PARCEL B10 – COKE OVEN AREA
ANNUAL INTERIM MEASURES PROGRESS REPORT
2025

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Revision 0 – March 10, 2026

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EXECUTIVE SUMMARY

The Coke Oven Area (COA) Annual Interim Measures (IMs) Progress Report 2025 has been prepared by ARM Group LLC (ARM) on behalf of Tradepoint Atlantic (TPA) and presents operational information for the groundwater remediation systems installed as IMs and a review of groundwater data for monitoring wells associated with the respective remediation systems through 2025. The COA is otherwise identified as TPA Parcel B10 and is composed of six sub-parcels or "cells", described below.

In addition, Agencies have approved the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025), which includes preferred remedial options for the COA. Changes related to each Cell are included in the below sections.

CELL 1

The Cell 1 IM includes an air sparging/soil vapor extraction (AS/SVE) system for the removal of volatile organic compounds (VOCs) from shallow zone groundwater in the Former Benzol Processing Area. The AS/SVE system operated at approximately 70% runtime during 2025, approximately 4 pounds of VOCs were removed in 2025, compared to 76 pounds of VOCs removed in 2024. On January 29, 2026, TPA submitted a *Cell 1 Interim Measures Shutdown Request* to the Agencies, due to the declining hydrocarbon mass recovery rates.

CELL 2

Cell 2 is in the former Coal Basin Area, and past IMs have included: (i) an AS/SVE system for shallow groundwater impacts (decommission in 2019) and (ii) a groundwater pump and treat (GWPT) system for hydraulic control and removal of VOCs from intermediate zone groundwater.

The GWPT system operated at approximately 23% runtime in 2025 and removed approximately 1,893 pounds of VOCs, compared to 400 pounds of VOCs removed in 2024.

The Cell 2 GWPT system will continue to operate in 2026 with addition of a catalytic oxidizer.

CELL 3

Cell 3 is located at the southern edge of the COA and IMs include the operation of an AS/SVE system for the removal of VOCs from shallow zone groundwater. The AS/SVE system operated at approximately 94% runtime and removed less than one pound of VOCs during 2025. Approximately 17 pounds of VOCs were removed in 2024. Air sparging and soil vapor extraction were focused on the eastern-third of the 600 foot-long AS/SVE remediation line in response to investigations indicating the eastern-third of the treatment zone contains the majority of local VOC-impacted groundwater.

In accordance with the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025), optimization of the existing Cell 3 AS/SVE system will be evaluated in a forthcoming Corrective Measures Implementation Work Plan.

CELL 4

Cell 4 is located in the Turning Basin of the former COA; the former IM included the use of pneumatic skimmer pumps and contaminant mass excavation. The skimmer pumps recovered high-naphthalene, dense non-aqueous phase liquid (DNAPL) from shallow zone groundwater. A total of approximately 1,604 gallons of DNAPL was recovered from Cell 4 from 2015 to 2023. In January 2023, the Cell 4 IM DNAPL recovery system was dismantled; between January and June 2023, DNAPL excavation activities were undertaken and removed approximately 18,165 tons of impacted material containing approximately 336,000 pounds of naphthalene. Cell 4 excavation activities were reported to the Agencies in the *Cell 4 DNAPL Excavation Report* (ARM, January 2024). Subsequent quarterly groundwater gauging and sampling is included with the Cell 5 activities and related reporting.

CELL 5

Located roughly 350 feet southeast of Cell 4, former Cell 5 Interim Measures (IMs) utilized a dual-phase extraction (DPE) system to remove naphthalene-impacted groundwater through a series of aligned extraction wells. On November 12, 2025, TPA submitted the *COA Cell 5 Interim Measure Shutdown Request*; this was approved by the Agencies on November 17, 2025. The DPE system was shut down and removed in November 2025. All components, including carbon vessels and system containers, were transferred to onsite storage for potential future use, and all recovery wells were abandoned in advance of Container Terminal construction activities. In 2025, the system operated at approximately 76% runtime and removed approximately 24 pounds of VOCs, compared to approximately 141 pounds in 2024. Historically, the Cell 5 IM system cumulatively removed approximately 2,569 pounds of VOCs.

In accordance with the *Container Terminal Monitoring Well Abandonment Letter* (ARM, October 31, 2025), groundwater monitoring wells within the Cells 4 and 5 area were proposed for abandonment in advance of Container Terminal development activities. A portion of the wells were abandoned in November 2025, with remaining wells to be abandoned in 2026. Select monitoring wells will be re-installed in accordance with the *CPA Groundwater Sampling Plan* following completion of the Container Terminal development activities.

CELL 6

Past Cell 6 IMs consisted of a Multi-Phase Extraction (MPE) system to remove light non-aqueous phase liquid (LNAPL) from a densely spaced extraction well field. The MPE system removed 7,643 gallons of LNAPL between system startup in October 2016 and 2022. In addition, 16,162 gallons of LNAPL was removed between 2010 and 2019 via manual skimming and bailing). The

MPE system seized operations in 2022 to conduct hotspot removal/treatment for residual NAPL within the Cell 6 MPE system recovery field. Beginning in August 2022, test pits were advanced northwest and southeast of the MPE system footprint to further delineate the extent of residual LNAPL.

Beginning in March 2025, bulk LNAPL recovery events were conducted multiple times per month from a mix of test pits, sumps, wells and a recovery trench in the Cell 6 vicinity. In May 2025, components of the former MPE system were modified to support bulk LNAPL recovery and separation efforts. During 2025 approximately 87,500 gallons of LNAPL and LNAPL impacted water were removed from various test pits, sumps, wells and the recovery trench. LNAPL impacted water was pumped into a 5,000-gallon aboveground storage tank (AST) for LNAPL separation. Approximately 6,800 gallons of LNAPL were transported offsite in 2025 by a licensed contractor, and approximately 80,700 gallons of LNAPL impacted groundwater were treated at the onsite permitted water treatment plant.

Cumulatively, 44,401 gallons or 325,374 pounds of LNAPL have been removed from the Cell 6 area since operation began in 2010.

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1.0 INTRODUCTION

The Coke Oven Area (COA) Annual Interim Measures (IMs) Progress Report 2025 has been prepared by ARM Group LLC (ARM) on behalf of Tradepoint Atlantic (TPA) and presents information for the ongoing groundwater remediation systems installed as IMs in the COA. This report also provides a review of groundwater data collected in 2025 for monitoring wells associated with the respective remediation systems. This report 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. These reports are submitted to the Maryland Department of the Environment (MDE) and the USEPA (hereafter referred to as the Agencies).

TRADEPOINT ATLANTIC SITE BACKGROUND

The TPA property is in Baltimore County, Maryland in the southeastern corner of the Baltimore metropolitan area, approximately nine miles from downtown Baltimore City. The location of the property is presented in **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, 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/revitalization of former production parcels and redevelopment of the TPA Sparrows Point Peninsula as a regional light industrial, warehousing and distribution commerce center.

COKE OVEN AREA

The IMs of the COA are located within six smaller sub-parcels designated as Cells 1, 2, 3, 4, 5, and 6. The locations of the cells are presented in **Figure 2.** Sitewide groundwater elevation contours for shallow COA monitoring wells gauged during the synoptic round in February 2024 are presented on **Figure 3**. For each cell, the IM progress report provides details regarding:

- notable 2025 operations & maintenance (O&M) activities
- IM system operational information, and
- groundwater analytical results for 2025.

Below is a short listing of Cell-specific IMs.

- Cell 1 (former Benzol Processing Area): Air Sparging/Soil Vapor Extraction (AS/SVE) system operated in the shallow groundwater zone (predominantly benzene removal);

- Cell 2 (former Coal Basin Area): AS/SVE system for shallow groundwater impacts (decommission in 2019) and a Groundwater Pump and Treat (GWPT) system operated to address intermediate groundwater zone VOC-impacts;
- Cell 3 (Cove Area): AS/SVE system operated in the shallow groundwater zone (benzene and naphthalene removal);
- Cell 4 (Turning Basin side of former COA): High-naphthalene DNAPL recovery system (decommissioned in 2023);
- Cell 5 (Turning Basin side of former COA): Dual-Phase Extraction (DPE) system operated in the shallow groundwater zone (high naphthalene removal) (decommissioned in November 2025); and
- Cell 6 (former Benzol Processing Area): Multi-Phase Extraction (MPE) system to recover LNAPL from shallow groundwater (decommissioned in 2023); manual LNAPL recovery is ongoing at several test pits/recovery sumps, wells, and the recovery trench.

2.0 CELL 1

2.1 DESCRIPTION

The Cell 1 IM includes an AS/SVE system for the removal of VOCs from shallow zone groundwater in the Former Benzol Processing Area. The AS system consists of a rotary vane air compressor delivering compressed air to a maximum of 25 sparge wells via an above-ground network of high-density polyethylene (HDPE) piping. VOCs stripped from the groundwater into the vadose zone are removed under vacuum via a horizontal SVE trench that is connected to the regenerative blower. Extracted soil vapor is processed through activated carbon. **Figure C1-1** presents the layout of the Cell 1 AS/SVE system.

2.2 OPERATIONS

Cell 1 AS/SVE system operational data are summarized in Table **C1-1**. Prior to August 2024, operations alternated between the northern and southern portions of the wellfield on 30-day and 14-day cycles, respectively. In August 2024, the system experienced a damaging power surge, likely caused by a nearby lightning strike. Following restart on November 15, 2024, the system was reconfigured to operate both wellfield areas simultaneously.

In early January 2025, the SVE blower motor began generating intermittent fault codes and was removed for repair; the fault code issues were likely related to the August 2024 power surge. After the motor was repaired, the system was restarted on February 18, 2025. On April 11, 2025, the blower motor failed again and was returned for additional evaluation. Diagnostic testing determined the motor was out of tolerance and required replacement. A new SVE blower motor was installed in early May 2025, and the system was restarted on May 20, 2025. Additional minor downtime occurred throughout 2025 due to power outages, maintenance, and minor equipment repairs.

The average daily VOC removal rate in 2025 was approximately 0.018 pounds per day, with quarterly averages ranging from approximately 0.0056 pounds per day (3Q25) to approximately 0.029 pounds per day (2Q25). As shown in **Table C1-1** and **Figure C1-2**, the Cell 1 AS/SVE system removed approximately 4 pounds of VOCs in 2025, compared to 76 pounds in 2024 and 68 pounds in 2023. Cumulative VOCs removed to date is approximately 16,739 pounds. **Table C1-1** also presents cumulative operational performance since system startup in August 2012, indicating that recovery has become asymptotic.

SVE influent (pre-treatment) vapor samples are collected monthly to evaluate hydrocarbon removal rates. Samples were analyzed by Maryland Spectral Services for VOCs using USEPA Method 8260. Monthly influent results are presented in **Table C1-2**.

2.3 GROUNDWATER SAMPLING RESULTS

To monitor VOC concentrations in groundwater, Cell 1 groundwater samples were collected from two monitoring wells on a quarterly schedule (CO93-PZM and CO190-MWS) and from a third

monitoring well on an annual schedule (CO191-MWS). **Figure C1-1** shows the monitoring well locations. Monitoring well construction information is summarized in **Table C1-3** and groundwater elevation gauging data for 2025 is summarized in **Table C1-4**. Groundwater samples were submitted to Pace Analytical for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and naphthalene per USEPA Method 8260. Groundwater analytical results for 2025 are presented in **Table C1-5.** A time-series graph of VOC concentrations is included as **Figure C1-3.**

VOC concentrations in upgradient monitoring well CO93-PZM have fluctuated since sampling began, with a slight decreasing trend since 2017. VOC concentrations in plume-central monitoring well CO190-MWS are fluctuating, but the 2025 results are within the historical range. Downgradient monitoring well CO191-MWS has shown a decrease since 2021, going from 129,573 in May 2021 to 31,320 µg/L in May 2025 (**Figure C1-3**). Cell 1 is hydraulically downgradient from Cell 6. The petroleum hydrocarbon LNAPL mass in Cell 6 contributes to the benzene mass measured in Cell 1. Continued LNAPL removal at Cell 6 will be part of the final remedy.

SVE influent vapor and groundwater laboratory analytical reports are included in **Appendix A.** Groundwater sampling purge logs are included in **Appendix B**. Historical analytical results for all Cell 1 monitoring wells are included in **Appendix C**.

2.4 SUMMARY AND RECOMMENDATIONS

The Cell 1 AS/SVE system removed approximately 4 pounds of VOCs in 2025. Despite ongoing system repairs and optimizations, Cell 1 petroleum mass recovery rates have been declining and appear to have reached asymptotic conditions. On January 29, 2026, TPA submitted a *Cell 1 Interim Measures Shutdown Request* to the Agencies.

In accordance with the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025), new remediation systems will be designed and installed to address source LNAPL, shallow groundwater impacts, and intermediate groundwater impacts. These remedial systems will account for current site conditions and the site conceptual model as presented in the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025).

3.0 CELL 2

3.1 DESCRIPTION

Cell 2 is located in the former Coal Basin Area, and IMs include: (i) an AS/SVE system for shallow groundwater impacts (decommission in 2019) and (ii) a groundwater pump and treat (GWPT) system for hydraulic control and removal of VOCs from intermediate zone groundwater.

In November 2024, the Cell 2 GWPT system was modified to include two 3,000-pound vapor-phase granular activated carbon (VGAC) vessels in series to replace the failed catalytic oxidizer (CatOx) unit. The Cell 2 air emissions permit requires a minimum destruction efficiency of 85% based on comparisons of influent and effluent vapor concentrations; this has resulted in frequent VGAC changeouts and a corresponding reduction in overall system runtime and efficiency.

3.2 OPERATIONS

Figure C2-1 shows the system layout of Cell 2 including the locations of groundwater extraction wells, post-treatment reinjection wells, former AS wells, former SVE trench, and surrounding monitoring wells. The cumulative hydrocarbon mass removed (40,446 lbs) from the subsurface at Cell 2 since GWPT system start-up is presented graphically on **Figure C2-2**.

The GWPT system operated between February 11, 2025, and August 20, 2025, with a runtime of approximately 23%. The GWPT system extracted approximately 536,070 gallons of dissolved-phase VOC-impacted groundwater from extraction well EW-4, resulting in the removal of approximately 1,900 pounds of VOCs in 2025 (**Table C2-1**).

In early January 2025, an electrical outage combined with freezing temperatures caused damage to the influent and interior water lines. The damaged piping and the effluent water meter were replaced, and the VGAC unit was changed out, prior to system restart on February 11, 2025. Operations continued through March 25, 2025, when the system was temporarily shut down for a full VGAC changeout due to elevated effluent vapor concentrations reducing destruction efficiency below the required 85% threshold. In April 2025, a moisture separator tank was installed upstream of the VGAC units to reduce moisture content and improve carbon treatment efficiency. The system was restarted on May 5, 2025, and operated through July 3, 2025, when it was again shut down for a partial changeout of the lead VGAC vessel. Operations resumed on July 9, 2025 and continued until August 20, 2025, when elevated effluent vapor concentrations caused destruction efficiency to fall below the required 85% threshold. The system was shut down in anticipation of upgrading the off-gas treatment system. Treatment options were evaluated in 4Q 2025; it was determined that a new CatOx unit will be installed in 2026.

3.3 GROUNDWATER SAMPLING RESULTS

Groundwater samples are collected from Cell 2 monitoring wells to evaluate VOC concentrations in groundwater within the local shallow and intermediate zones. Monitoring well construction information is summarized in **Table C2-2** and groundwater elevation gauging data for 2025 is summarized in **Table C2-3**. **Figure C2-1** presents the monitoring well locations in the Cell 2 area.

Figure C2-3 presents quarterly benzene concentrations in the shallow zone wells. **Figure C2-4** presents quarterly benzene concentrations in the intermediate zone wells. Groundwater samples were submitted to Pace Analytical for analysis of BTEX and naphthalene per USEPA Method 8260. Analytical results for 2025 are presented in **Table C2-4**. For Cell 2 wells sampled in 2025, total VOC concentration trends are summarized below.

Monitoring Well	Total VOC Concentration Trend
Shallow Zone	
CO27-PZM012 (center of plume)	Stable since mid-2020
CO28-PZM010 (crossgradient)	Fluctuating concentrations with two orders of magnitude decrease since 2019
CO36-PZM008 (crossgradient)	Reached minimum detected concentrations in early 2025, but has increased back to within historical range by Q4 2025
CO37-PZM003 (crossgradient)	Concentrations fluctuated in 2023-2024, 2025 concentrations more stable
CO38-PZM006 (upgradient)	Concentrations stable since 2018 and decreasing over time
CO39-PZM007 (upgradient)	Concentrations stable since 2022 and decreasing over time
CO40-PZM008 (upgradient)	Concentrations increasing since mid-2019
CO41-PZM001 (upgradient)	Concentrations fluctuating, but overall increase since 2019
CO180-MWS (crossgradient)	Concentrations fluctuating but stable
CO181-MWS (crossgradient)	Concentrations stable
CO186-MWS (upgradient)	Overall decreasing trend, with exception of Q4 2024 result
CO209-MWS (crossgradient)	Concentrations increasing
Intermediate Zone	
CO27-PZM046 (center of plume)	Overall decrease since 2014, results more stable since 2020
CO28-PZM048 (crossgradient)	Concentrations stable since Q4 2019
CO36-PZM043 (crossgradient)	Overall decreasing trend, with fluctuations in 2025
CO38-PZM043 (upgradient)	Concentrations increased in 2025, but within historical range
CO39-PZM042 (upgradient)	Overall decreasing trend, but slight increase in 2025 concentrations when compared to 2022-2023
CO41-PZM036 (upgradient)	Concentrations stable
CO180-MWI (crossgradient)	Concentrations decreasing since 2021
CO181-MWI (crossgradient)	Overall decreasing trend since 2019
CO182-MWI (upgradient)	Q2 -Q4 2025 concentrations increased from 2022 – Q1 2025 results, but within historical range
CO209-MWI (crossgradient)	Concentrations stable
GD01-MWI (downgradient)	Concentrations stable
GD02-MWI (downgradient)	Concentrations fluctuating in 2025

Groundwater analytical reports are included in **Appendix A.** Groundwater purge logs are included in **Appendix B**. Historical analytical results for all Cell 2 monitoring wells are included in **Appendix C**.

3.4 SUMMARY AND RECOMMENDATIONS

Cell 2 is located in the Former Coal Basin Area and includes a GWPT system for the recovery of VOC-impacted groundwater from the intermediate zone.

The GWPT system will continue to be operated as an IM in its current configuration, with extraction from CO46-PZM047 (EW-4). In 2025, the GWPT system operated with a runtime of approximately 23%; this was largely due to frequent VGAC changeouts. To address this, a new CatOx unit will be installed to treat the effluent vapor from the GWPT system to increase overall system runtime and treatment efficiency.

4.0 CELL 3

4.1 DESCRIPTION

Cell 3 IMs include the use of an AS/SVE system designed to remove VOCs from shallow zone groundwater with treatment of the extracted soil vapor by carbon filters. The AS system consists of a rotary vane air compressor that delivers compressed air to fifteen 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. **Figure C3-1** presents the layout of the Cell 3 AS/SVE system and the locations of the major system components including the AS and SVE wells, the SVE trench, and monitoring wells. The major AS/SVE system design components are described in the Cell 3 final design report entitled *Coke Oven Area Interim Measures Cell 3 Cove Area Air Sparge/Soil Vapor Extraction System Design* (URS 2011).

Vertical profiling of VOC concentrations in shallow zone groundwater was conducted during previous investigations and indicated the majority of benzene mass beneath Cell 3 is located from 15 to 30 feet below ground surface (bgs) and the majority of naphthalene mass is located from 20 to 40 feet bgs (ARM 2019). The AS wells were proposed to be installed to 30 feet bgs with screened intervals from 28-30 feet bgs to target the bottom of the benzene-impacted zone and the middle of the naphthalene-impacted zone. However, the AS wells were installed to total depths between approximately 22.2 and 27.4 feet bgs due to refusal encountered with the hollow stem augers during installation. Therefore, the screened intervals are shallower than proposed and target the middle/bottom of the benzene-impacted zone and shallower (upper) portion of the naphthalene-impacted zone. Air sparge well construction information is summarized in **Table C3-1.**

4.2 OPERATIONS

The operational performance of the AS/SVE system during 2025 is summarized in **Table C3-2**. The system operated at approximately 94% runtime during 2025. System downtime was a result of electrical power losses, preventative maintenance, and minor repairs. Approximately 0.1 pounds of VOCs were removed in 2025, compared to 17.4 pounds removed during 2024 and 26 pounds removed during 2023. Approximately 2,345 pounds of cumulative VOCs have been removed to date (**Figure C3-2**).

SVE influent (e.g., pre-treatment) system vapor samples are collected monthly to assess hydrocarbon removal rates. The monthly SVE influent system vapor samples were submitted to Maryland Spectral Services for analysis of VOCs per USEPA Method 8260. SVE vapor analytical results are presented in **Table C3-3.** Based on system monitoring data and as shown on **Figure C3-2**, AS/SVE system recovery has become asymptotic (with minimal mass removal) despite being operated at nearly 100% runtime since mid-April 2022.

4.3 GROUNDWATER SAMPLING RESULTS

Groundwater samples were collected from seven monitoring wells in the Cell 3 area at varying frequencies to monitor VOC concentrations. **Figure C3-1** presents the monitoring well locations. Groundwater samples were collected from the following monitoring wells:

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

Groundwater samples were submitted to Pace Analytical for analysis of BTEX and naphthalene per USEPA Method 8260. Monitoring well construction information is summarized in **Table C3-4**. Groundwater analytical results are presented in **Table C3-5**. **Figure C3-3** presents benzene concentrations in the shallow zone groundwater monitoring wells during the 2nd and 4th Quarters of 2025. A time-series graph of total VOC concentrations is included as **Figure C3-4**. Benzene and naphthalene are the main contaminants of concern (COCs) in Cell 3 shallow zone groundwater. Long term reductions in total VOC concentrations are observed in monitoring wells CO30-PZM015, CO194-MWS, CO195-MWS, CO196-MWS, and CO198-MWS. At CO30-PZM015, a significant decrease in benzene concentrations was identified from the 3rd Quarter 2025 (30,000 µg/L benzene) to the 4th Quarter 2025 (73 µg/L benzene); this result is likely anomalous. Total VOC concentrations have increased over the past several sampling events at CO201-MWS (since 2024) and CO30-PZM060 (since 2022), with the 2025 result being the maximum concentration observed to date for each well. CO201-MWS and CO30-PZM060 will continue to be monitored in 2026 to determine if the concentrations continue to increase.

SVE influent soil vapor and groundwater laboratory analytical reports are included in **Appendix A.** Groundwater sampling purge logs are included in **Appendix B**. Historical analytical results for Cell 3 monitoring wells are included in **Appendix C**.

4.4 SUMMARY AND RECOMMENDATIONS

The Cell 3 AS/SVE system removed approximately 0.1 pounds of VOCs in 2025. The Cell 3 AS/SVE system will continue to be operated in 2026. In accordance with the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025), optimization of the existing AS/SVE system will be evaluated in a forthcoming Corrective Measures Implementation Work Plan.

5.0 CELL 4

5.1 DESCRIPTION

The prior Cell 4 IM consisted of a DNAPL recovery system operated in the naphthalene source area upgradient of Cell 5. A total of approximately 1,604 gallons of DNAPL were recovered from Cell 4 from 2015 to 2023. In January 2023, the DNAPL system was abandoned in accordance with the *DNAPL Excavation Work Plan Area B: Parcel B10 Cell 4* (November 10, 2022 and subsequent comments received November 15, 2022, with a comment response provided December 13, 2022). Cell 4 excavation activities were undertaken between January and June 2023, with backfilling performed in October and November 2023. The excavation was advanced to approximately 22 ft bgs and 18,165 tons of impacted material (approximately 336,000 pounds of naphthalene) were removed and disposed of at Greys Landfill (*Cell 4 DNAPL Excavation Report*, ARM, 2024). Refer to **Figure C4-1** for excavation extents.

5.2 SUMMARY AND RECOMMENDATIONS

Monitoring wells within the Cell 4 area were sampled on a quarterly basis in 2025 with results discussed in **Section 6.3**. In accordance with the *Container Terminal Monitoring Well Abandonment Letter* (ARM, October 31, 2025) and the *Coke Point Area Corrective Measures Study Report* (Revision 5, October 13, 2025), the monitoring wells within Cell 4 will be abandoned to accommodate Container Terminal construction, with select monitoring wells re-installed after completion.

6.0 CELL 5

6.1 DESCRIPTION

Cell 5 is located approximately 350 feet southeast of Cell 4. The former Cell 5 IM included a DPE system to extract naphthalene-impacted groundwater**. Figure C5-1** presents the former Cell 5 system layout including locations of extraction wells, groundwater reinjection wells, and monitoring wells. On November 12, 2025, TPA submitted the *COA Cell 5 Interim Measure Shutdown Request*; this was approved by the Agencies on November 17, 2025. The DPE system was shut down and removed in November 2025 to accommodate Container Terminal construction. System components, including carbon vessels and system containers, were transferred to onsite storage for potential future use, and recovery wells were abandoned.

In 2025, the system operated at approximately 76% runtime and removed approximately 24 pounds of VOCs, compared to 81% runtime and 141 pounds of VOCs removed in 2024. Cumulatively, the Cell 5 DPE system removed 2,569 pounds of VOCs, see **Figure C5-2.**

6.2 OPERATIONS

The Cell 5 DPE system operated from January 1, 2025, through November 14, 2025, with an approximate runtime of 76%. On January 14, 2025, the system's primary Programmable Logic Controller (PLC) failed during a period of extreme cold, resulting in significant damage to both internal and external water lines. Prior to this failure, system heating was controlled by temperature sensors interfaced with a PLC-programmed thermostat; consequently, the PLC failure disabled all interior heaters and exterior heat trace lines. The loss of heating, combined with subfreezing temperatures, caused multiple water lines to freeze and crack.

Following repairs in February and March—including replacement of the PLC and repairs to damaged water lines—the system was restarted on April 1, 2025, and remained operational until its final shutdown on November 14, 2025. In 2025, approximately 850,000 gallons of naphthalene-impacted groundwater were recovered, treated and subsequently discharged under permit, resulting in removal of approximately 24 pounds of VOCs (**Table C5-1**). This compares to approximately 2.2 million gallons of groundwater treated and 141 pounds of VOCs removed in 2024.

6.3 GROUNDWATER SAMPLING RESULTS

Groundwater samples are collected quarterly from Cell 5 monitoring wells to monitor VOC concentrations within local shallow zone groundwater. **Figure C5-1** presents the monitoring well locations. Monitoring well construction information is summarized in **Table C5-2** and groundwater elevation data is summarized in **Table C5-3. Figure C5-3** presents a groundwater elevation contour map for 2nd Quarter of 2025 with the DPE system active.

Groundwater samples are submitted to Pace Analytical for analysis of BTEX and naphthalene per USEPA Method 8260. Groundwater analytical results are presented in **Table C5-4.**

Naphthalene is the main COC in groundwater in the vicinity of Cell 5. **Figures C5-4** through **C5-7** present the naphthalene concentrations in the shallow zone groundwater monitoring wells during each quarter of 2025**.** Time-series graphs of naphthalene in groundwater samples are included as follows:

- **Figure C5-8**: monitoring wells located in the reinjection area (Cell 4)
- **Figure C5-9**: monitoring wells located in the Cell 5 IM area
- **Figure C5-10**: perimeter monitoring wells

Naphthalene concentrations have historically fluctuated in most monitoring wells, although the following observations are noted:

- CO24-PZM007: Overall decreasing naphthalene concentrations since 2022
- CO206R-MWS: 2025 naphthalene results are all higher than the 2024 results
- CO26-PZM007, CO56-PZP001, CO58-PZM001: overall decreasing naphthene concentrations

Groundwater analytical reports are included in **Appendix A.** Groundwater sampling purge logs are included in **Appendix B**. Historical analytical results for all Cell 5 monitoring wells are included in **Appendix C**.

6.4 SUMMARY AND RECOMMENDATIONS

The Cell 5 DPE system operated with a 76% runtime during 2025 and removed approximately 24 pounds of VOCs from the shallow groundwater zone . In November 2025 the DPE system was shut down and removed to accommodate Container Terminal construction. System components including carbon filtration vessels and system containers were moved to onsite storage areas for possible future use. Recovery wells were abandoned in accordance with the *COA Cell 5 Interim Measure Shutdown Request* (November 12, 2025). Cumulatively, the DPE system removed approximately 2,569 pounds of VOCs.

The *Container Terminal Monitoring Well Abandonment Letter* was submitted to the Agencies on October 31, 2025, and approved via email on November 7, 2025. It proposed abandonment of all monitoring wells within the Container Terminal footprint. Between November 17 and 18, 2025, five monitoring wells (CO26-PZM007, CO55-PZM000, CO56-PZP001, CO58-PZM001, and CO60-PZP001) within the Cell 4 / Cell 5 area were abandoned. The remaining wells (CO23-PZM008, CO24-PZM007, CO57-PZP002, and CO59-PZP002) will be abandoned at a later date with Agency approval; remaining/existing wells will continue to be sampled on a quarterly basis until abandonment. Select monitoring wells will be re-installed in accordance with the *CPA Groundwater Sampling Plan* following completion of Container Terminal development activities.

7.0 CELL 6

7.1 DESCRIPTION

Cell 6 is in the former Benzol Processing Area, approximately 500 feet east of Cell 1 and approximately 1,000 feet southeast of Cell 2. The originally designed IMs for Cell 6 included a LNAPL MPE system with a CatOx and/or carbon off-gas treatment units. **Figure C6-1** presents the system layout of Cell 6 including the locations of the extraction wells (both existing and abandoned), groundwater reinjection wells, and monitoring wells. The MPE system removed 7,643 gallons of LNAPL between 2016 and 2023 (in addition to 16,162 gallons removed between 2010 and 2019 via manual skimming and bailing).

The MPE system was shut down in 2023 to evaluate hotspot removal/treatment of residual LNAPL within the Cell 6 MPE system recovery field. Additional LNAPL removal (via excavation) and treatment (via Hydrogen Peroxide) was conducted in May 2024. A total of 628 CY of LNAPL-impacted material was excavated, treated where necessary, and transported to Greys Landfill for disposal (*Cell 6 Hotspot Removal / Treatment Final Report* (ARM, 2024).

A manual skimmer pump was used for LNAPL recovery at location CO173, with 8,819 gallons removed between 2020 and 2024. In early 2025, CO173 was converted into a test pit and then a sump (COA-037-TP).

Between 2022 and 2024, LNAPL delineation and removal activities were undertaken outside of the Cell 6 MPE system recovery field. Approximately 4,965 gallons of LNAPL were recovered from Cell 6 monitoring wells, test pits and sumps between 2022 and 2024. LNAPL removal was conducted via pumps, absorbent socks, and enhanced fluid recovery [EFR] events. The cumulative hydrocarbon mass recovered from Cell 6 is presented graphically on **Figure C6-2**.

Beginning in February 2025, bulk LNAPL recovery events were conducted routinely using multiple recovery points, including wells, test pits, recovery sumps. In October 2025, TPA installed a LNAPL recovery trench (**Figure C6-3**) in accordance with the *Cell 6 Pilot Test Work Plan* (September 4, 2025); subsequently, LNAPL recovery events included the recovery trench.

Targeted locations for each LNAPL recovery event were selected based on pre-event LNAPL gauging and historical recovery performance, including the proportion of LNAPL to water historically recovered at each location. During each event, a 3,500-gallon vacuum truck extracted LNAPL and LNAPL-impacted water, which were subsequently transferred to the 5,000-gallon Cell 6 aboveground storage tank (AST) for phase separation.

In May 2025, components of the former Cell 6 MPE system were modified to support treatment of water removed from the AST. Water withdrawn from the bottom of the AST was routed through the former MPE system's four skimmer tanks to remove residual LNAPL prior to being pumped to the Cell 6 frac tank for temporary storage. The accumulated water was periodically transferred to the permitted onsite water treatment plant for treatment.

Implementation of this dewatering process significantly reduced water content in the LNAPL AST, improving efficiency and allowing greater flexibility in recycling recovered LNAPL. The AST contents are periodically removed and disposed of under manifest by a licensed RCRA waste hauler.

During 2025, approximately 6,813 gallons (49,924 pounds) of LNAPL, and approximately 80,696 gallons of LNAPL impacted water were removed from the various wells, test pits, recovery sumps and LNAPL recovery trench.

Quarterly LNAPL gauging is conducted for the remaining MPE system extraction wells. **Figure C6-4** presents a summary of the LNAPL thickness in the extraction wells as gauged during the 4th Quarter of 2025.

Table C6-1 summarizes cumulative LNAPL volumes recovered from: (i) bulk removal efforts (between 2022 to 2025), (ii) previous CO173 pumping (2019 to 2024), (iii) hand bailing/skimmer pump operations (2010 to 2019), and (iv) MPE recovery operations (2016 to 2021). Since mid-2010, an estimated 44,401 gallons of LNAPL have been removed from Cell 6. **Table C6-2** presents total volumes of LNAPL and LNAPL impacted water, removed from each recovery location in 2025. Locations with active LNAPL recovery in 2025 are shown on **Figure C6-4**.

7.2 SUMMARY AND RECOMMENDATIONS

The original Cell 6 MPE system removed 7,643 gallons of LNAPL between 2016 and 2023 (in addition to 16,162 gallons removed between 2010 and 2019 via manual skimming and bailing). The MPE system was shut down in 2023 to evaluate hotspot removal/treatment of residual LNAPL, resulting in the excavation and treatment (where necessary) of 628 CY of LNAPL-impacted material. Between 2020 and 2024, LNAPL removal continued at CO173 with 8,819 gallons removed. Between 2022 and 2024, LNAPL removal was conducted at various other monitoring wells, test pits and sumps outside of the Cell 6 MPE field, with approximately 4,965 gallons of LNAPL removed.

Beginning in March 2025, LNAPL recovery events were conducted routinely across multiple recovery points, including wells, test pits, recovery sumps, and the LNAPL recovery trench. In May 2025, components of the former Cell 6 MPE system were reconfigured to support treatment of settled water removed from the AST. This process has reduced water accumulation within the AST, improving system efficiency and enhancing LNAPL management and recycling capability. AST contents continue to be periodically removed and disposed of under manifest by a licensed RCRA waste hauler.

During 2025, approximately 6,813 gallons (49,924 pounds) of LNAPL and 80,696 gallons of LNAPL-impacted water were recovered from wells, test pits, recovery sumps, and the recovery trench. Quarterly LNAPL gauging is performed at remaining extraction wells, observation points, and recovery sumps to monitor remaining impacts and evaluate recovery progress.

8.0 SUMMARY AND CONCLUSIONS

During 2025, COA Cell 1, Cell 2, Cell 3, and Cell 5 IMs were operated in accordance with their original designs.

- Cell 1 - the IM AS/SVE system removed approximately 4 pounds of VOCs during 2025. On January 29, 2026, TPA submitted a *Cell 1 Interim Measures Shutdown Request* to the Agencies; the Cell 1 system will continue to operate until the Agencies have approved this request.
- Cell 2 – the GWPT system operated between February and August in 2025. The GWPT system recovered and treated over 536,070 gallons of groundwater and removed approximately 1,893 pounds of VOCs during 2025, with improved operations expected for 2026 once a new CatOx unit is received, installed and started.
- Cell 3 – the IM AS/SVE system removed less than one pound of VOCs during 2025 and will continue operation in 2026. Optimization of the existing AS/SVE system will be evaluated in a forthcoming Corrective Measures Implementation Work Plan.
- Cell 5 – Prior to shutdown in November 2025, the DPE system recovered and treated over 850,000 gallons of groundwater and removed approximately 24 pounds of VOCs in 2025.
- Cell 6 – Beginning in March 2025, routine bulk LNAPL recovery events began taking place in the Cell 6 area. During 2025, approximately 6,813 gallons (49,924 pounds) of LNAPL and 80,696 gallons of LNAPL-impacted water were recovered from wells, test pits, recovery sumps, and the recovery trench.

During 2025, a total of approximately:

- 1,921 pounds of VOCs were removed by the combined Cell 1, Cell 2, Cell 3, and Cell 5 IMs, and
- 5,813 gallons of LNAPL were recovered by bulk recovery operations at Cell 6.

9.0 REFERENCES

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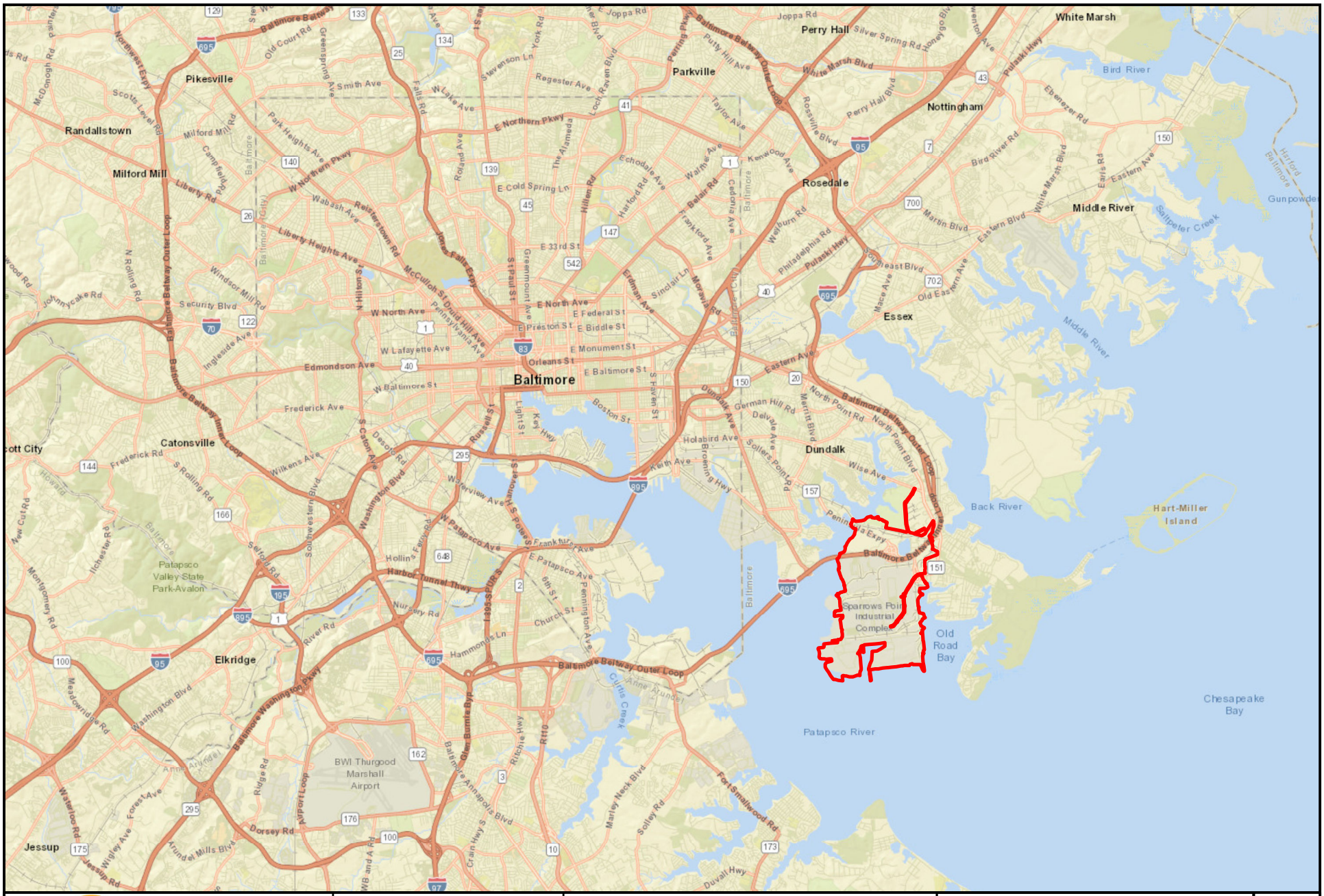
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FIGURES



P:\EnviroAnalytics Group\150298M EAG_Sparrows Point Area A\GIS\Site-wide Regional Figures.mxd

ARM Group Inc.
Earth Resource Engineers and Consultants

0 1.25 2.5 5 Miles

Property Boundary

Tradepoint Atlantic Regional Site View

February 6, 2026

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD

Figure 1



N

ARM Group LLC
Engineers and Scientists

1 inch = 550 feet

0 275 550
Feet

Former Coke Oven Area
Interim Measures Cell Locations

Date: 2/6/2026

Figure 2

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

CO180-MWS
0.06

CO179-MWS
0.59

CO27-PZM012
0.08

CO03-PZM005
8.41 (NC)

SW13-PZM003
2.8

SW-030-MWS
NM

CO05B-PZM
7.34 (NC)

CO209-MWS
0.06

CO185-MWS
0.4

CO02-PZM006
1.2

CO16-PZM006
NM

CO07-PZM008
1.43

CO08A-PZM
2.34

CO04-PZM004
4.75

CO05C-PZM
1.22

TS08-PPM007
0.73

CO29-PZM010
0.45

CO193-MWS
0.28

COA-MWS-004
1.46

CO212-MWS
1.78

CO24-PZM007
0.91

CO203-MWS
0.93

CO210-MWS
0.18

CO197-MWS
0.44

CO32-PZM004
-1.96

CO08B-PZM
1.32

CO23-PZM008
0.85

CO25-PZM008
0.78

CO26-PZM007
0.86

CO206R-MWS
0.7

CO30-PZM015
0.18

CP22-MWS
0.51

CO211-MWS
0.91

CP23-MWS
0.17

CP02-PZM007
0.4

SW18-PZM008
0.52

CO35-PZM013
0.37

CP24-MWS
0.11

CP25-MWS
0.09

CP07-PZM006
0.34

CP08R-PZM008
0.64

CP20-PZM011
0.52

CP17-PZM013
0.1

CP05-PZM008
NM

CP12-PZM012
0.18

CP26-MWS
-0.11

CP09-PZM010
0.2

CP11-PZM010
0.04

CP15-PZM020
0.11

4
4.5
3.5
3
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5

LEGEND

- Shallow Monitoring Well
- Groundwater Contour (Shallow Zone)
- Parcel Boundary

Note:
- "NM"= Not Measured
- "NC"= Not Contoured
- Synoptic gauging was completed on February 27, 2024 as part of the CPA CMS.

Source: E

Former Coke Oven Area Sitewide Groundwater Contours (Shallow Zone)

February 6, 2026

Figure 3

ARM Group LLC
Engineers and Scientists

0 150 300 600 Feet

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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ARM Group LLC
Engineers and Scientists

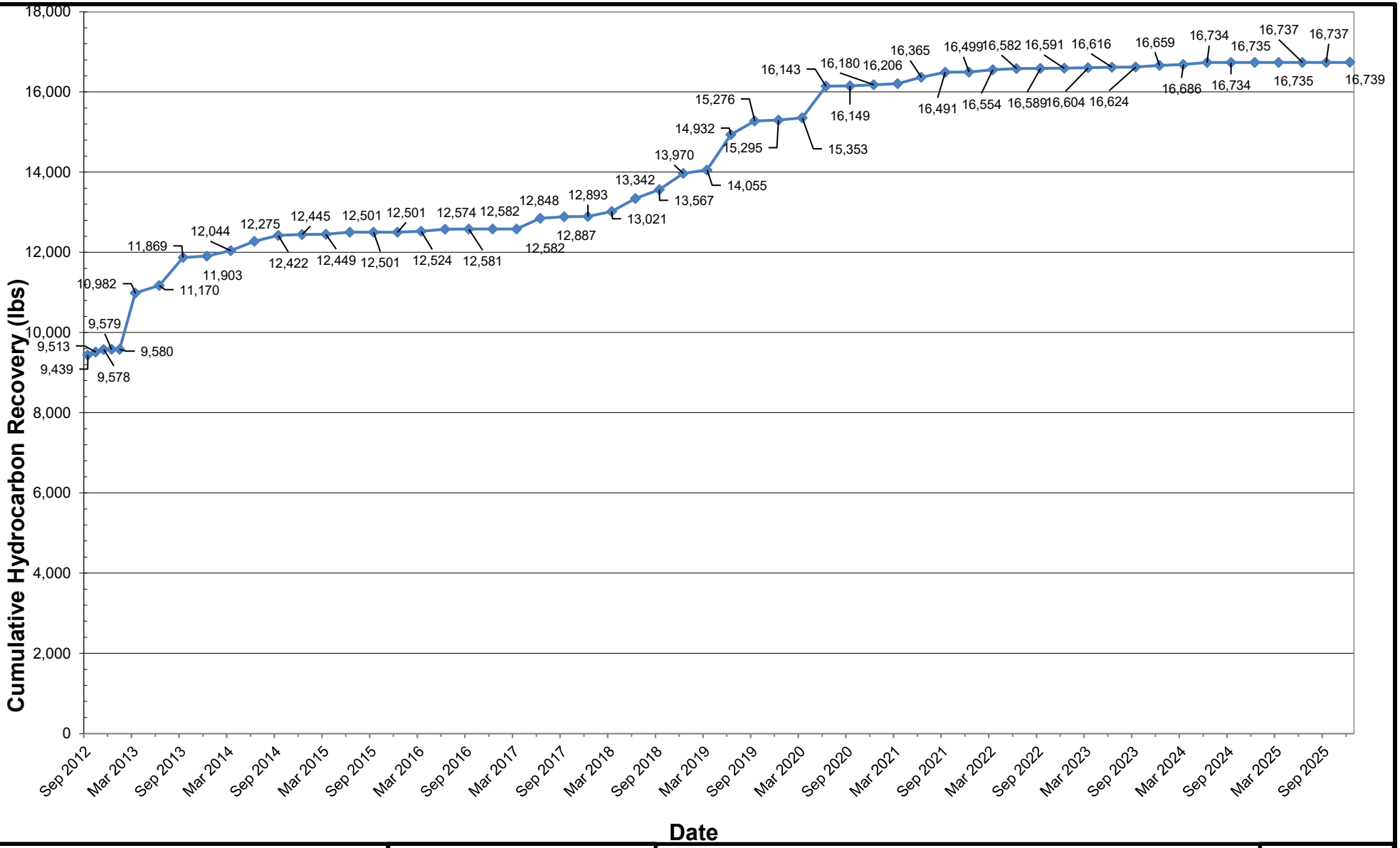
1 inch = 100 feet

0 50 100 Feet

Former Coke Oven Area
Cell 1 System Layout
AS/SVE
Date: 2/6/2026

Figure C1-1

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Engineers and Scientists

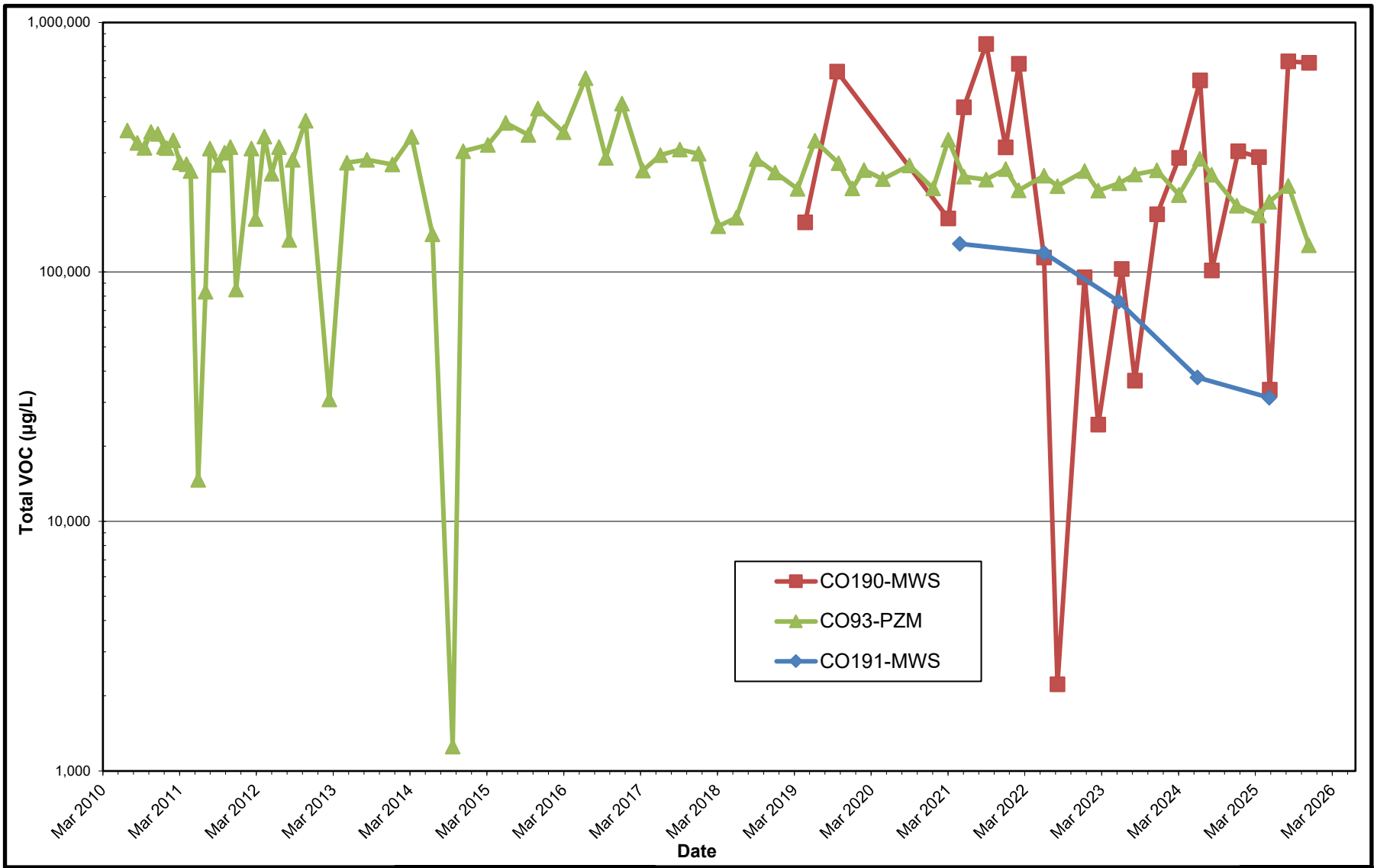
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)

February 4, 2026

Figure C1-2



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Engineers and Scientists

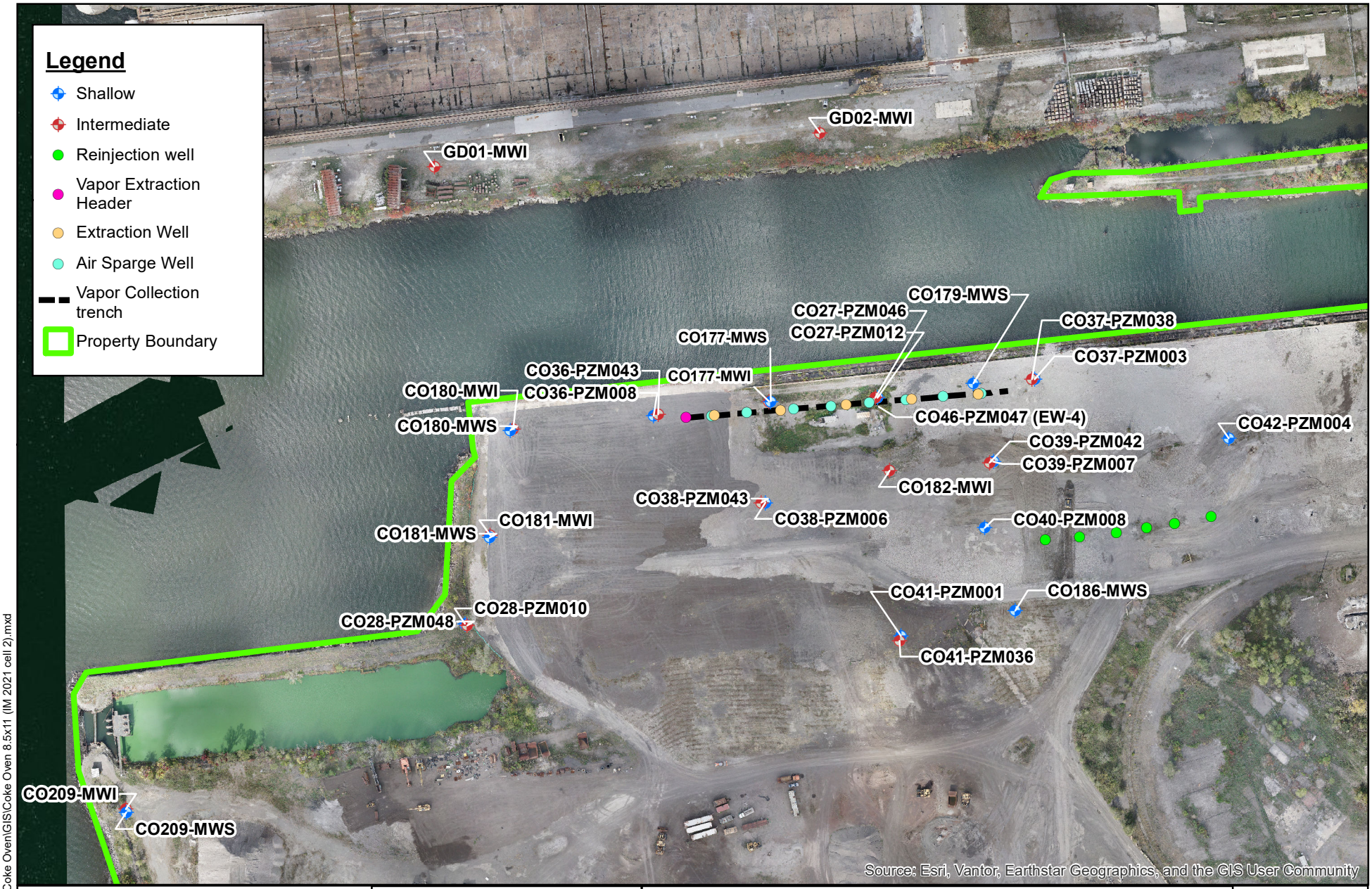
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 1 Shallow Zone

January 2026

Figure C1-3



N

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Engineers and Scientists

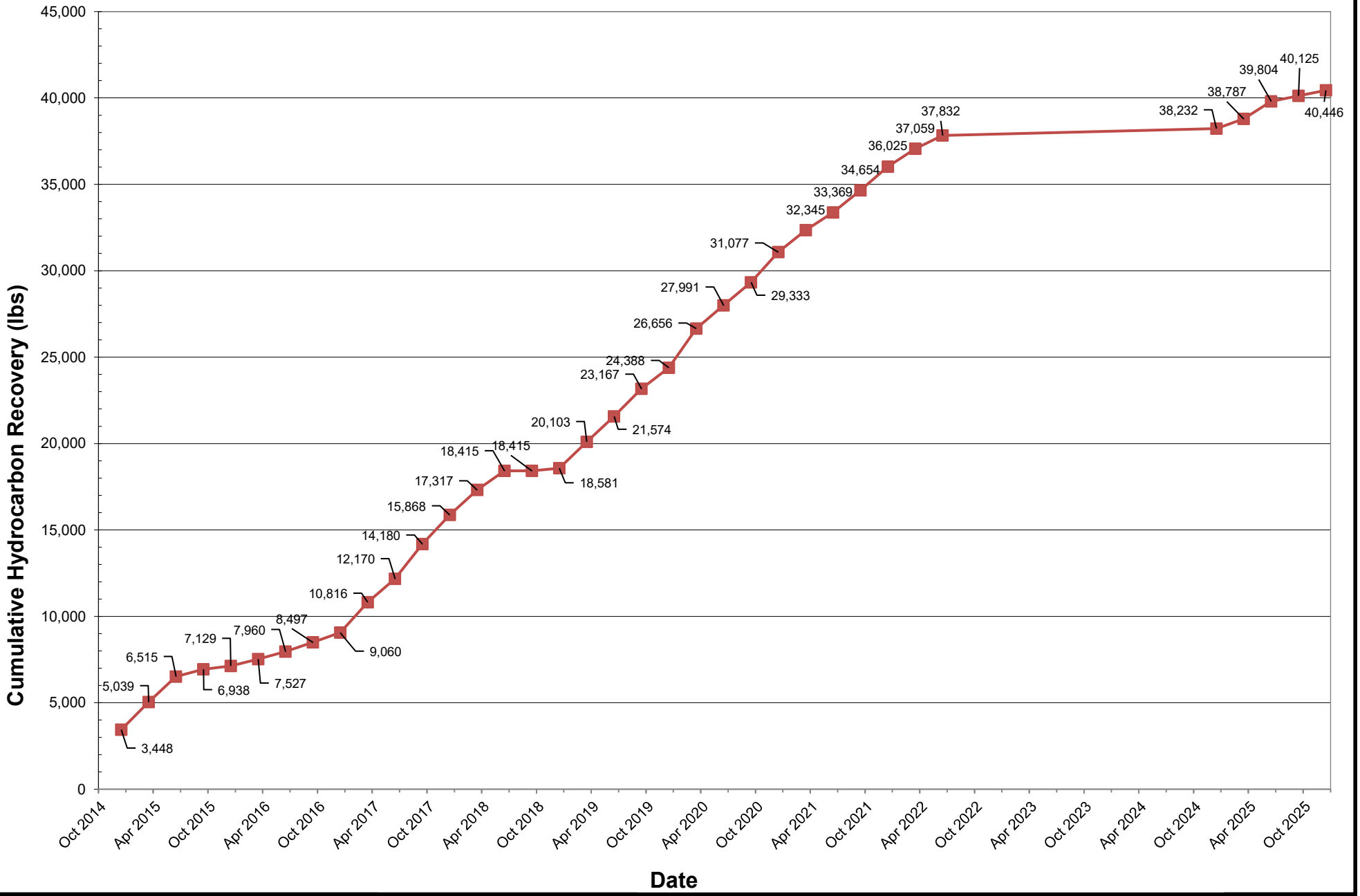
1 inch = 210 feet

0 105 210
Feet

Former Coke Oven Area
Cell 2 System Layout
AS/SVE and GW P&T
Date: 2/9/2026

Figure C2-1

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Engineers and Scientists

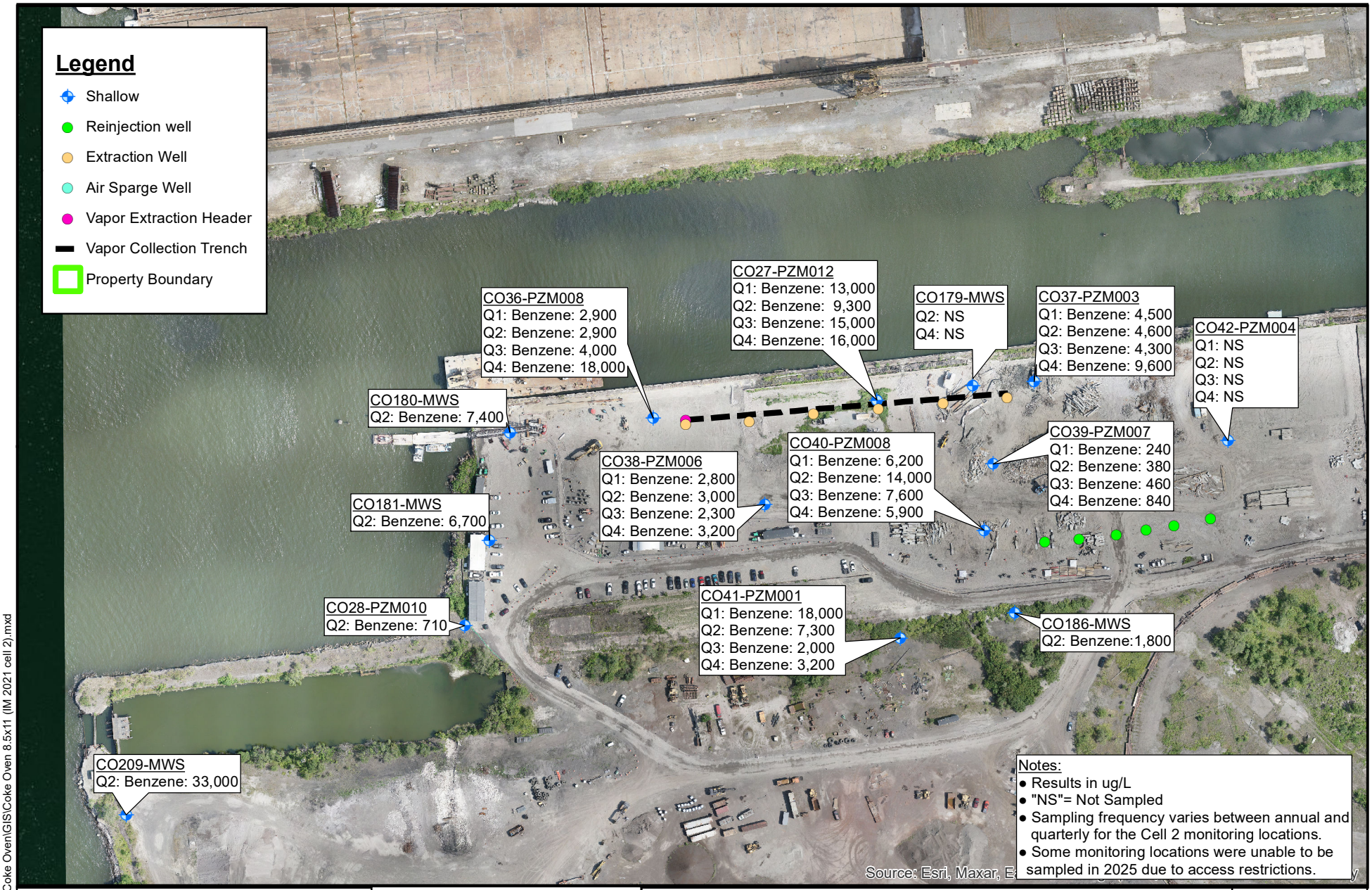
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 2

January 3, 2026

Figure
C2-2



N

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Engineers and Scientists

1 inch = 210 feet

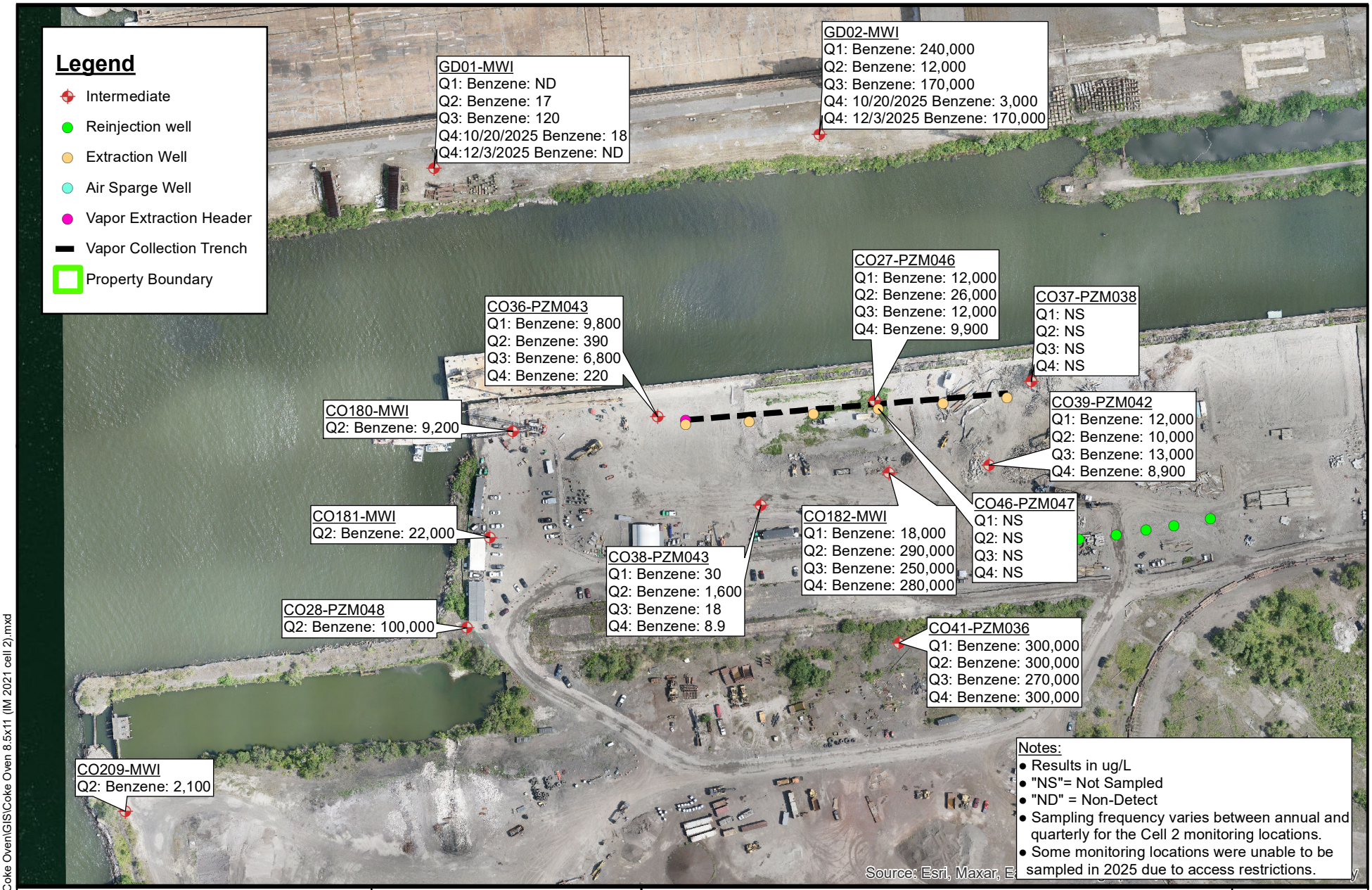
0 105 210
Feet

Former Coke Oven Area
Cell 2 2025 Benzene Concentrations
Shallow Zone

Date: 1/15/2026

Figure
C2-3

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N

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1 inch = 210 feet

0 105 210
Feet

Former Coke Oven Area
Cell 2 2025 Benzene Concentrations
Intermediate Zone

Date: 1/15/2026

Figure
C2-4

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Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Air Sparge Well
- Vapor Extraction Header
- Vapor Collection Trench

N

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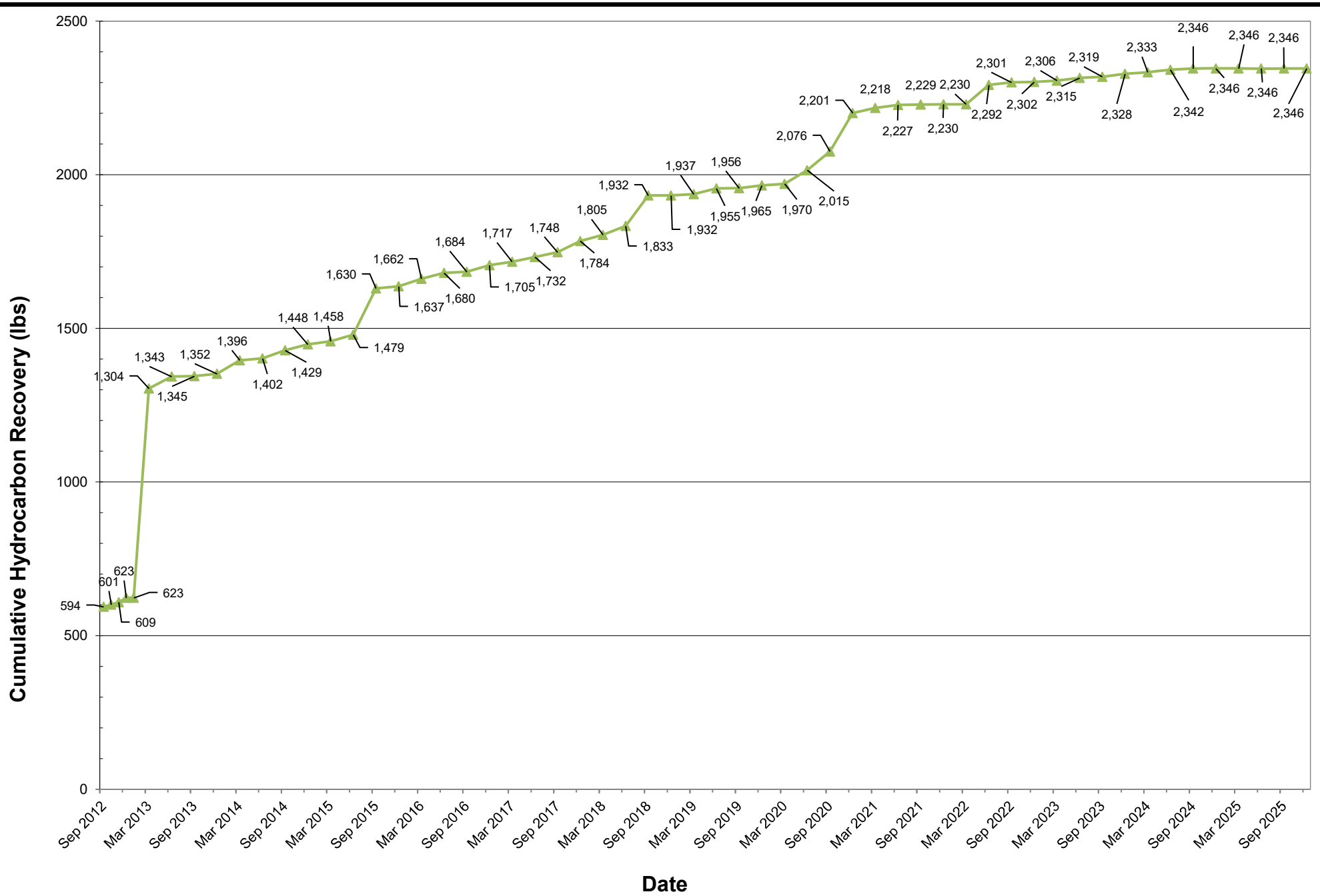
1 inch = 83 feet

0 40 80 Feet

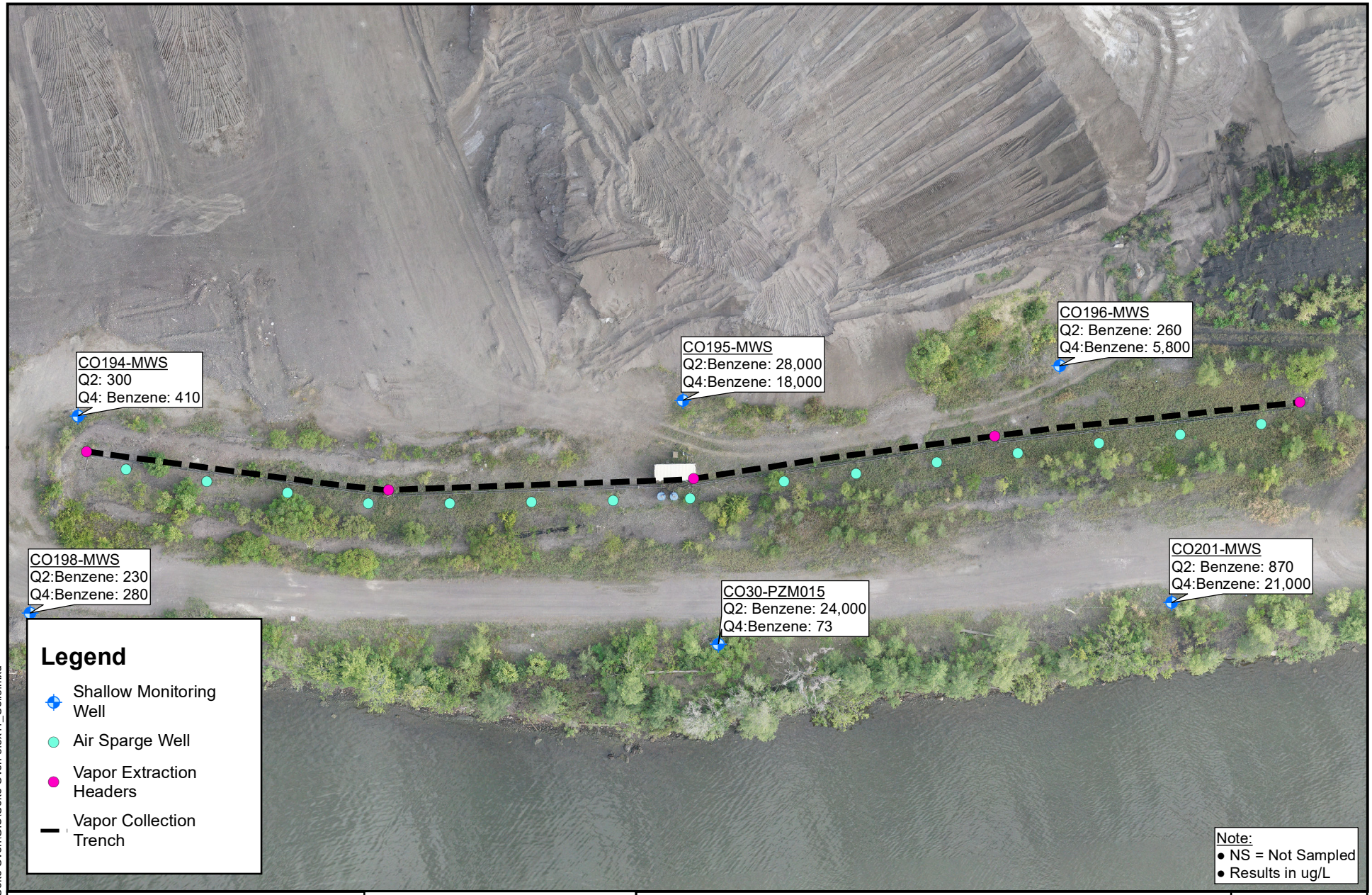
Former Coke Oven Area
Cell 3 System Layout
AS/SVE
Date: 2/4/2026

Figure C3-1

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ARM Group LLC Engineers and Scientists	Former Coke Oven Area Tradepoint Atlantic Sparrows Point, Maryland	Cumulative Hydrocarbon Recovery (lbs) Cell 3 February 4, 2026	**Figure** **C3-2**



N

ARM Group LLC
Engineers and Scientists

1 inch = 67 feet

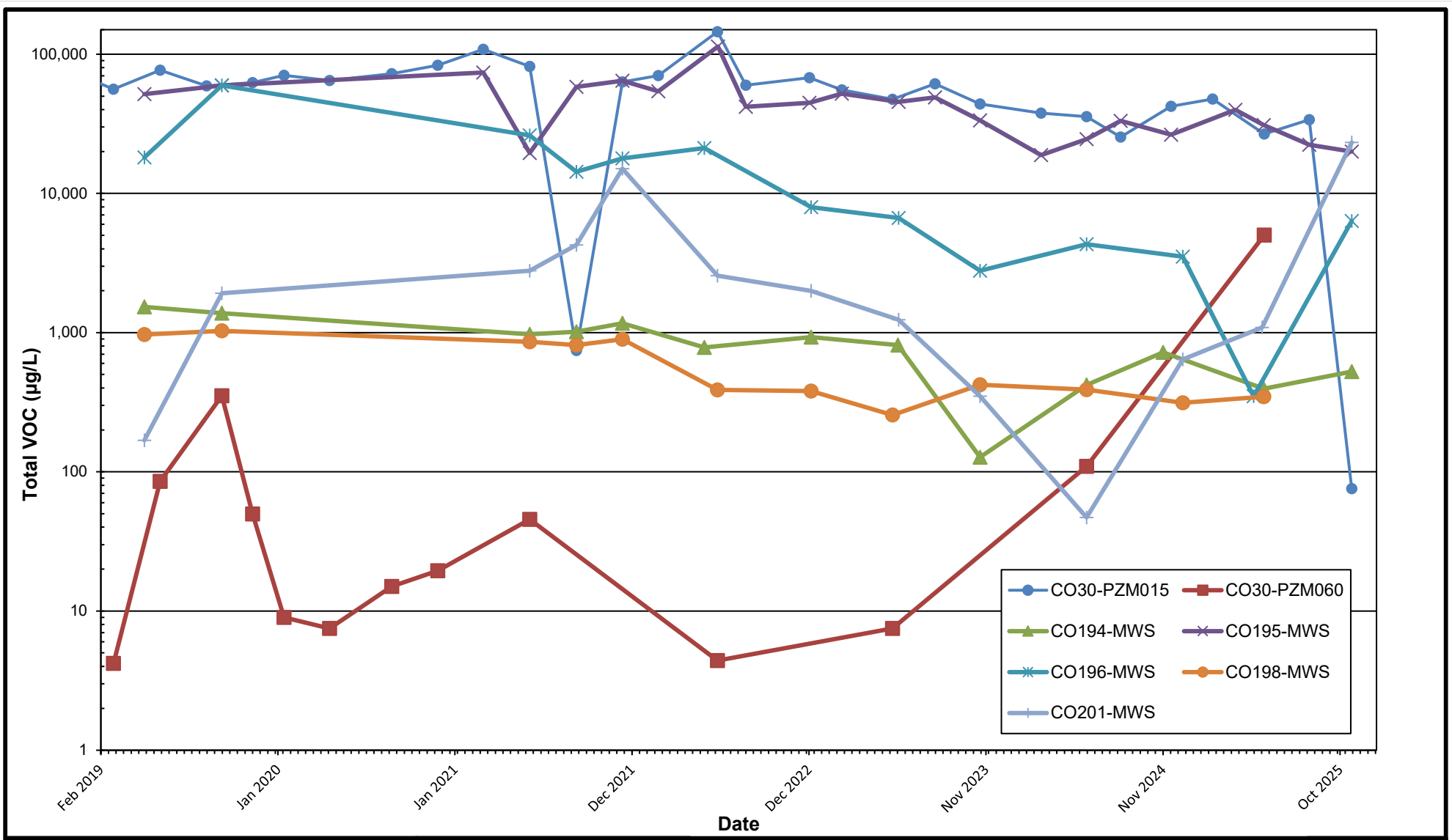
0 30 60
Feet

Former Coke Oven Area
Cell 3 2025 Benzene Concentrations
Shallow Zone

Date: 2/12/2026

Figure C3-3

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ARM Group LLC
Engineers and Scientists

Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 3 Shallow Zone

January 2026

Figure C3-4



Former Coke Oven Area - Cell 4
Completed Excavation Boundary
January 22, 2024

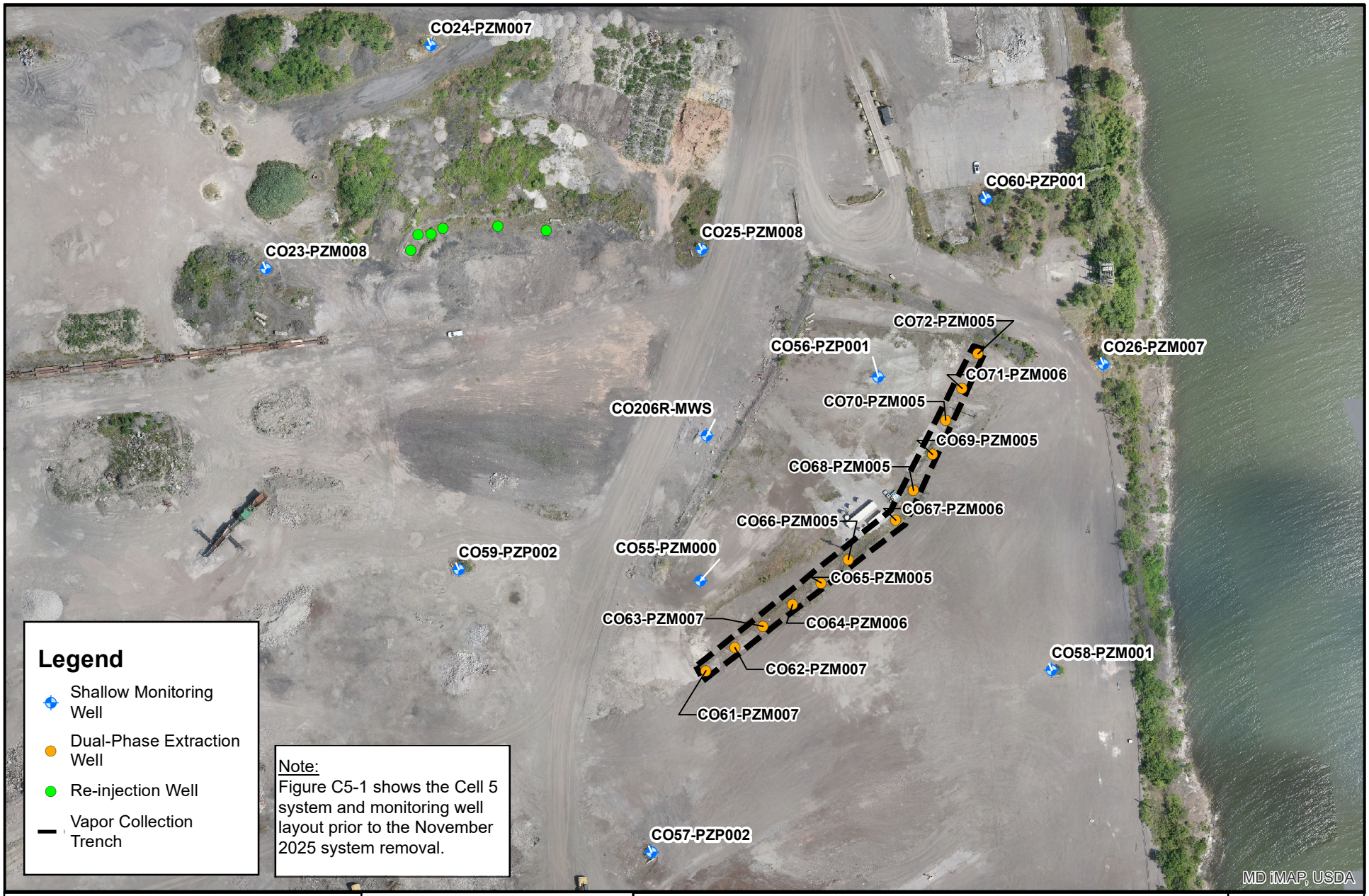
Figure
C4-1

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD

P:\EnviroAnalytics Group\Coke Oven\GIS\Cell 4 Supp Borings.mxd



Legend

- Shallow Monitoring Well
- Dual-Phase Extraction Well
- Re-injection Well
- Vapor Collection Trench

Note:
Figure C5-1 shows the Cell 5 system and monitoring well layout prior to the November 2025 system removal.

N

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1 inch = 160 feet

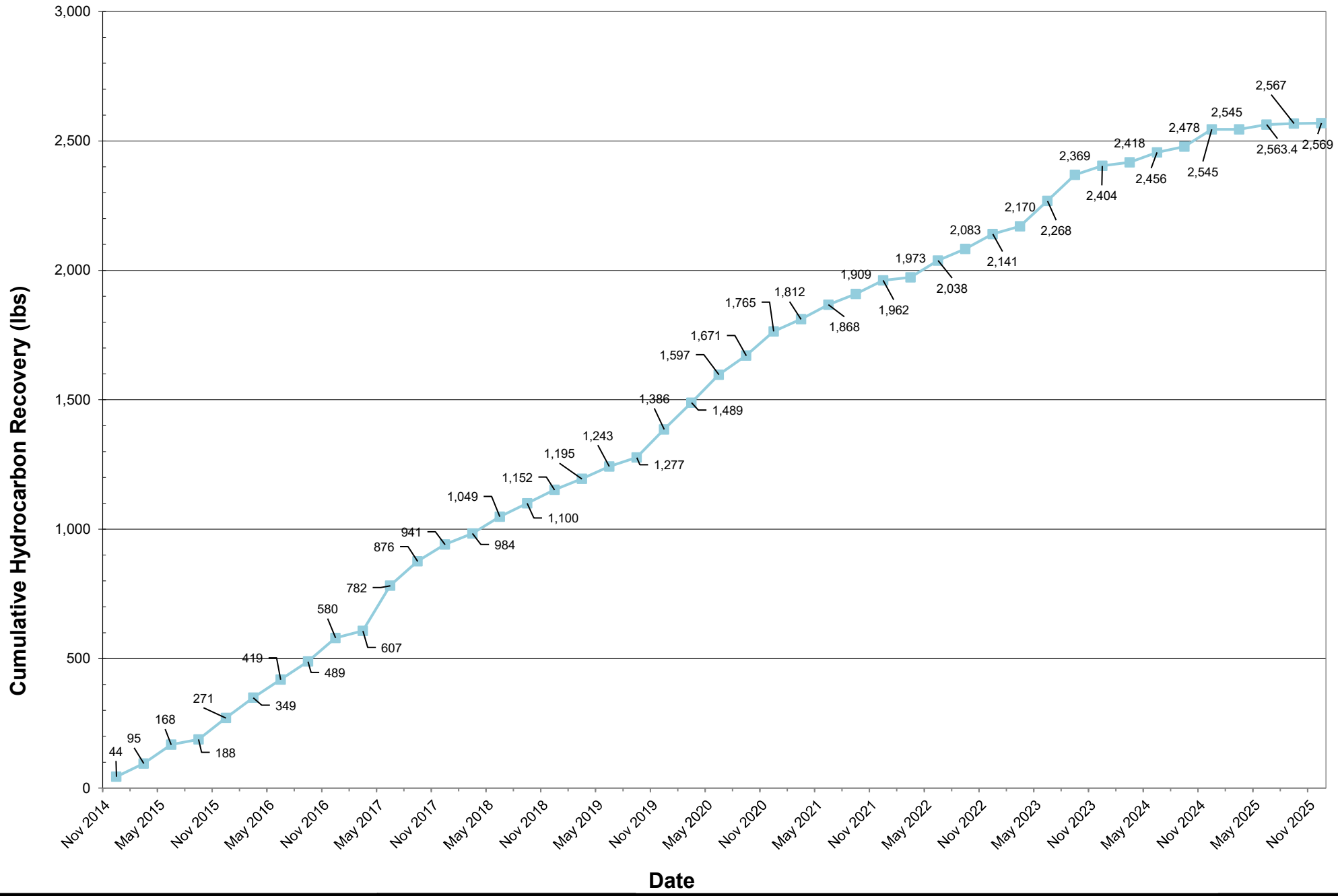
0 75 150 Feet

Former Coke Oven Area - Cell 5 System Layout DPE System

Date: 2/2/2026

Figure C5-1

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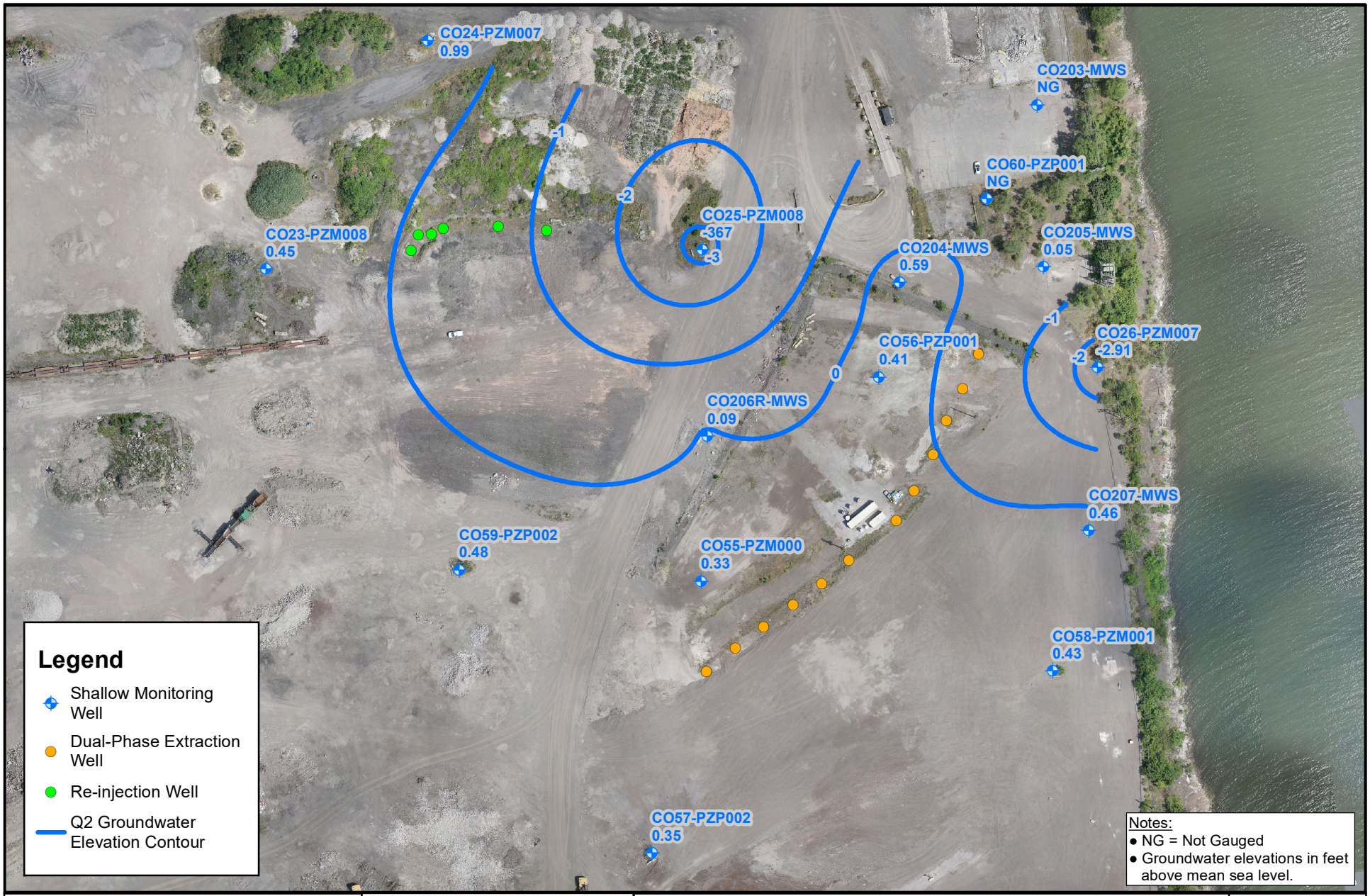
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 5 - DPE System

February 4, 2026

Figure
C5-2



N

ARM Group LLC
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1 inch = 160 feet

0 75 150 Feet

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

Date: 1/15/2026

Figure C5-3

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N

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1 inch = 160 feet

0 75 150 Feet

Former Coke Oven Area
Cell 5 Q1 Naphthalene Concentrations
Shallow Zone

Date: 1/19/2026

Figure C5-4

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N

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Engineers and Scientists

1 inch = 160 feet

0 75 150 Feet

Former Coke Oven Area
Cell 5 Q2 Naphthalene Concentrations
Shallow Zone

Date: 1/19/2026

Figure C5-5

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N

ARM Group LLC
Engineers and Scientists

1 inch = 160 feet

0 75 150 Feet

Former Coke Oven Area
Cell 5 Q3 Naphthalene Concentrations
Shallow Zone

Date: 1/19/2026

Figure C5-6

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N

ARM Group LLC
Engineers and Scientists

1 inch = 160 feet

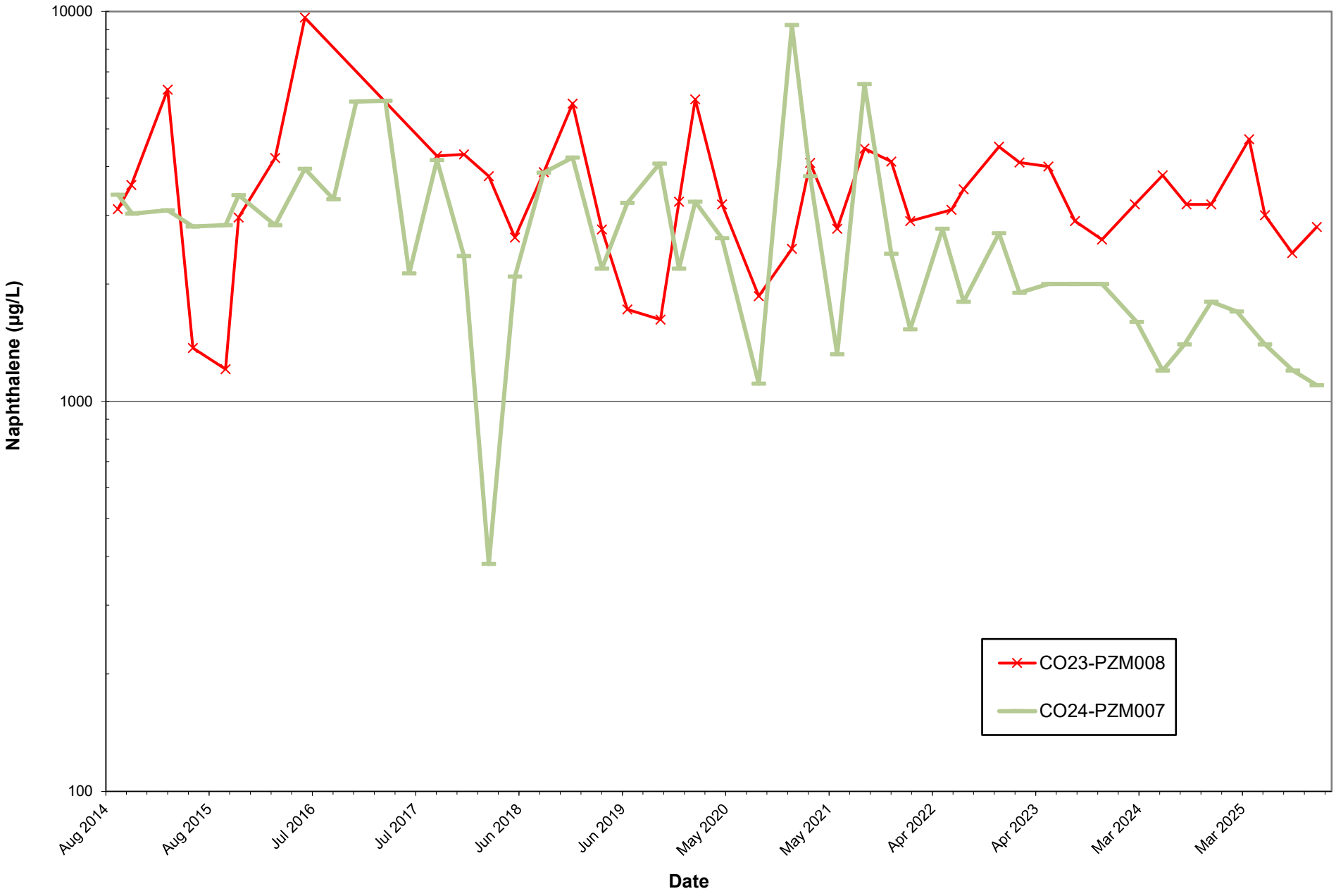
0 75 150 Feet

Former Coke Oven Area
Cell 5 Q4 Naphthalene Concentrations
Shallow Zone

Date: 1/19/2026

Figure C5-7

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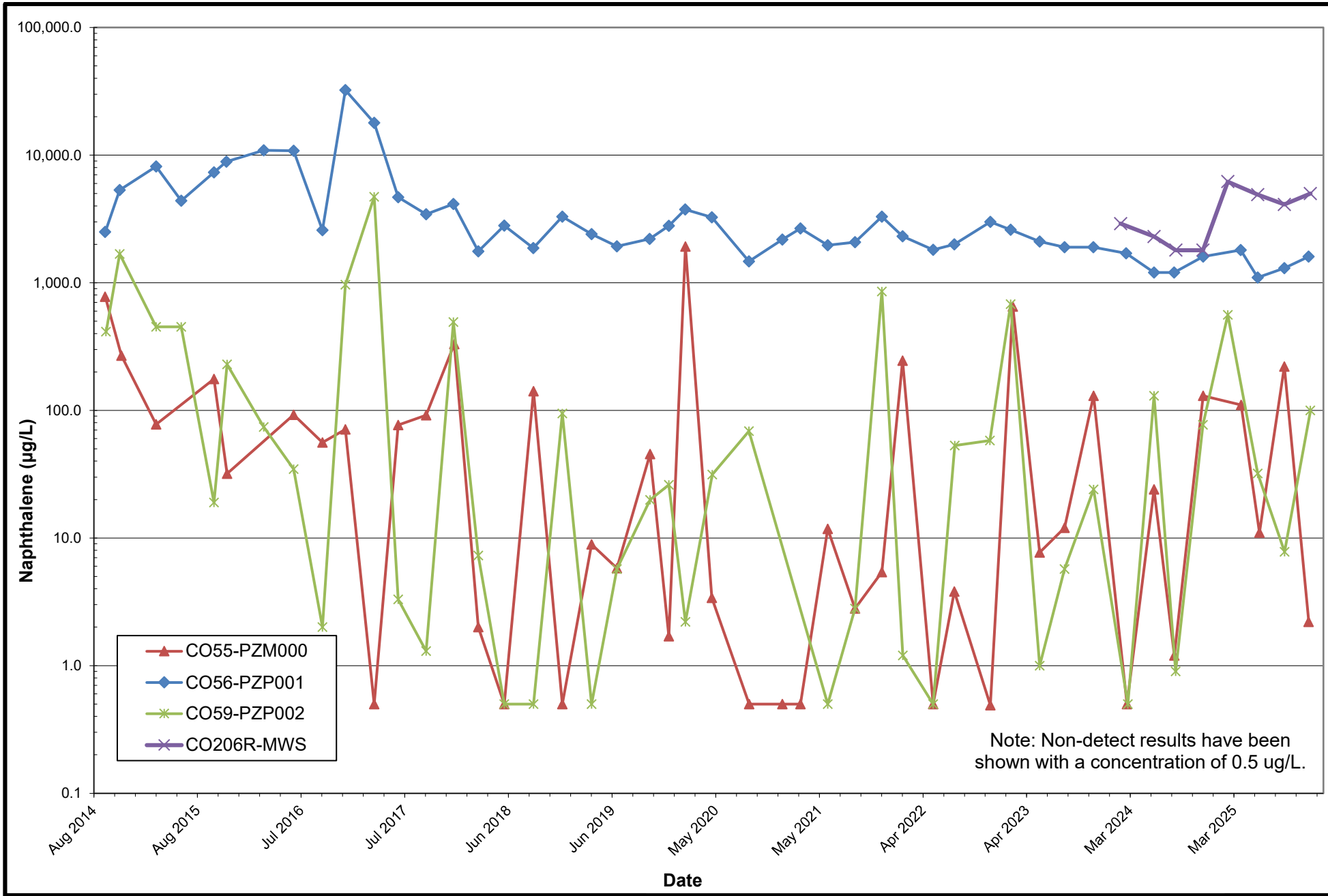
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Naphthalene in Groundwater
Cell 5 Reinjection-Area Monitoring Wells

January 2026

Figure
C5-8



ARM Group LLC
Engineers and Scientists

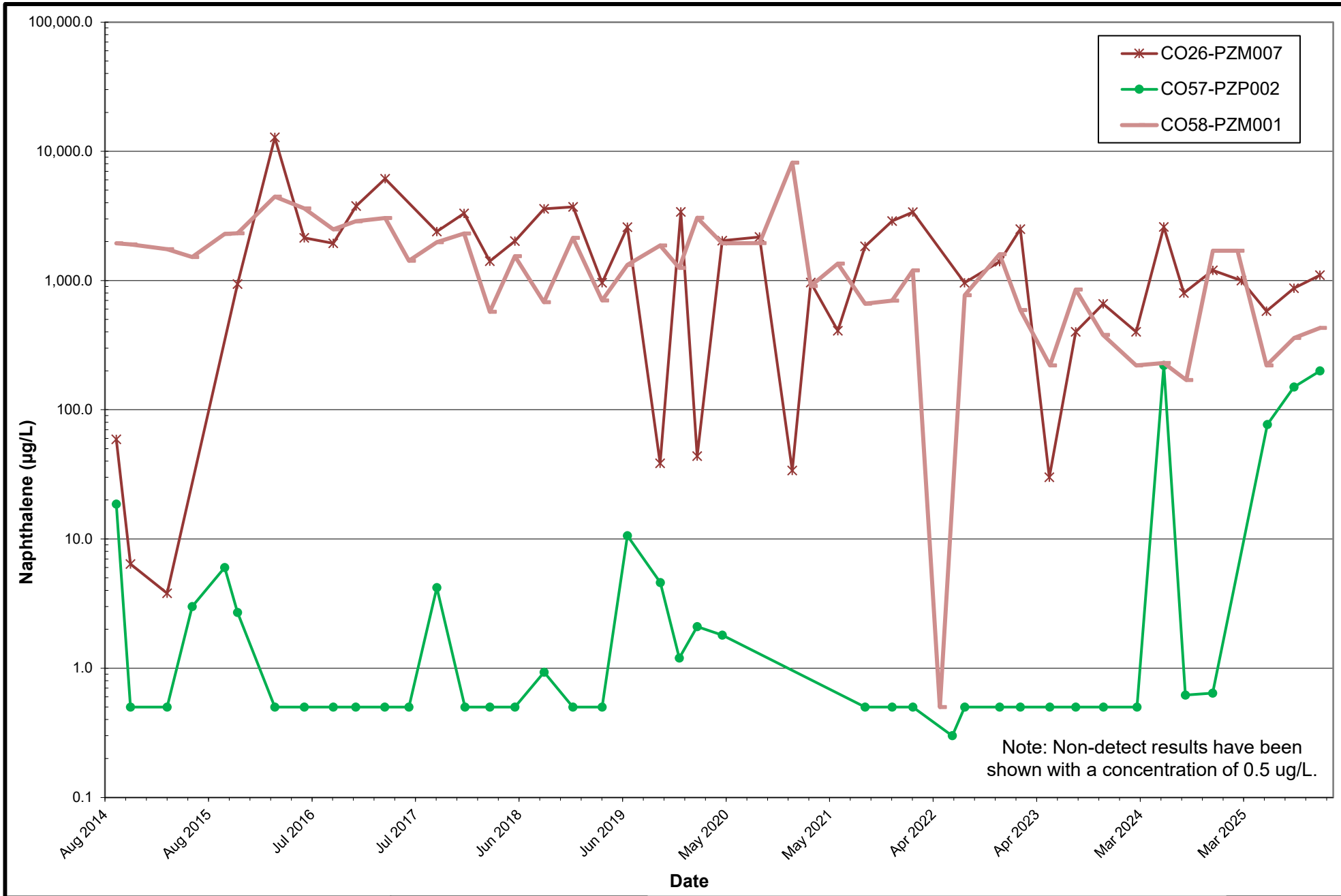
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Naphthalene in Groundwater
Cell 5 Extraction-Area Monitoring Wells

January 2026

Figure
C5-9



ARM Group LLC
Engineers and Scientists

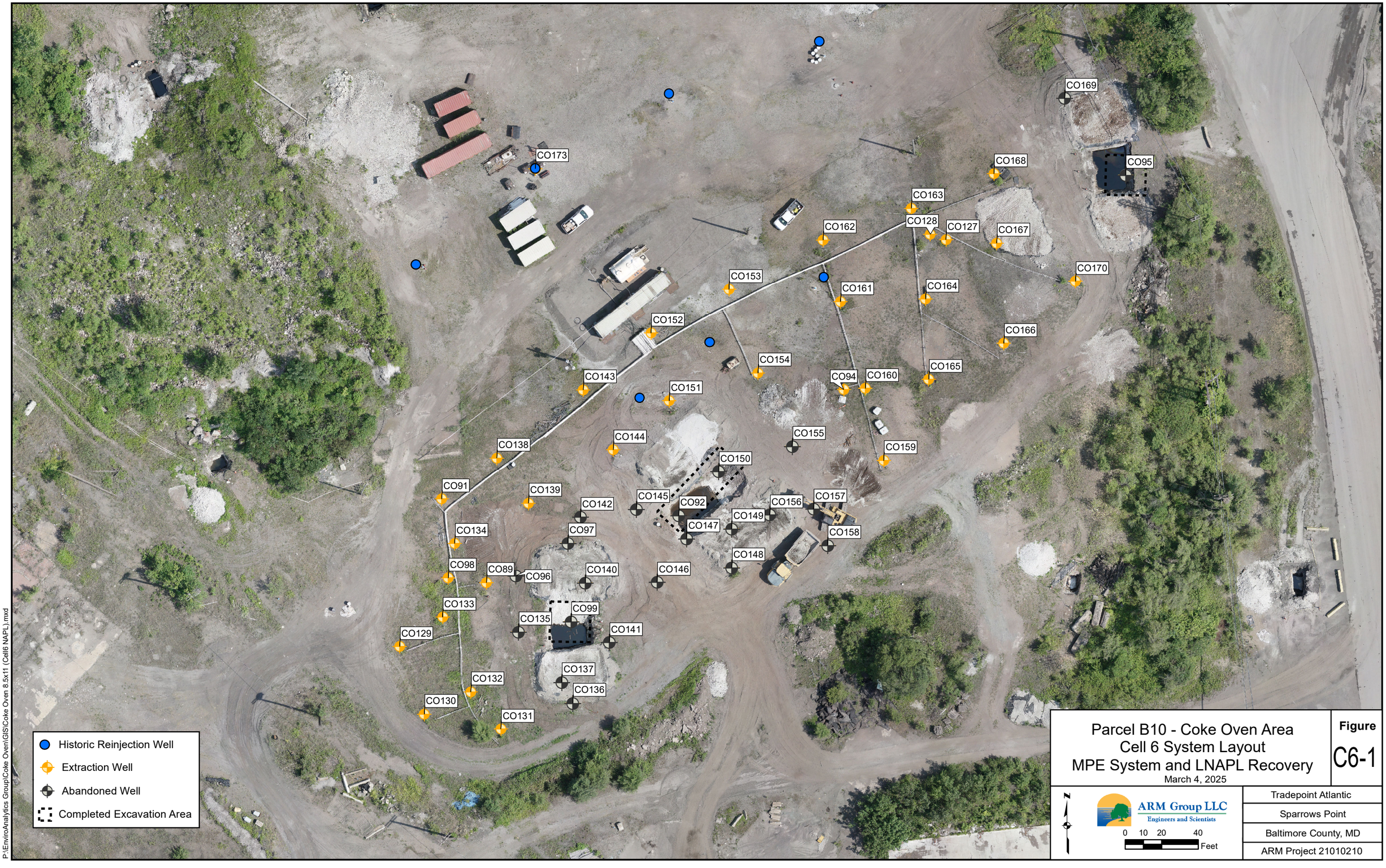
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Naphthalene in Groundwater
Cell 5 Perimeter Monitoring Wells

January 2026

Figure
C5-10



P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (Cell6 NAPL).mxd

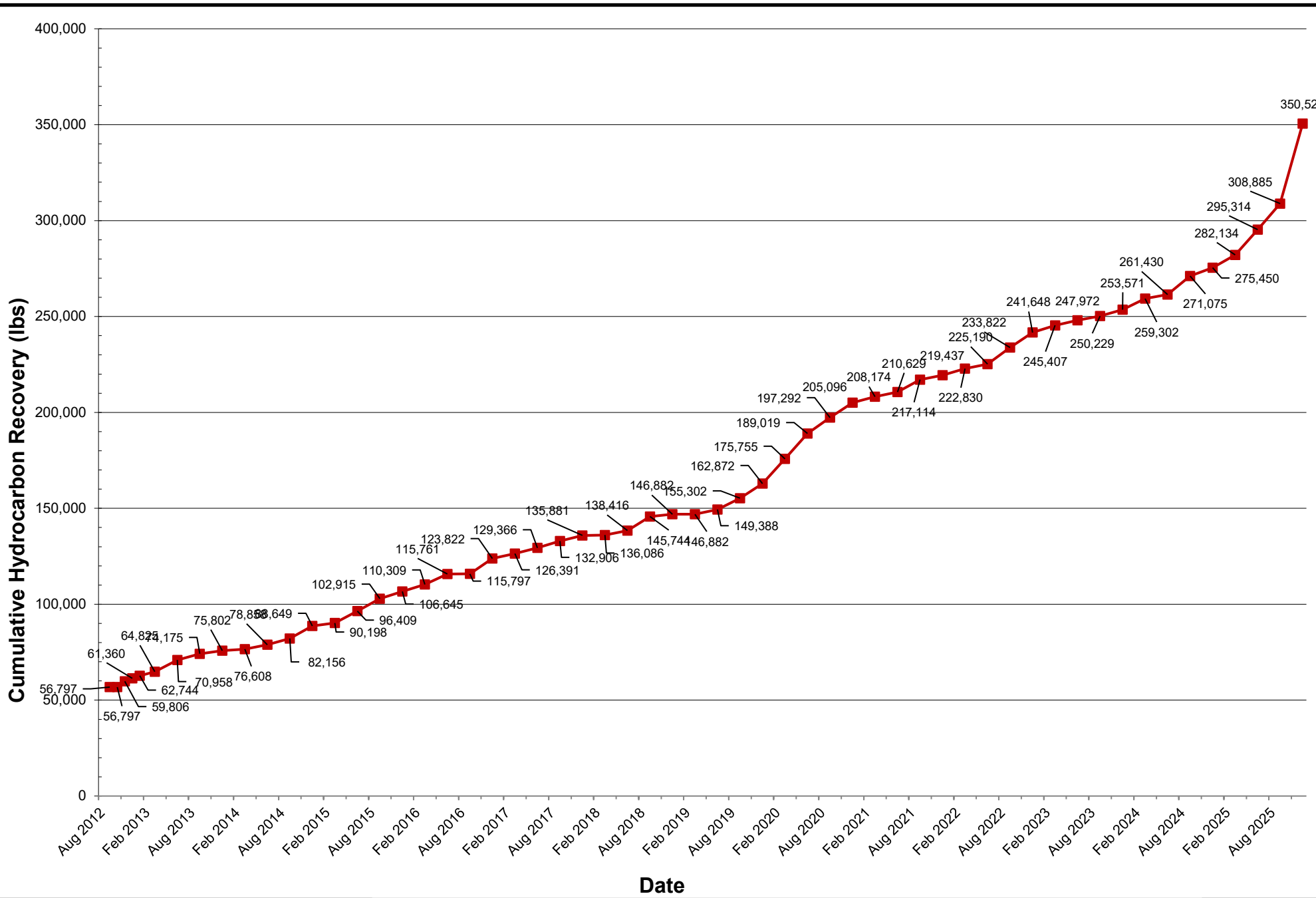
Parcel B10 - Coke Oven Area
Cell 6 System Layout
MPE System and LNAPL Recovery

March 4, 2025

Figure
C6-1

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210



ARM Group LLC
Engineers and Scientists

Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 6

February 4, 2026

Figure
C6-2



Cell 6 - 2025 NAPL Recovery Locations

February 6, 2026

Figure C6-3

ARM Group LLC
Engineers and Scientists

0 30 60 120 Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210

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Former Cell 6 Extraction Wells - Product Thickness (Q4 2025)

November 18, 2025

Figure
C6-4

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210

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TABLES

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

Cell 1 2025 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	296	271	256	272	274
Average Concentrations	ug/L	0.86	1.2	0.24	0.62	0.73
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.00095	0.0012	0.00023	0.00063	0.00076
Estimated Hydrocarbon Destruction/Removal Rate	pounds/day	0.023	0.029	0.0056	0.015	0.018
Total VGAC Operating Time	hours	950	1,128	2,133	1,923	6,133
Overall VGAC Operational Time	%	44.0%	51.6%	96.6%	87.1%	69.8%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	0.90	1.4	0.50	1.22	4.0

Cell 1 Cumulative Summary of Estimated Hydrocarbon Recovery

August 3, 2010 - December 31, 2025

Parameter	Units	Quantity
Total VGAC Operating Time	hours	68,905
Overall VGAC Operational Time	%	51.0%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	16,739
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.2429
Estimated Hydrocarbon Destruction/Removal Rate	pounds/day	5.8303

Table C1-2 - Cell 1 VGAC Influent Analytical Results

Month		January	February	March	April	May	June	July	August	September	October	November	December
Analyte (8260 Organics)	**Units**	*OFFLINE*	2/28/2025	3/28/2025	*OFFLINE*	5/30/2025	6/17/2025	7/23/2025	8/29/2025	9/29/2025	10/27/2025	11/25/2025	12/23/2025
Benzene	ug/L	*NS*	**0.81**	**0.65**	*NS*	**0.75**	**1.35**	**0.45**	**0.11**	*ND*	*ND*	**0.72**	**0.62**
Toluene	ug/L	*NS*	*ND*	**0.25**	*NS*	**0.15**	**0.16**	**0.17**	*ND*	*ND*	**0.1**	**0.11**	**0.31**
Total Volatile Organics	ug/L	*NS*	**0.81**	**0.90**	*NS*	**0.90**	**1.51**	**0.62**	**0.11**	**0.00**	**0.10**	**0.72**	**0.93**

Notes:
BOLD = Analyte detected
ug/L = micro grams per liter
ND = Non-detect
NS = not sampled, system offline at sample date
*Analytes with no detections were not included within this table.

Table C1-3
Cell 3 Monitoring Well Construction Information

Monitoring Well Designation	Monitoring Well Temporary Identification	Installation Method	Northing	Easting	Top of Casing Elevation (ft AMSL)	Protection Cover Type	Well Total Depth (ft bgs)	Riser Length (ft)	Screen Length (ft)
CO93-PZM	BP-MW-09	Hollow Stem Auger	562,511.91	1,455,769.43	12.12	Steel Riser	18.00	8.00	10.00
CO190-MWS	COX-MWS	Hollow Stem Auger	562,623.23	1,455,434.17	15.45	Steel Riser	20.00	10.00	10.00
CO191-MWS	COT-MWS	Hollow Stem Auger	562,392.83	1,455,088.30	13.48	Steel Riser	20.00	5.00	15.00

ft AMSL = feet above mean sea level
ft bgs = feet below ground surface

Table C1-4
Cell 1 Monitoring Well Groundwater Elevations

Well ID	Top of PVC Elevation (ft AMSL)	Aquifer	Well Depth (ft bgs)	Q1		Q2		Q3		Q4	
				Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)
CO93-PZM	12.12	Shallow	20.00	11.49	0.63	11.22	0.90	10.76	1.36	10.74	1.38
CO190-MWS	15.45	Shallow	20.00	14.97	0.48	14.75	0.70	14.27	1.18	14.25	1.20
CO191-MWS	13.48	Shallow	20.00	-	-	13.26	0.22	12.25	1.23	12.58	0.90

Table C1-5
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			3/26/25	5/14/25	8/12/25	11/18/25	3/26/25	5/16/25	8/12/25	11/19/25	5/14/25
Volatile Organic Compound	**Units**	**PAL**									
Benzene	µg/L	5	**120,000**	**140,000**	**160,000**	**94,000**	**290,000**	**33,000**	**670,000**	**670,000**	**26,000**
Ethylbenzene	µg/L	700	**920**	**860**	**910**	**680**	**1,000**	ND	ND	ND	**120**
Toluene	µg/L	1,000	**38,000**	**40,000**	**50,000**	**26,000**	**14,000**	**740**	**27,000**	**18,000**	**4,000**
Xylenes	µg/L	10,000	**9,200**	**10,000**	**10,000**	**7,100**	**2,000**	ND	ND	ND	**1,200**
Total Volatile Organics	µg/L		**168,120**	**190,860**	**220,910**	**127,780**	**307,000**	**33,740**	**697,000**	**688,000**	**31,320**
Semi-Volatile Organic Compound	**Units**	**PAL**									
Naphthalene	µg/L	0.12	**1,100**	**1,200**	**1,200**	**1,100**	**2,000**	ND	ND	ND	**220**

Notes:

Bold = Analyte Detected

Red = Exceedence of groundwater Project Action Limit (PAL)

µg/L = micrograms per liter

ND = Not Detected above the reporting limit

Table C2-1: 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	211,600	177,220	147,250	0	536,070
Total Operating Time	hours	825	626	540	0	1,991
Overall Operational Time	%	38.2%	28.7%	24.4%	0.0%	22.8%
Extracted Total Concentrations	lbs/gal	2.62E-03	5.74E-03	2.18E-03	OFFLINE	2.18E-03
Effluent Total Concentrations	lbs/gal	1.41E-06	1.94E-06	7.66E-07	OFFLINE	7.66E-07
0						
Extracted Hydrocarbons	lbs	555	1,017	321	OFFLINE	1,894
Effluent Hydrocarbons	lbs	0.30	0.34	0.11	OFFLINE	0.76
Total Hydrocarbons Removed	lbs	555	1,017	321	OFFLINE	1,893

Table C2-2
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
CO03-PZM005	----------	Hollow Stem Auger	562990.712	1455398.333	13.53	Steel Riser	17.00	7.00	10.00
CO27-PZM012	----------	Hollow Stem Auger	563239.965	1454916.917	5.12	Steel Riser	15.00	5.00	10.00
CO27-PZM046	----------	Hollow Stem Auger	563239.958	1454913.372	5.17	Steel Riser	49.00	39.00	10.00
CO28-PZM010	----------	Unknown	562891.927	1454280.619	12.34	Steel Riser	Unknown	Unknown	Unknown
CO28-PZM048	----------	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
CO121-PZM	CO121-SB075	Unknown	563301.930	1455356.120	11.87	Steel Riser	14.00	Unknown	Unknown
CO177-MWS	COK-MWS	Hollow Stem Auger	563234.958	1454751.722	6.62	Steel Riser	15.00	5.00	10.00
CO177-MWI	COK-MWI	Hollow Stem Auger	563234.629	1454749.248	6.83	Steel Riser	50.00	30.00	20.00
CO178-MWI	COL-MWI	Hollow Stem Auger	563246.333	1454911.001	7.56	Steel Riser	50.00	30.00	20.00
CO179-MWS	COM-MWS	Hollow Stem Auger	563262.590	1455064.510	8.11	Steel Riser	15.00	5.00	10.00
CO179-MWI	COM-MWI	Hollow Stem Auger	563247.848	1454916.386	7.43	Steel Riser	50.00	30.00	20.00
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
CO184-MWI	COR-MWI	Hollow Stem Auger	562836.854	1454628.124	11.65	Steel Riser	37.00	22.00	15.00
CO186-MWS	COT-MWS	Hollow Stem Auger	562911.800	1455128.850	11.74	Steel Riser	20.00	5.00	15.00
CO188-MWI	COV-MWI	Hollow Stem Auger	562760.829	1455004.678	12.20	Steel Riser	50.00	30.00	20.00
CO209-MWS	----------	Hollow Stem Auger	562600.385	1453757.934	10.70	Steel Riser	25.00	15.00	10.00
CO209-MWI	----------	Hollow Stem Auger	562605.794	1453757.191	10.43	Steel Riser	50.00	40.00	10.00
GD01-MWI	----------	Hollow Stem Auger	563597.259	1454233.229	7.30	Steel Riser	50.00	40.00	10.00
GD02-MWI	----------	Hollow Stem Auger	563649.399	1454827.562	8.89	Steel Riser	50.00	40.00	10.00

Table C2-3
Cell 2 Monitoring Well Groundwater Elevations

Well ID	Top of PVC Elevation (ft AMSL)	Aquifer	Well Depth (ft bgs)	Q1			Q2			Q3			Q4		
				Depth to Groundwater (ft bTOC)	Groundwater Elevation (ft AMSL)	NAPL Thickness (ft)	Depth to Groundwater (ft bTOC)	Groundwater Elevation (ft AMSL)	NAPL Thickness (ft)	Depth to Groundwater (ft bTOC)	Groundwater Elevation (ft AMSL)	NAPL Thickness (ft)	Depth to Groundwater (ft bTOC)	Groundwater Elevation (ft AMSL)	NAPL Thickness (ft)
CO03-PZM005	13.53	S	17.00	NM	NM	--	5.72	7.81	--	NM	NM	NM	4.60	8.93	--
CO27-PZM012	5.12	S	17.00	4.08	1.04	--	4.10	1.02	--	4.13	0.99	--	7.03	-1.91	--
CO27-PZM046	5.17	I	50.00	6.87	-1.70	--	7.49	-2.32	--	7.19	-2.02	--	8.42	-3.25	--
CO28-PZM010	12.34	S	22.00	12.39	-0.05	--	11.80	0.54	--	10.60	1.74	--	12.11	0.23	--
CO28-PZM048	12.69	I	56.00	12.96	-0.27	--	12.14	0.55	--	10.68	2.01	--	12.30	0.39	--
CO36-PZM008	6.94	S	15.00	12.84	-5.90	--	12.97	-6.03	--	12.69	-5.75	--	13.27	-6.33	--
CO36-PZM043	6.92	I	50.00	13.36	-6.44	--	13.48	-6.56	--	13.19	-6.27	--	13.65	-6.73	--
CO37-PZM003	12.34	S	15.00	14.42	-2.08	--	13.70	-1.36	0.02	13.98	-1.64	Trace	14.12	-1.78	Trace
CO37-PZM038	12.12	I	50.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO38-PZM006	6.75	S	13.00	10.53	-3.78	--	13.03	-6.28	--	12.77	-6.02	--	13.72	-6.97	--
CO38-PZM043	6.65	I	50.00	12.90	-6.25	--	10.76	-4.11	--	10.30	-3.65	--	10.71	-4.06	--
CO39-PZM007	7.75	S	15.00	14.12	-6.37	--	14.15	-6.40	--	13.62	-5.87	--	14.00	-6.25	--
CO39-PZM042	7.91	I	50.00	15.31	-7.40	--	15.42	-7.51	--	14.92	-7.01	--	15.35	-7.44	--
CO40-PZM008	7.47	S	15.00	14.91	-7.44	--	14.75	-7.28	--	14.36	-6.89	--	14.62	-7.15	--
CO41-PZM001	13.57	S	15.00	16.59	-3.02	--	16.13	-2.56	--	15.60	-2.03	--	15.89	-2.32	--
CO41-PZM036	13.60	I	50.00	16.34	-2.74	--	17.71	-4.11	--	16.23	-2.63	--	16.51	-2.91	--
CO42-PZM004	10.83	S	15.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO121-PZM	11.87	S	14.00	NM	NM	--	11.40	0.47	--	NM	NM	--	8.02	3.85	--
CO122-PZM	19.42	S	22.00	NM	NM	--	13.43	5.99	--	NM	NM	--	NM	NM	--
CO177-MWS	6.62	S	15.00	NM	NM	--	5.78	0.84	--	NM	NM	--	NM	NM	--
CO177-MWI	6.83	I	50.00	NM	NM	--	8.53	-1.70	--	NM	NM	--	8.65	-1.82	--
CO178-MWS		S		7.53	NM	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO178-MWI	7.56	I	50.00	9.48	-1.92	--	8.73	-1.17	--	NM	NM	--	11.43	-3.87	--
CO179-MWS	8.11	S	15.00	NM	NM	--	13.98	-5.87	Trace	Dry	Dry	--	Dry	Dry	--
CO179-MWI	7.43	I	50.00	NM	NM	--	17.18	-9.75	--	NM	NM	--	NM	NM	--
CO180-MWS	12.01	S	15.00	12.19	-0.18	--	11.21	0.80	--	10.45	1.56	--	11.87	0.14	--
CO180-MWI	11.99	I	50.00	NM	NM	--	11.24	0.75	--	10.40	1.59	--	12.04	-0.05	--
CO181-MWS	12.70	S	15.00	NM	NM	--	12.09	0.61	--	11.21	1.49	--	12.67	0.03	--
CO181-MWI	12.68	I	50.00	NM	NM	--	12.00	0.68	--	11.27	1.41	--	12.50	0.18	--
CO182-MWI	7.53	I	50.00	16.09	-8.56	--	14.96	-7.43	--	NM	NM	--	14.66	-7.13	--
CO184-MWI	11.65	I	37.00	NM	NM	--	15.55	-3.90	--	NM	NM	--	11.30	0.35	--
CO186-MWS	11.74	S	20.00	NM	NM	--	14.73	-2.99	--	NM	NM	--	14.52	-2.78	--
CO188-MWI	12.20	I	50.00	NM	NM	--	16.17	-3.97	--	NM	NM	--	16.00	-3.80	--
CO209-MWS	10.70	S	25.00	10.88	-0.18	--	10.12	0.58	--	9.86	0.84	--	10.59	0.11	--
CO209-MWI	10.43	I	50.00	10.76	-0.33	--	9.57	0.86	--	9.77	0.66	--	10.93	-0.50	--
GD01-MWI	7.30	I	50.00	NM	NM	--	39.45	-32.15	--	32.33	-25.03	--	34.94	-27.64	--
GD02-MWI	8.89	I	50.00	NM	NM	--	19.60	-10.71	--	17.92	-9.03	--	19.77	-10.88	--

Notes:
I = Intermediate zone well
S = Shallow zone well
NAPL = Non-aqueous phase liquid
-- = NAPL not observed
NM = Well not measured.
NS = Not sampled. Wells CO37-PZM038 and CO42-PZM004 are presumed to be buried due to construction activities.
DTW measured without the riser accounted for.

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID			CO27-PZM012				CO28-PZM010	CO36-PZM008			
Quarter			Q1	Q2	Q3	Q4	Q2	Q1	Q2	Q3	Q4
Event Date			3/27/2025	5/19/2025	8/12/2025	11/13/2025	5/16/2025	2/13/2025	5/15/2025	8/13/2025	11/13/2025
Volatile Organic Compound	**Units**	**PAL**									
Benzene	µg/L	5	**13,000**	**9,300**	**15,000**	**16,000**	**710**	**2,900**	**2,900**	**4,000**	**18,000**
Ethylbenzene	µg/L	700	**130**	**100**	**120**	**140**	**7.5**	**6.1 J**	**7.5 J**	**17 J**	**72**
Toluene	µg/L	1,000	**4,200**	**2,900**	**4,400**	**5,600**	**24**	**470**	**400**	**780**	**4,300**
Xylenes	µg/L	10,000	**1,100**	**780**	**920**	**1,400**	**120**	**260**	**260**	**300**	**1,300**
Total Volatile Organics	µg/L		**18,430**	**13,080**	**20,440**	**23,140**	**868**	**3,636**	**3,568**	**5,097**	**23,672**
Semi-Volatile Organic Compound	**Units**	**PAL**									
Naphthalene	µg/L	0.12	**630**	**640**	**700**	**620**	**240**	**120**	**61.0**	**170**	**510**

Sample ID			CO27-PZM046				CO28-PZM048	CO36-PZM043			
Quarter			Q1	Q2	Q3	Q4	Q2	Q1	Q2	Q3	Q4
Event Date			3/27/2025	5/19/2025	8/12/2025	11/13/2025	5/16/2025	2/13/2025	5/15/2025	8/13/2025	11/13/2025
Volatile Organic Compound	**Units**	**PAL**									
Benzene	µg/L	5	**12,000**	**26,000**	**12,000**	**9,900**	**100,000**	**9,800**	**390**	**6,800**	**220**
Ethylbenzene	µg/L	700	**160**	**170**	**100**	**97**	**230 J**	**27.0**	**6.9**	**24 J**	**5.6**
Toluene	µg/L	1,000	**4,600**	**4,700**	**3,800**	**3,500**	**950**	**1,100**	**140**	**1,200**	**210**
Xylenes	µg/L	10,000	**1,400**	**1,200**	**840**	**900**	**3900 J**	**370**	**77**	**340**	**110**
Total Volatile Organics	µg/L		**18,160**	**32,070**	**16,740**	**14,397**	**105,080**	**11,297**	**631**	**8,364**	**546**
Semi-Volatile Organic Compound	**Units**	**PAL**									
Naphthalene	µg/L	0.12	**920**	**830**	**620**	**650**	**3,100**	**370**	**5.3**	**190**	**25**

Notes:

Bold = Analyte Detected

Red = Exceedance of groundwater Project Action Limit (PAL)

µg/L = micrograms per liter

ND = Not Detected above the reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID			CO37-PZM003				CO38-PZM006				CO39-PZM007			
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date			2/21/2025	5/14/2025	8/14/2025	11/19/2025	2/24/2025	5/15/2025	8/14/2025	11/18/2025	2/21/2025	5/14/2025	8/18/2025	11/14/2025
Volatile Organic Compound	**Units**	**PAL**												
Benzene	µg/L	5	**4,500**	**4,600**	**4,300**	**9,600**	**2,800**	**3,000**	**2,300**	**3,200**	**240**	**380**	**460**	**840**
Ethylbenzene	µg/L	700	**25**	**31**	**38**	**39 J**	**26**	**28**	**25**	**34**	**1.6**	**7.4**	**2.6**	**4.2 J**
Toluene	µg/L	1,000	**1,100**	**1,400**	**1,600**	**1,800**	**480**	**590**	**310**	**450**	**32**	**190**	**62**	**120**
Xylenes	µg/L	10,000	**290**	**400**	**460**	**390**	**170**	**240**	**170**	**210**	**11**	**75**	**19**	**33 J**
Total Volatile Organics	µg/L		**5,915**	**6,431**	**6,398**	**11,829**	**3,476**	**3,858**	**2,805**	**3,894**	**285**	**652**	**544**	**997**
Semi-Volatile Organic Compound	**Units**	**PAL**												
Naphthalene	µg/L	0.12	**190**	**190**	**210**	**200**	**560**	**290**	**510**	**790**	**63**	**36**	**44**	**46**

Sample ID			CO38-PZM043				CO39-PZM042				CO41-PZM036			
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date			2/21/2025	5/15/2025	8/14/2025	11/18/2025	2/21/2025	5/14/2025	8/18/2025	11/14/2025	3/26/2025	5/14/2025	8/18/2025	11/13/2025
Volatile Organic Compound	**Units**	**PAL**												
Benzene	µg/L	5	**30**	**1,600**	**18**	**8.9**	**12,000**	**10,000**	**13,000**	**8,900**	**300,000**	**300,000**	**270,000**	**300,000**
Ethylbenzene	µg/L	700	**1.2**	**18**	**0.65**	*0.50 U*	**170**	**140**	**130**	**100**	**1000 J**	**920 J**	**730 J**	**830 J**
Toluene	µg/L	1,000	**23**	**490**	**17**	**3.2**	**4,400**	**3,800**	**2,900**	**2,100**	**100,000**	**96,000**	**84,000**	**94,000**
Xylenes	µg/L	10,000	**9.9**	**200**	**8.6**	**2.2**	**1,500**	**1,200**	**1,000**	**790**	**18,000**	**18,000**	**14,000**	**17,000**
Total Volatile Organics	µg/L		**64.1**	**2,308**	**44.3**	**14**	**19,070**	**16,140**	**17,030**	**11,890**	**419,000**	**414,920**	**368,730**	**411,830**
Semi-Volatile Organic Compound	**Units**	**PAL**												
Naphthalene	µg/L	0.12	**6.5**	**2.5 J**	**4.3**	**10.0**	**1,200**	**630**	**560**	**510**	*2500 U*	**1500 J**	**580 J**	*2000 U*

Notes:

Bold = Analyte Detected

Red = Exceedance of groundwater Project Action Limit (PAL)

µg/L = micrograms per liter

ND = Not Detected above the reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID			CO40-PZM008				CO41-PZM001				CO180-MWS	CO181-MWS	CO186-MWS	CO209-MWS
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q2	Q2	Q2	Q2
Event Date			3/27/2025	5/14/2025	8/18/2025	11/18/2025	3/26/2025	5/15/2025	8/18/2025	11/13/2025	5/19/2025	5/19/2025	5/15/2025	5/16/2025
Volatile Organic Compound	**Units**	**PAL**												
Benzene	µg/L	5	**6,200**	**14,000**	**7,600**	**5,900**	**18,000**	**7,300**	**2,000**	**3,200**	**7,400**	**6,700**	**1,800**	**33,000**
Ethylbenzene	µg/L	700	**57.0**	**110.0**	**66.0**	**62.0**	**210**	**93**	**21**	**32**	**35**	**31**	**7.8**	ND
Toluene	µg/L	1,000	**1,200**	**3,700**	**1,700**	**1,300**	**1,800**	**630**	**900**	**1,400**	**1,300**	**1,600**	**270**	**740**
Xylenes	µg/L	10,000	**370**	**860**	**400**	**470**	**720**	**300**	**300**	**530**	**560**	**470**	**57**	ND
Total Volatile Organics	µg/L		**7,827**	**18,670**	**9,766**	**7,732**	**20,730**	**8,323**	**3,221**	**5,162**	**9,295**	**8,801**	**2,135**	**33,740**
Semi-Volatile Organic Compound	**Units**	**PAL**												
Naphthalene	µg/L	0.12	**1,400**	**1,500**	**1,100**	**970**	**110 J**	**28 J**	**21 J**	**17 J**	**390**	**400**	ND	ND

Sample ID			CO180-MWI	CO181-MWI	CO182-MWI				CO209-MWI	GD01-MWI				
Quarter			Q2	Q2	Q1	Q2	Q3	Q4	Q2	Q1	Q2	Q3	Q4	
Event Date			5/19/2025	5/19/2025	3/27/2025	5/15/2025	8/20/2025	11/18/2025	5/16/2025	1/27/2025	5/29/2025	9/3/2025	10/20/2025	12/3/2025
Volatile Organic Compound	**Units**	**PAL**												
Benzene	µg/L	5	**9,200**	**22,000**	**18,000**	**290,000**	**250,000**	**280,000**	**2,100**	ND	**17**	**120**	**18**	ND
Ethylbenzene	µg/L	700	**44 J**	**99 J**	**89 J**	**710 J**	**710 J**	**ND**	**68**	ND	ND	NS	ND	ND
Toluene	µg/L	1,000	**2,100**	**5,600**	**2,000**	**32,000**	**28,000**	**27,000**	**34 J**	ND	ND	NS	ND	ND
Xylenes	µg/L	10,000	**630**	**1,500**	**860**	**7100 J**	**6000 J**	**5,100**	**ND**	ND	ND	NS	ND	ND
Total Volatile Organics	µg/L		**11,974**	**29,199**	**20,949**	**328,710**	**284,710**	**312,100**	**2,202**	ND	**17**	**120**	**18**	ND
Semi-Volatile Organic Compound	**Units**	**PAL**												
Naphthalene	µg/L	0.12	**580**	**2100**	**56 J**	*2000 U*	**700 J**	ND	**13,000**	ND	**1.7**	NS	ND	ND

Notes:

Bold = Analyte Detected

Red = Exceedance of groundwater Project Action Limit (PAL)

µg/L = micrograms per liter

ND = Not Detected above the reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		
Quarter		
Event Date		
Volatile Organic Compound	**Units**	**PAL**
Benzene	µg/L	5
Ethylbenzene	µg/L	700
Toluene	µg/L	1,000
Xylenes	µg/L	10,000
Total Volatile Organics	µg/L	

Semi-Volatile Organic Compound	**Units**	**PAL**
Naphthalene	µg/L	0.12

Sample ID			**GD02-MWI**				
Quarter			Q1	Q2	Q3	Q4	
Event Date			1/27/2025	5/22/2025	9/3/2025	10/20/2025	12/3/2025
Volatile Organic Compound	**Units**	**PAL**					
Benzene	µg/L	5	**240,000**	**12,000**	**170,000**	**3,000**	**170,000**
Ethylbenzene	µg/L	700	**430**	**29 J**	NS	ND	**320 J**
Toluene	µg/L	1,000	**3,100**	**ND**	NS	ND	ND
Xylenes	µg/L	10,000	**1,400**	**44 J**	NS	ND	ND
Total Volatile Organics	µg/L		**244,930**	**12,073**	**170,000**	**3,000**	**170,320**
Semi-Volatile Organic Compound	**Units**	**PAL**					
Naphthalene	µg/L	0.12	**1,200**	**44 J**	NS	**14 J**	**320 J**

Notes:

Bold = Analyte Detected

Red = Exceedance of groundwater Project Action Limit (PAL)

µg/L = micrograms per liter

ND = Not Detected above the reporting limit

NS = Not Sampled

Table C3-1
Cell 3 Air Sparge Well Construction Information

Air Sparge Well Designation	Installation Method	Northing	Easting	Well Depth (ft bgs)	Screen Interval (ft bgs)	Riser Length
AS-1	Hollow Stem Auger	561764.53	1454822.67	25.8	23.8-25.8	24.2
AS-2	Hollow Stem Auger	561759.86	1454785.04	25.8	23.8-25.8	24.7
AS-3	Hollow Stem Auger	561756.68	1454743.04	25.7	23.7-25.7	24.2
AS-4	Hollow Stem Auger	561753.05	1454705.40	26.9	24.9-26.9	25.6
AS-5	Hollow Stem Auger	561746.83	1454670.55	24.6	22.6-24.6	22.9
AS-6	Hollow Stem Auger	561739.92	1454627.92	25.8	23.8-25.8	24.7
AS-7	Hollow Stem Auger	561735.75	1454592.11	27.0	25-27	25.7
AS-8	Hollow Stem Auger	561730.50	1454551.31	26.5	24.5-26.5	25.3
AS-9	Hollow Stem Auger	561727.96	1454509.48	26.2	24.2-26.2	24.9
AS-10	Hollow Stem Auger	561726.26	1454468.55	26.8	24.8-26.8	25.4
AS-11	Hollow Stem Auger	561724.23	1454429.15	22.2	20.2-22.2	20.8
AS-12	Hollow Stem Auger	561724.31	1454388.28	24.5	22.5-24.5	23.2
AS-13	Hollow Stem Auger	561729.46	1454349.75	27.4	25.4-27.4	25.8
AS-14	Hollow Stem Auger	561735.14	1454312.14	23.5	21.5-25.5	22.0
AS-15	Hollow Stem Auger	561740.06	1454271.58	27.4	25.4-27.4	25.9

Table C3-2: Summary of Operation
Cell 3: AS/SVE System in Cove Area

Cell 3 2025 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	307	286	280	309	296
Average Concentrations	ug/L	0.0	0.0	0.0	0.0	0.01
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.000	0.000	0.000	0.000	0.000
Total VGAC Operating Time	hours	1,971	2,004	2,123	2,114	8,211
Overall VGAC Operational Time	%	91.3%	91.7%	96.1%	95.7%	93.7%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	0.0	0.1	0.0	0.0	0.1

[1]Flow rates are calculated using the recorded SVE flow temperature.

Cell 3 Cumulative Summary of Estimated Hydrocarbon Recovery

June 24, 2011 - December 31, 2025

Parameter	Units	Quantity
Total VGAC Operating Time	hours	79,147
Overall VGAC Operational Time	%	62.2%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	2,345
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.0296

Table C3-3 - Cell 3 VGAC Influent Analytical Results

Month		January	February	March	April	May	June	July	August	September	October	November	December
Analyte (8260 Organics)	**Units**	1/31/2025	2/28/2025	3/28/2025	4/28/2025	5/30/2025	6/17/2025	7/23/2025	8/29/2025	9/30/2025	10/27/2025	11/25/2025	12/23/2025
Benzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	**0.12**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Total Volatile Organics	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	**0.12**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

Notes:

BOLD = Analyte detected

ug/L = micro grams per liter

ND = Analyte not detected above reporting limit.

NS = not sampled, system offline at sample date

*Analytes with no detections were not included within this table.

Table C3-4
Cell 3 Monitoring Well Construction Information

Monitoring Well Designation	Monitoring Well Temporary Identification	Installation Method	Northing	Easting	Top of Casing Elevation (ft AMSL)	Protection Cover Type	Well Total Depth (ft bgs)	Riser Length (ft)	Screen Length (ft)
CO30-PZM015	----------	Hollow Stem Auger	561,656.38	1,454,556.58	11.97	Steel Riser	25.00	10.00	15.00
CO194-MWS	COB-MWS	Hollow Stem Auger	561,768.07	1,454,242.77	14.23	Steel Riser	25.00	10.00	15.00
CO195-MWS	COC-MWS	Hollow Stem Auger	561,775.58	1,454,539.22	14.32	Steel Riser	35.00	20.00	15.00
CO196-MWS	COD-MWS	Hollow Stem Auger	561,792.57	1,454,723.99	13.74	Steel Riser	28.00	12.00	16.00
CO198-MWS	COF-MWS	Hollow Stem Auger	561,671.42	1,454,219.19	14.51	Steel Riser	35.00	20.00	15.00
CO201-MWS	COI-MWS	Hollow Stem Auger	561,676.61	1,454,778.73	13.30	Steel Riser	32.00	12.00	20.00
CO30-PZM060	----------	Hollow Stem Auger	561,656.09	1,454,552.60	13.13	Steel Riser	70.60	60.60	10.00

ft AMSL = feet above mean sea level
ft bgs = feet below ground surface

Table C3-5
Cell 3 Groundwater Analytical Results

Sample ID			CO30-PZM015				CO194-MWS		CO195-MWS			
Quarter			Q1	Q2	Q3	Q4	Q2	Q4	Q1	Q2	Q3	Q4
Event Date			2/10/25	5/23/25	8/20/25	11/12/25	5/22/25	11/12/25	3/27/25	5/22/25	8/20/25	11/12/25
Volatile Organic Compounds	**Units**	**PAL**										
Benzene	µg/L	5	**43,000**	**24,000**	**30,000**	**73**	**300**	**410**	**36,000**	**28,000**	**20,000**	**18,000**
Ethylbenzene	µg/L	700	**91 J**	**52 J**	**75 J**	**0.25 J**	**2.8 J**	**2.9 J**	**60 J**	**54 J**	**43 J**	ND
Toluene	µg/L	1,000	**3,500**	**2,000**	**2,800**	**0.64 J**	**62**	**77**	**3,000**	**2,300**	**1,800**	**1,500**
Xylenes	µg/L	10,000	**1,100**	**650 J**	**950**	**1.7 J**	**31**	**34**	**770 J**	**620 J**	**480 J**	**470 J**
Total Volatile Organics	µg/L		**47,691**	**26,702**	**33,825**	**76**	**396**	**524**	**39,830**	**30,974**	**22,323**	**19,970**
Semi-Volatile Organic Compounds	**Units**	**PAL**										
Naphthalene	µg/L	0.12	**2,400**	**1,600**	**2,000**	**6.7**	**1,500**	**1,100**	**1,600**	**1,600**	**1,200**	**1,100**

Sample ID			CO196-MWS		CO198-MWS		CO201-MWS		CO30-PZM060
Quarter			Q2	Q4	Q2	Q4	Q2	Q4	Q2
Event Date			5/22/25	11/12/25	5/22/25	11/12/25	5/19/25	11/12/25	5/23/25
Volatile Organic Compounds	**Units**	**PAL**							
Benzene	µg/L	5	**260**	**5,800**	**230**	**280**	**870**	**21,000**	**4,900**
Ethylbenzene	µg/L	700	**2.8**	**10 J**	**2.0 J**	**2.7 J**	**6.1**	ND	ND
Toluene	µg/L	1,000	**51**	**420**	**59**	**67**	**140**	**1,700**	**110**
Xylenes	µg/L	10,000	**35**	**100 J**	**27 J**	**34**	**74**	**540 J**	ND
Total Volatile Organics	µg/L		**349**	**6,330**	**318**	**384**	**1,090**	**23,240**	**5,010**
Semi-Volatile Organic Compounds	**Units**	**PAL**							
Naphthalene	µg/L	0.12	**170**	**610**	**1,000**	**890**	**220**	**1,600**	**40 J**

Notes:

Bold = Analyte Detected

Red = Exceedence of groundwater Project Action Limit (PAL)

µg/L = Micrograms per liter

ND = Not Detected above the reporting limit

J = estimated result, detected below the reporting limit but above the method detection limit

Table C5-1: 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	11,535	487,400	222,800	126,500	848,235
Total Operating Time	hours	425	2,136	2,208	1,000	5,769
Overall Operational Time	%	19.7%	97.8%	100.0%	87.3%	76.2%
Extracted Total Concentrations	lbs/gal	1.84E-06	3.76E-05	1.74E-05	1.58E-05	7.27E-05
Effluent Total Concentrations	lbs/gal	0.0	0.0	0.0	0.0	0.0
Extracted Hydrocarbons	lbs	0.0	18.3	3.9	2.0	24
Effluent Hydrocarbons	lbs	0.0	0.0	0.0	0.0	0.0
Total Hydrocarbons Removed	lbs	0.0	18.3	3.9	2.0	24

Table C5-2
Cell 5 Monitoring Well Construction Information

Monitoring Well Designation	Monitoring Well Temporary Identification	Northing	Easting	Top of Casing Elevation (ft AMSL)	Protection Cover Type	Well Total Depth (ft bgs)	Riser Length (ft)	Screen Length (ft)
CO23-PZM008	----------	561783.979	1457095.859	11.17	Flush Mount	19	9	10
CO24-PZM007	----------	562048.175	1457276.816	12.02	Flush Mount	19	9	10
CO26-PZM007	----------	561682.425	1458048.048	12.76	Flush Mount	20	10	10
CO55-PZM000	Cell 5 - MW1 (S)	561434.420	1457585.900	15.10	Steel Riser	15	5	10
CO56-PZP001	Cell 5 - MW2 (S)	561668.410	1457790.050	15.92	Steel Riser	15	5	10
CO57-PZP002	Cell 5 - MW3 (S)	561122.520	1457530.000	16.59	Steel Riser	15	5	10
CO58-PZM001	Cell 5 - MW4 (S)	561331.310	1457989.130	14.31	Steel Riser	15	5	10
CO59-PZP002	Cell 5 - MW5 (S)	561446.980	1457308.790	16.75	Steel Riser	15	5	10
CO60-PZP001	Cell 5 - MW6 (S)	561872.550	1457913.360	15.83	Steel Riser	15	5	10
CO203-MWS		561979.808	1457971.019	10.53	Flush Mount	25	5	20
CO204-MWS		561776.152	1457813.750	16.27	Steel Riser	25	5	20
CO205-MWS		561794.484	1457978.386	15.55	Steel Riser	25	5	20
CO206R-MWS		561600.409	1457593.351	14.32	Steel Riser	20	5	15
CO207-MWS		561492.274	1458030.691	14.78	Steel Riser	25	5	20

ft AMSL = feet above mean sea level
ft bgs = feet below ground surface

Note: Monitoring wells CO26-PZM007, CO55-PZM000, CO56-PZP001, CO58-PZP001, CO60-PZP001, CO203-MWS, CO204-MWS, CO205-MWS, CO206R-MWS, and CO207-MWS were all abandoned on November 11, 2025.

Table C5-3
Cell 5 Monitoring Well Groundwater Elevations

Well ID	Temporary Well ID	Top of PVC Elevation (ft AMSL)	Aquifer	Well Depth (ft bgs)	Q1 2025		Q2 2025		Q3 2025		Q4 2025	
					Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft AMSL)
CO23-PZM008		15.74	Shallow	19.00	15.48	0.26	15.29	0.45	14.92	0.82	14.94	0.80
CO24-PZM007		15.95	Shallow	19.00	15.18	0.77	14.96	0.99	14.46	1.49	14.60	1.35
CO25-PZM008		12.03	Shallow	20.00	15.85	-3.82	15.70	-3.67	15.07	-3.04	15.35	-3.32
CO26-PZM007		12.76	Shallow	20.00	15.81	-3.05	15.67	-2.91	15.12	-2.36	15.36	-2.60
CO55-PZM000	Cell 5 - MW1 (S)	15.10	Shallow	15.00	16.47	-1.37	14.77	0.33	14.32	0.78	14.40	0.70
CO56-PZP001	Cell 5 - MW2 (S)	15.92	Shallow	15.00	15.64	0.28	15.51	0.41	15.07	0.85	15.20	0.72
CO57-PZP002	Cell 5 - MW3 (S)	16.59	Shallow	15.00	15.35	1.24	16.24	0.35	15.94	0.65	15.90	0.69
CO58-PZM001	Cell 5 - MW4 (S)	14.31	Shallow	15.00	13.98	0.33	13.88	0.43	13.26	1.05	13.63	0.68
CO59-PZP002	Cell 5 - MW5 (S)	16.75	Shallow	15.00	16.43	0.32	16.27	0.48	15.78	0.97	15.95	0.80
CO60-PZP001	Cell 5 - MW6 (S)	15.83	Shallow	15.00	Dry	*	Dry	*	Dry	*	Dry	*
CO203-MWS		10.65	Shallow	25.00	Damaged	--	Damaged	--	Damaged	--	^10.03	0.62
CO204-MWS		16.27	Shallow	25.00	NM	NM	15.68	0.59	NM	NM	15.47	0.80
CO205-MWS		15.55	Shallow	25.00	NM	NM	15.5	0.05	NM	NM	15.30	0.25
CO206R-MWS		14.32	Shallow	20.00	14.31	0.01	14.23	0.09	13.43	0.89	13.90	0.42
CO207-MWS		14.78	Shallow	25.00	NM	NM	14.32	0.46	NM	NM	14.17	0.61

Notes:
* = No water, well obstructed
ft AMSL = feet above mean sea level
ft bgs = feet below ground surface
^ = Badly damaged and flush mount compacted with dirt, undug and was able to obtain depth to groundwater value.

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID			CO23-PZM008				CO24-PZM007				CO25-PZM008				CO26-PZM007			
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date			3/27/25	5/20/25	8/20/25	11/11/25	2/13/25	5/20/25	8/22/25	11/11/25	3/27/25	5/20/25	8/21/25	11/17/25	2/24/25	5/20/25	8/21/25	11/17/25
Volatile Organic Compounds	**Units**	**PAL**																
Benzene	µg/L	5	**370**	**430**	**890**	**380**	**4.4 J**	**5.7**	**4.8 J**	**5.9**	**1,100**	**1,100**	**1,300**	**1,900**	**88**	**33**	**86**	**180**
Ethylbenzene	µg/L	700	**19**	**18**	**26**	**21**	**2.5 J**	**2.4 J**	**2.0 J**	**2.2 J**	**34 J**	**30 J**	**32 J**	**42 J**	**3.6 J**	**1.8 J**	**3.0**	**4 J**
Toluene	µg/L	1000	**200**	**230**	**370**	**190**	**2.3 J**	**3.9 J**	**2.0 J**	**3.2 J**	**910**	**1,100**	**1,100**	**1,600**	**51**	**35**	**48**	**86**
Xylenes	µg/L	10000	**310**	**330**	**420**	**320**	ND	**4.6 J**	ND	**3.8 J**	**780**	**820**	**860**	**1,100**	**76**	**43**	**68**	**85**
Total Volatile Organics	µg/L		**899**	**1,008**	**1,706**	**911**	**9.2**	**17**	**8.8**	**15.1**	**2,824**	**3,050**	**3,290**	**4,642**	**219**	**113**	**207**	**355**
Semi-Volatile Organic Compounds	**Units**	**PAL**																
Naphthalene	µg/L	0.12	**4,700**	**3,000**	**2,400**	**2,800**	**1,700**	**1,400**	**1,200**	**1,100**	**20,000**	**1,400**	**16,000**	**18,000**	**1,000**	**580**	**870**	**1,100**

Sample ID			CO55-PZM000				CO56-PZP001				CO57-PZP002				CO58-PZM001			
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date			3/28/25	5/29/25	8/21/25	11/11/25	3/27/25	5/23/25	8/21/25	11/11/25	3/28/25	5/23/25	8/21/25	11/17/25	2/11/25	5/20/25	8/22/25	11/17/25
Volatile Organic Compounds	**Units**	**PAL**																
Benzene	µg/L	5	**42**	**9.0**	**6.1**	**0.86**	**130**	**270**	**140**	**210**	**0.26 J**	**21**	**2.1**	**4.5**	**150**	**6.1**	**42**	**54**
Ethylbenzene	µg/L	700	**1.8**	**0.54**	**0.75 J**	ND	**5.6**	**6.1**	**2.5 J**	**7.4 J**	ND	**0.44 J**	**0.27 J**	**0.46 J**	**6.4**	**0.68 J**	**2.0**	**2.2**
Toluene	µg/L	1000	**20**	**4.6**	**8.7**	**0.47 J**	**68**	**84**	**24**	**63**	**0.50 J**	**8.2**	**3.7**	**9.0**	**63**	**10**	**10**	**14**
Xylenes	µg/L	10000	**25**	**7.2**	**14.0**	**0.35 J**	**120**	**120**	**90**	**150**	ND	**8.5**	**7.3**	**12**	**120**	**15**	**33**	**34**
Total Volatile Organics	µg/L		**88.8**	**21.3**	**29.6**	**1.68**	**324**	**480**	**257**	**430**	**0.76**	**38**	**13**	**26.0**	**339**	**31.78**	**87**	**104**
Semi-Volatile Organic Compounds	**Units**	**PAL**																
Naphthalene	µg/L	0.12	**110**	**11**	**220**	**2.2**	**1,800**	**1,100**	**1,300**	**1,600**	**0.53 J**	**77**	**150**	**200**	**1,700**	**220**	**360**	**430**

Sample ID			CO59-PZP002				CO206R-MWS			
Quarter			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date			2/11/25	5/23/25	8/22/25	11/17/25	2/11/25	5/23/25	8/21/25	11/17/25
Volatile Organic Compounds	**Units**	**PAL**								
Benzene	µg/L	5	**59**	**8.5**	**0.59**	**2.6**	**750**	**640**	**690**	**530**
Ethylbenzene	µg/L	700	**4.2**	ND	ND	ND	**17 J**	**15 J**	**14**	**13**
Toluene	µg/L	1000	**22**	**2.8**	ND	**5.3**	**520**	**440**	**430**	**320**
Xylenes	µg/L	10000	**75**	**2.4**	**0.84 J**	**6.6 J**	**410**	**380**	**330**	**310**
Total Volatile Organics	µg/L		**160**	**14**	**1.4**	**14.5**	**1,697**	**1,475**	**1,479**	**1,173**
Semi-Volatile Organic Compounds	**Units**	**PAL**								
Naphthalene	µg/L	0.12	**560**	**32**	**7.8**	**100**	**6,200**	**4,900**	**4,100**	**5,000**

Notes:

Bold = Analyte Detected

Red = Exceedance of groundwater Project Action Limit (PAL)

NS = Not Sampled

µg/L = Micrograms per liter

ND = Not Detected above the reporting limit

J = estimated result, detected below the reporting limit but above the method detection limit

Table C6-1
Cell 6 Cumulative Summary of Operations

Method	Recovery Period		Pre-2025		LNAPL Recovered Q1		LNAPL Recovered Q2		LNAPL Recovered Q3		LNAPL Recovered Q4		Total LNAPL Recovered 2025		Cumulative Total LNAPL Recovered	
	Begin	End	(gal)	(lbs)[1]	(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	0	0	16,162	118,435
CO173 Pneumatic Skimmer Pump	12/17/2019	11/12/2024	8,819	64,623	0	0	0	0	0	0	0	0	0	0	8,819	64,623
Test Pit/Sump Bulk Removal (Double Diaphragm Pump, Sorbent Pads, Vac Truck)	9/6/2022	On-going	4,965	36,384	1,912	14,012	1,883	13,799	1,898	13,909	1,120	8,205	6,813	49,924	11,778	86,307
MPE System	10/1/2016	2021	7,643	56,008	0	0	0	0	0	0	0	0	0	0	7,643	56,008
	Total Recovery		**37,589**	**275,450**	**1,912**	**14,012**	**1,883**	**13,799**	**1,898**	**13,909**	**1,120**	**8,205**	**6,813**	**49,924**	**44,401**	**325,374**

Notes:

[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.

Table C6-2
Cell 6 LNAPL Recovery by Location (2025)

Location	Total Volume Removed	Total Water Removed	Total LNAPL	
Units	(LNAPL & water gal)	(gal)	(gal)	(lbs)[1]
Cell 6 Trench	12,835	12,315	519	3,807
COA-007-TP	2,590	2,258	332	2,433
COA-012-TP	90	N/A[2]	90	660
COA-013-TP	12,936	11,873	1,063	7,790
COA-015-TP	2,160	1,848	312	2,286
COA-016-TP	1,187	890	297	2,176
COA-027-TP	12,295	11,363	932	6,830
COA-028-TP	2335	2,180	155	1136
COA-036-TP	14,262	13,224	1,038	7,606
COA-037-TP	17,049	15,662	1,387	10,164
COA-039-TP	4,362	4,097	265	1,942
Cell 6 West	449	382	67	491
COA-013-MWS	2,976	2,743	233	1,707
B10-014-SB	1,495	1,393	102	747
COA-163-MWS	141	135	6	44
COA-164-MWS	160	153	7	51
COA-166-MWS	188	180	8	59
Cumulative Totals	**87,510**	**80,696**	**6,813**	**49,929**

Notes:

Only locations with active LNAPL removal during 2025 shown.

[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.

[2] Removed prior to Cell 6 phase seperation modifications, water content not measured.

APPENDIX A

ANALYTICAL REPORT

Lab Number:	L2518713
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q1 GW
Project Number:	Not Specified
Report Date:	04/09/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q1 GW
Project Number: Not Specified

Lab Number: L2518713
Report Date: 04/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2518713-01	CO57-PZP002	WATER	B10	03/28/25 10:40	03/28/25
L2518713-02	CO55-PZM000	WATER	B10	03/28/25 12:00	03/28/25
L2518713-03	TB-001	WATER	B10	03/28/25 00:00	03/28/25

Project Name:	COA Q1 GW	**Lab Number:**	L2518713
Project Number:	Not Specified	**Report Date:**	04/09/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q1 GW	**Lab Number:**	L2518713
Project Number:	Not Specified	**Report Date:**	04/09/25

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2518713-01: The Client ID was specified by the client.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 04/09/25

ORGANICS

VOLATILES

Project Name: COA Q1 GW
Project Number: Not Specified
Lab Number: L2518713
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518713-01
Client ID: CO57-PZP002
Sample Location: B10

Date Collected: 03/28/25 10:40
Date Received: 03/28/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 16:50
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.26	J	ug/l	0.50	0.16	1
Toluene	0.50	J	ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	0.53	J	ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q1 GW
Project Number: Not Specified
Lab Number: L2518713
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518713-02
Client ID: CO55-PZM000
Sample Location: B10

Date Collected: 03/28/25 12:00
Date Received: 03/28/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 17:14
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	42		ug/l	0.50	0.16	1
Toluene	20		ug/l	0.75	0.20	1
Ethylbenzene	1.8		ug/l	0.50	0.17	1
p/m-Xylene	17		ug/l	1.0	0.33	1
o-Xylene	7.9		ug/l	1.0	0.39	1
Xylenes, Total	25		ug/l	1.0	0.33	1
Naphthalene	110		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q1 GW
Project Number: Not Specified

Lab Number: L2518713
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518713-03
Client ID: TB-001
Sample Location: B10

Date Collected: 03/28/25 00:00
Date Received: 03/28/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 16:26
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q1 GW
Project Number: Not Specified
Lab Number: L2518713
Report Date: 04/09/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/08/25 08:24
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2051485-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 GW
Project Number: Not Specified

Lab Number: L2518713
Report Date: 04/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2051485-3 WG2051485-4								
Benzene	110		110		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		95		70-130	5		20
Naphthalene	83		94		70-130	12		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		116		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	110		109		70-130
Dibromofluoromethane	96		99		70-130

Project Name: COA Q1 GW
Project Number: Not Specified

Lab Number: L2518713
Report Date: 04/09/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2518713-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		ARCHIVE()
L2518713-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)
L2518713-03D	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q1 GW	**Lab Number:**	L2518713
Project Number:	Not Specified	**Report Date:**	04/09/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 GW	**Lab Number:**	L2518713
Project Number:	Not Specified	**Report Date:**	04/09/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 GW	**Lab Number:**	L2518713
Project Number:	Not Specified	**Report Date:**	04/09/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q1 GW
Project Number: Not Specified
Lab Number: L2518713
Report Date: 04/09/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/29/25

ALPHA Job #: L2518713

Client Information

Client: TrackPoint Atlantic
Address: 6995 Bethlehem Blvd Sparrows Point MD
Phone:
Fax:
Email: Jtearman@armgroup.net X
Inguille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q1 GW
Project Location: BIO
Project #:
Project Manager:
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING	Sample Specific Comments	TOTAL # BOTTLES
18713-01	C057-PZP001	3/28	1040	GW	SKL	X		pH>10	3
-02	C055-PZM000	3/28	1200	GW	SKL	X		pH>10	3
-03	TB-001	—	—	—	—	X			4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Sarah Lowe ARM	3/28/25 1505	D. Robinson PACE	3/28/25 1588
Anthony Green	3/28/25 1800	Anthony Green	MAR 28 2025 2240
Anthony Green		PACE	3/29/25 0300
			3/29/25 0300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2507612
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	CPA CMS ADDITIONAL SAMPLE
Project Number:	20010210
Report Date:	02/18/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210

Lab Number: L2507612
Report Date: 02/18/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2507612-01	CO59-PZP002	WATER	Not Specified	02/11/25 13:55	02/11/25
L2507612-02	CO206R-MWS	WATER	Not Specified	02/11/25 14:40	02/11/25
L2507612-03	CO58-PZM001	WATER	Not Specified	02/11/25 14:45	02/11/25
L2507612-04	TB-001-WT	WATER	Not Specified	02/07/25 00:00	02/11/25

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507612
Project Number:	20010210	**Report Date:**	02/18/25

Case Narrative

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

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

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

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

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

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

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507612
Project Number:	20010210	**Report Date:**	02/18/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 02/18/25

ORGANICS

VOLATILES

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507612

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2507612-01 D
Client ID: CO59-PZP002
Sample Location: Not Specified

Date Collected: 02/11/25 13:55
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 04:23
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	59		ug/l	2.5	0.80	5
Toluene	22		ug/l	3.8	1.0	5
Ethylbenzene	4.2		ug/l	2.5	0.84	5
p/m-Xylene	54		ug/l	5.0	1.7	5
o-Xylene	21		ug/l	5.0	2.0	5
Xylenes, Total	75		ug/l	5.0	1.7	5
Naphthalene	560		ug/l	5.0	1.1	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	110		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507612

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2507612-02 D
Client ID: CO206R-MWS
Sample Location: Not Specified

Date Collected: 02/11/25 14:40
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 03:57
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	750		ug/l	20	6.4	40
Toluene	520		ug/l	30	8.1	40
Ethylbenzene	17	J	ug/l	20	6.7	40
p/m-Xylene	310		ug/l	40	13.	40
o-Xylene	100		ug/l	40	16.	40
Xylenes, Total	410		ug/l	40	13.	40
Naphthalene	6200		ug/l	40	8.6	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	109		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507612

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2507612-03 D
Client ID: CO58-PZM001
Sample Location: Not Specified

Date Collected: 02/11/25 14:45
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 03:32
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	150		ug/l	5.0	1.6	10
Toluene	63		ug/l	7.5	2.0	10
Ethylbenzene	6.4		ug/l	5.0	1.7	10
p/m-Xylene	90		ug/l	10	3.3	10
o-Xylene	34		ug/l	10	3.9	10
Xylenes, Total	120		ug/l	10	3.3	10
Naphthalene	1700		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	115		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Lab Number: L2507612
Project Number: 20010210
Report Date: 02/18/25

SAMPLE RESULTS

Lab ID: L2507612-04
Client ID: TB-001-WT
Sample Location: Not Specified

Date Collected: 02/07/25 00:00
Date Received: 02/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 03:06
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	119		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210
Lab Number: L2507612
Report Date: 02/18/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/14/25 22:51
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2030869-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	117		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210
Lab Number: L2507612
Report Date: 02/18/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2030869-3 WG2030869-4								
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	90		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		113		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	89		87		70-130
Dibromofluoromethane	108		107		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210

Lab Number: L2507612
Report Date: 02/18/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2507612-01A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-01B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-01C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-02A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-02B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-02C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-03A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-03B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-03C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-04A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-04B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-04C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2507612-04D	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507612
Project Number:	20010210	**Report Date:**	02/18/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507612
Project Number:	20010210	**Report Date:**	02/18/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507612
Project Number:	20010210	**Report Date:**	02/18/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507612

Project Number: 20010210 **Report Date:** 02/18/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

Serial_No:02182512:56

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/12/25

ALPHA Job #: L2507612

Client Information

Client: Trade point Atlantic

Address: 6995 Bethlehem blvd Sparrows Point MD

Phone:

Fax:

Email: TBerna@amgroup.us KSmith@amgroup.us

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: CPA CMS Additional Samples

Project Location:

Project #: 20010210

Project Manager: Kaye Gallo

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: (5 day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene 8260	Sample Specific Comments	TOTAL # BOTTLES
07612-01	CO59-P2P002	2/11/25	1355	GW	AZJ	X	pH>10	3
-02	CO206R-MW5	2/11/25	1440	GW	AZJ	X	pH<10	3
-03	CO58-P2M001	2/11/25	1445	GW	AZJ	X	pH<10	3
-04	TB-001-WT	—	—	—	—	X		4

SAMPLE HANDLING

Filtration

☐ Done ☐ Not needed ☐ Lab to do

Preservation

☐ Lab to do (Please specify below)

Container Type	V
Preservative	A

Relinquished By:	Date/Time	Received By:	Date/Time
Alexis Zerangue Multiterrain	2/11/25 1530	Laura Cain	2/11/25 1540
Laura Cain	2/11/25 1735	Anthony Green	2/11/25 1735
Anthony Green	2/12/25 0015		2/12/25 0015

FEB 11 2025 0150

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

2/12/25 0240

02112125-0240

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2507276
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	CPA CMS ADDITIONAL SAMPLE
Project Number:	20010210
Report Date:	02/17/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210

Lab Number: L2507276
Report Date: 02/17/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2507276-01	CO30-PZM015	WATER	Not Specified	02/10/25 10:50	02/10/25
L2507276-02	TB-001	WATER	Not Specified	02/10/25 00:00	02/10/25

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507276
Project Number:	20010210	**Report Date:**	02/17/25

Case Narrative

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

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

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

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

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

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

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507276
Project Number:	20010210	**Report Date:**	02/17/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 02/17/25

ORGANICS

VOLATILES

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507276

Project Number: 20010210 **Report Date:** 02/17/25

SAMPLE RESULTS

Lab ID: L2507276-01 D
Client ID: CO30-PZM015
Sample Location: Not Specified

Date Collected: 02/10/25 10:50
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/14/25 16:19
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	43000		ug/l	120	40.	250
Toluene	3500		ug/l	190	51.	250
Ethylbenzene	91	J	ug/l	120	42.	250
p/m-Xylene	780		ug/l	250	83.	250
o-Xylene	290		ug/l	250	98.	250
Xylenes, Total	1100		ug/l	250	83.	250
Naphthalene	2400		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	94		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210
Lab Number: L2507276
Report Date: 02/17/25

SAMPLE RESULTS

Lab ID: L2507276-02
Client ID: TB-001
Sample Location: Not Specified
Date Collected: 02/10/25 00:00
Date Received: 02/10/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/14/25 15:57
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	110		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210
Lab Number: L2507276
Report Date: 02/17/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/14/25 08:32
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2030840-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210

Lab Number: L2507276
Report Date: 02/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2030840-3 WG2030840-4								
Benzene	94		90		70-130	4		20
Toluene	96		94		70-130	2		20
Ethylbenzene	93		91		70-130	2		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		85		70-130	6		20
Naphthalene	84		84		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		94		70-130
Toluene-d8	103		101		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	99		100		70-130

Project Name: CPA CMS ADDITIONAL SAMPLE
Project Number: 20010210

Lab Number: L2507276
Report Date: 02/17/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2507276-01A	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-01B	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-01C	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-02A	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-02B	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-02C	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)
L2507276-02D	Vial HCl preserved	A	NA		4.0	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507276
Project Number:	20010210	**Report Date:**	02/17/25

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507276
Project Number:	20010210	**Report Date:**	02/17/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMPLE	**Lab Number:**	L2507276
Project Number:	20010210	**Report Date:**	02/17/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: CPA CMS ADDITIONAL SAMPLE **Lab Number:** L2507276

Project Number: 20010210 **Report Date:** 02/17/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

Serial_No:02172513:27

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 2/11/25

L2507276 17FEB25
TRADEPOINT

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd Sparrows Point MD
Phone:
Fax:
Email: JBaina@cmgroup.com kguile@cmgroup.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: CPACMS Additional Sampling
Project Location:
Project #: 20010210
Project Manager: Kaye Guile
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5 day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene 8260	SAMPLE HANDLING	TOTAL # BOTTLES
0727601	CO30-PZM015	2/10/25	1050	GW	AZJ	1	pH>10	
02	FB-001	—	—	—	—	1		

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)
Sample Specific Comments

Container Type	V																						
Preservative	A																						

Relinquished By:	Date/Time	Received By:	Date/Time
Abe Jacinto Abe Jacinto	2/10/25 1550	Debra J. Fox	2-10-25 1550
Debra J. Fox	2-10-25 1842		2-10 1842
Anthony Green	2/11/25 0010	Anthony Green	FEB 10 2025 2145 2/11/25 0010 / 2/11/25 0220

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2518027
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q1 2025 GW
Project Number:	21010210
Report Date:	04/04/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518027
Report Date: 04/04/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2518027-01	CO93-PZM	WATER	SPARROWS POINT, MD	03/26/25 11:15	03/26/25
L2518027-02	CO190-MWS	WATER	SPARROWS POINT, MD	03/26/25 12:00	03/26/25
L2518027-03	CO41-PZM036	WATER	SPARROWS POINT, MD	03/26/25 13:00	03/26/25
L2518027-04	CO41-PZM001	WATER	SPARROWS POINT, MD	03/26/25 14:05	03/26/25
L2518027-05	TB-001	WATER	SPARROWS POINT, MD	03/26/25 00:00	03/26/25

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518027
Project Number:	21010210	**Report Date:**	04/04/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518027
Project Number:	21010210	**Report Date:**	04/04/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 04/04/25

ORGANICS

VOLATILES

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

SAMPLE RESULTS

Lab ID: L2518027-01 D
Client ID: CO93-PZM
Sample Location: SPARROWS POINT, MD

Date Collected: 03/26/25 11:15
Date Received: 03/26/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/03/25 16:39
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	120000		ug/l	500	160	1000
Toluene	38000		ug/l	750	200	1000
Ethylbenzene	920		ug/l	500	170	1000
p/m-Xylene	7000		ug/l	1000	330	1000
o-Xylene	2200		ug/l	1000	390	1000
Xylenes, Total	9200		ug/l	1000	330	1000
Naphthalene	1100		ug/l	1000	220	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

SAMPLE RESULTS

Lab ID: L2518027-02 D
Client ID: CO190-MWS
Sample Location: SPARROWS POINT, MD

Date Collected: 03/26/25 12:00
Date Received: 03/26/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/03/25 17:03
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	280000		ug/l	1000	320	2000
Toluene	8300		ug/l	1500	410	2000
Ethylbenzene	ND		ug/l	1000	330	2000
p/m-Xylene	ND		ug/l	2000	660	2000
o-Xylene	ND		ug/l	2000	780	2000
Xylenes, Total	ND		ug/l	2000	660	2000
Naphthalene	ND		ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

SAMPLE RESULTS

Lab ID: L2518027-03 D
Client ID: CO41-PZM036
Sample Location: SPARROWS POINT, MD

Date Collected: 03/26/25 13:00
Date Received: 03/26/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/03/25 17:28
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	300000		ug/l	1200	400	2500
Toluene	100000		ug/l	1900	510	2500
Ethylbenzene	1000	J	ug/l	1200	420	2500
p/m-Xylene	14000		ug/l	2500	830	2500
o-Xylene	4000		ug/l	2500	980	2500
Xylenes, Total	18000		ug/l	2500	830	2500
Naphthalene	ND		ug/l	2500	540	2500

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

SAMPLE RESULTS

Lab ID: L2518027-04 D
Client ID: CO41-PZM001
Sample Location: SPARROWS POINT, MD

Date Collected: 03/26/25 14:05
Date Received: 03/26/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/03/25 17:52
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	18000		ug/l	100	32.	200
Toluene	1800		ug/l	150	41.	200
Ethylbenzene	210		ug/l	100	33.	200
p/m-Xylene	500		ug/l	200	66.	200
o-Xylene	220		ug/l	200	78.	200
Xylenes, Total	720		ug/l	200	66.	200
Naphthalene	110	J	ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

SAMPLE RESULTS

Lab ID: L2518027-05
Client ID: TB-001
Sample Location: SPARROWS POINT, MD

Date Collected: 03/26/25 00:00
Date Received: 03/26/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/03/25 15:49
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/03/25 08:47
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG2049399-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	116		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518027
Report Date: 04/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG2049399-3 WG2049399-4								
Benzene	100		100		70-130	0		20
Toluene	88		100		70-130	13		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	105		90		70-130	15		20
o-Xylene	95		85		70-130	11		20
Naphthalene	90		73		70-130	**21**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		116		70-130
Toluene-d8	91		104		70-130
4-Bromofluorobenzene	116		96		70-130
Dibromofluoromethane	103		99		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518027
Report Date: 04/04/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2518027-01A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-01B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-01C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-02A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-02B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-02C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-03A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-03B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-03C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-04A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-04B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-04C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-05A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-05B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-05C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2518027-05D	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518027
Project Number:	21010210	**Report Date:**	04/04/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518027
Project Number:	21010210	**Report Date:**	04/04/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518027
Project Number:	21010210	**Report Date:**	04/04/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518027
Report Date: 04/04/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/27/25

ALPHA Job #: L2518027

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGville@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q1 2025 GW
Project Location: Sparrows Point, MD
Project #: 21010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
L8027-01	CO93-PZM	3/26	1115	GW	CN	X	pH>10	3
-02	CO190-MWS	3/26	1200	GW	CN	X		3
-03	CO41-PZM036	3/26	1300	GW	CN	X	pH>10	3
-04	CO41-PZM001	3/26	1405	GW	CN	X		3
-05	TB-001	—	—	—	—	X		4
								16

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	3/26/25 1600	Ray D	3-26 1600
RWR	3/26	Anthony Green MAR 26 2025 0210	
Anthony Green	3/26/25 0140		3/26/25 0210

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

05/27/25 04:40

ANALYTICAL REPORT

Lab Number:	L2509967
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q1 2025 GW
Project Number:	21010210
Report Date:	02/28/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509967
Report Date: 02/28/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509967-01	CO38-PZM006	WATER	SPARROWS POINT, MD	02/24/25 11:25	02/24/25
L2509967-02	CO26-PZM007	WATER	SPARROWS POINT, MD	02/24/25 12:45	02/24/25

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509967
Project Number:	21010210	**Report Date:**	02/28/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509967
Project Number:	21010210	**Report Date:**	02/28/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Kelly O'Neill

Title: Technical Director/Representative Date: 02/28/25

ORGANICS

VOLATILES

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509967
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509967-01 D
Client ID: CO38-PZM006
Sample Location: SPARROWS POINT, MD

Date Collected: 02/24/25 11:25
Date Received: 02/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 12:40
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2800		ug/l	12	4.0	25
Toluene	480		ug/l	19	5.1	25
Ethylbenzene	26		ug/l	12	4.2	25
p/m-Xylene	120		ug/l	25	8.3	25
o-Xylene	50		ug/l	25	9.8	25
Xylenes, Total	170		ug/l	25	8.3	25
Naphthalene	560		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q1 2025 GW
Lab Number: L2509967
Project Number: 21010210
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509967-02 D
Client ID: CO26-PZM007
Sample Location: SPARROWS POINT, MD

Date Collected: 02/24/25 12:45
Date Received: 02/24/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 13:05
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	88		ug/l	5.0	1.6	10
Toluene	51		ug/l	7.5	2.0	10
Ethylbenzene	3.6	J	ug/l	5.0	1.7	10
p/m-Xylene	55		ug/l	10	3.3	10
o-Xylene	21		ug/l	10	3.9	10
Xylenes, Total	76		ug/l	10	3.3	10
Naphthalene	1000		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509967
Report Date: 02/28/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/26/25 10:58
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2034661-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509967
Report Date: 02/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2034661-3 WG2034661-4								
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	94		93		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		115		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	108		109		70-130
Dibromofluoromethane	102		98		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509967
Report Date: 02/28/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509967-01A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509967-01B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509967-01C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509967-02A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509967-02B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509967-02C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509967
Project Number:	21010210	**Report Date:**	02/28/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509967
Project Number:	21010210	**Report Date:**	02/28/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509967
Project Number:	21010210	**Report Date:**	02/28/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509967
Report Date: 02/28/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/25/25

L2509967 03MAR25
TRADEPOINT

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarn2@2rmgroup.net
KGuille@2rmgroup.net

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q1 2025 GW
Project Location: Sparrows Point, MD
Project #: 21010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
0249967-01	C038-PZM006	2/24	1125	GW	CN	X	pH > 10	3
02	C026-PZM007	2/24	1245	GW	CN	X		3
								6

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris AFM	2/24 1430	Nubor Tofa	2-24-25 1430
Nubor Tofa	2-24-25 1830	Anthony Green	2-24-25 1830
Anthony Green	2-24-25		FEB 24 2025 0345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2509766
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q1 2025 GW
Project Number:	21010210
Report Date:	02/28/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509766
Report Date: 02/28/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2509766-01	CO37-PZM003	WATER	SPARROWS POINT, MD	02/21/25 10:25	02/21/25
L2509766-02	CO39-PZM007	WATER	SPARROWS POINT, MD	02/21/25 11:30	02/21/25
L2509766-03	CO39-PZM042	WATER	SPARROWS POINT, MD	02/21/25 12:10	02/21/25
L2509766-04	CO38-PZM043	WATER	SPARROWS POINT, MD	02/21/25 13:15	02/21/25

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509766
Project Number:	21010210	**Report Date:**	02/28/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509766
Project Number:	21010210	**Report Date:**	02/28/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 02/28/25

ORGANICS

VOLATILES

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509766
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509766-01 D
Client ID: CO37-PZM003
Sample Location: SPARROWS POINT, MD

Date Collected: 02/21/25 10:25
Date Received: 02/21/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 16:55
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4500		ug/l	25	8.0	50
Toluene	1100		ug/l	38	10.	50
Ethylbenzene	25		ug/l	25	8.4	50
p/m-Xylene	200		ug/l	50	17.	50
o-Xylene	94		ug/l	50	20.	50
Xylenes, Total	290		ug/l	50	17.	50
Naphthalene	190		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509766
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509766-02 D
Client ID: CO39-PZM007
Sample Location: SPARROWS POINT, MD

Date Collected: 02/21/25 11:30
Date Received: 02/21/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 17:20
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	240		ug/l	1.2	0.40	2.5
Toluene	32		ug/l	1.9	0.51	2.5
Ethylbenzene	1.6		ug/l	1.2	0.42	2.5
p/m-Xylene	8.1		ug/l	2.5	0.83	2.5
o-Xylene	2.7		ug/l	2.5	0.98	2.5
Xylenes, Total	11		ug/l	2.5	0.83	2.5
Naphthalene	63		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q1 2025 GW
Lab Number: L2509766
Project Number: 21010210
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509766-03 D
Client ID: CO39-PZM042
Sample Location: SPARROWS POINT, MD

Date Collected: 02/21/25 12:10
Date Received: 02/21/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 17:46
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12000		ug/l	100	32.	200
Toluene	4400		ug/l	150	41.	200
Ethylbenzene	170		ug/l	100	33.	200
p/m-Xylene	1100		ug/l	200	66.	200
o-Xylene	370		ug/l	200	78.	200
Xylenes, Total	1500		ug/l	200	66.	200
Naphthalene	1200		ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509766
Report Date: 02/28/25

SAMPLE RESULTS

Lab ID: L2509766-04
Client ID: CO38-PZM043
Sample Location: SPARROWS POINT, MD

Date Collected: 02/21/25 13:15
Date Received: 02/21/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/26/25 16:30
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	30		ug/l	0.50	0.16	1
Toluene	23		ug/l	0.75	0.20	1
Ethylbenzene	1.2		ug/l	0.50	0.17	1
p/m-Xylene	7.5		ug/l	1.0	0.33	1
o-Xylene	2.4		ug/l	1.0	0.39	1
Xylenes, Total	9.9		ug/l	1.0	0.33	1
Naphthalene	6.5		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509766
Report Date: 02/28/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/26/25 10:58
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2034661-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509766
Report Date: 02/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2034661-3 WG2034661-4								
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	94		93		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		115		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	108		109		70-130
Dibromofluoromethane	102		98		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2509766
Report Date: 02/28/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2509766-01A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-01B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-01C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-02A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-02B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-02C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-03A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-03B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-03C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-04A	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-04B	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)
L2509766-04C	Vial HCl preserved	A	NA		2.7	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509766
Project Number:	21010210	**Report Date:**	02/28/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509766
Project Number:	21010210	**Report Date:**	02/28/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2509766
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Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2509766
Report Date: 02/28/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

L2509766 TRADEPOINT 28FEB25

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/22/25

ALPHA Job #:

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGuille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q1 2025 GW
Project Location: Sparrows Point, MD
Project #: 21010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
097666-01	C037-PZM003	2/21	1025	GW	CN	X	pH > 10	3
02	C039-PZM007	2/21	1130	GW	CN	X	pH > 10	3
03	C039-PZM042	2/21	1210	GW	CN	X	pH > 10	3
04	C038-PZM043	2/21	1315	GW	CN	X		3
								12

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM Group	2/21/25 1600	PPC6	2/21/25 1600
PPC6	2/21/25	Anthony Green	2/21/25 18:33
Anthony Green	2/22/25 0140		FEB 21 2025

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

2/22/25 0100 2/22/25 0345

02/22/25 0345

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2508257
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	CPA CMS ADDITIONAL SAMP.
Project Number:	20010210
Report Date:	02/18/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: CPA CMS ADDITIONAL SAMP.
Project Number: 20010210

Lab Number: L2508257
Report Date: 02/18/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2508257-01	CO24-PZM007	WATER	Not Specified	02/13/25 12:15	02/13/25
L2508257-02	CO36-PZM043	WATER	Not Specified	02/13/25 14:15	02/13/25
L2508257-03	CO36-PZM008	WATER	Not Specified	02/13/25 14:45	02/13/25
L2508257-04	TB-001-WT	WATER	Not Specified	02/13/25 00:00	02/13/25

Project Name:	CPA CMS ADDITIONAL SAMP.	**Lab Number:**	L2508257
Project Number:	20010210	**Report Date:**	02/18/25

Case Narrative

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

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

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

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

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

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

Project Name:	CPA CMS ADDITIONAL SAMP.	**Lab Number:**	L2508257
Project Number:	20010210	**Report Date:**	02/18/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 02/18/25

ORGANICS

VOLATILES

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2508257-01 D2
Client ID: CO24-PZM007
Sample Location: Not Specified

Date Collected: 02/13/25 12:15
Date Received: 02/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/17/25 08:27
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	1700		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	107		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2508257-01 D
Client ID: CO24-PZM007
Sample Location: Not Specified

Date Collected: 02/13/25 12:15
Date Received: 02/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 01:25
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4.4	J	ug/l	5.0	1.6	10
Toluene	2.3	J	ug/l	7.5	2.0	10
Ethylbenzene	2.5	J	ug/l	5.0	1.7	10
p/m-Xylene	ND		ug/l	10	3.3	10
o-Xylene	ND		ug/l	10	3.9	10
Xylenes, Total	ND		ug/l	10	3.3	10
Naphthalene	2500	E	ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	82		70-130
Dibromofluoromethane	123		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2508257-02 D
Client ID: CO36-PZM043
Sample Location: Not Specified

Date Collected: 02/13/25 14:15
Date Received: 02/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 01:50
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9800		ug/l	25	8.0	50
Toluene	1100		ug/l	38	10.	50
Ethylbenzene	27		ug/l	25	8.4	50
p/m-Xylene	280		ug/l	50	17.	50
o-Xylene	91		ug/l	50	20.	50
Xylenes, Total	370		ug/l	50	17.	50
Naphthalene	370		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	105		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2508257-03 D
Client ID: CO36-PZM008
Sample Location: Not Specified

Date Collected: 02/13/25 14:45
Date Received: 02/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 02:16
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2900		ug/l	12	4.0	25
Toluene	470		ug/l	19	5.1	25
Ethylbenzene	6.1	J	ug/l	12	4.2	25
p/m-Xylene	190		ug/l	25	8.3	25
o-Xylene	65		ug/l	25	9.8	25
Xylenes, Total	260		ug/l	25	8.3	25
Naphthalene	120		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	106		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

SAMPLE RESULTS

Lab ID: L2508257-04
Client ID: TB-001-WT
Sample Location: Not Specified

Date Collected: 02/13/25 00:00
Date Received: 02/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/15/25 02:41
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	118		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/14/25 22:51
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2030869-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	117		70-130

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/17/25 08:05
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2030973-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CPA CMS ADDITIONAL SAMP.
Project Number: 20010210

Lab Number: L2508257
Report Date: 02/18/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2030869-3 WG2030869-4								
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	90		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		113		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	89		87		70-130
Dibromofluoromethane	108		107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CPA CMS ADDITIONAL SAMP.
Project Number: 20010210

Lab Number: L2508257
Report Date: 02/18/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2030973-3 WG2030973-4								
Benzene	100		93		70-130	7		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		97		70-130	3		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		90		70-130	5		20
Naphthalene	82		84		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		98		70-130
Toluene-d8	106		105		70-130
4-Bromofluorobenzene	92		94		70-130
Dibromofluoromethane	102		100		70-130

Project Name: CPA CMS ADDITIONAL SAMP.
Project Number: 20010210

Lab Number: L2508257
Report Date: 02/18/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2508257-01A	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-01B	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-01C	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-02A	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-02B	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-02C	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-03A	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-03B	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-03C	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-04A	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-04B	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-04C	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)
L2508257-04D	Vial HCl preserved	A	NA		3.0	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	CPA CMS ADDITIONAL SAMP.	**Lab Number:**	L2508257
Project Number:	20010210	**Report Date:**	02/18/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMP.	**Lab Number:**	L2508257
Project Number:	20010210	**Report Date:**	02/18/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	CPA CMS ADDITIONAL SAMP.	**Lab Number:**	L2508257
Project Number:	20010210	**Report Date:**	02/18/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: CPA CMS ADDITIONAL SAMP. **Lab Number:** L2508257

Project Number: 20010210 **Report Date:** 02/18/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

L2508257 18FEB25
TRADEPOINT

Date Rec'd in Lab: 2/14/25

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: KGallie@CMGroup
JBarnes@cmgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: CPA CMS Additional SVM14
Project Location:
Project #: 20010210
Project Manager: Kaye Gallie
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (3 day) Time:

Report Information - Data Delive

☐ FAX ☐ EMAIL ☐ Same as Client info PO #:
☐ ADEx ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene 8260	SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
08257 -01	CO24-PZM007	2/13/25	12:15	GW	AZS	X		pH>10	3
-02	CO36-PZM043	2/13/25	14:15	GW	CN	X		pH>10	3
-03	CO36-PZM008	2/13/25	14:45	GW	CN	X		pH>10	3
-04	TB-001-WT	—	—	—	—	X			4

Container Type: V
Preservative: A

Relinquished By:	Date/Time	Received By:	Date/Time
Abram Jarnagin	2/13/25 1550	RMB	2-13 1825
RMB	2-13 1836		2-13 1836
Anthony Green	2/14/25 0210	Anthony Green FEB 13 2025 2033	2/14/25 0210

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

2/14 0420

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2518350
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q1 2025 GW
Project Number:	21010210
Report Date:	04/11/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518350
Report Date: 04/11/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2518350-01	CO27-PZM012	WATER	SPARROWS POINT, MD	03/27/25 10:10	03/27/25
L2518350-02	CO27-PZM046	WATER	SPARROWS POINT, MD	03/27/25 11:20	03/27/25
L2518350-03	CO182-MWI	WATER	SPARROWS POINT, MD	03/27/25 12:20	03/27/25
L2518350-04	CO40-PZM008	WATER	SPARROWS POINT, MD	03/27/25 13:30	03/27/25
L2518350-05	CO195-MWS	WATER	SPARROWS POINT, MD	03/27/25 15:00	03/27/25
L2518350-06	TRIP BLANK	WATER	SPARROWS POINT, MD	03/27/25 00:00	03/27/25

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518350
Project Number:	21010210	**Report Date:**	04/11/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518350
Project Number:	21010210	**Report Date:**	04/11/25

Case Narrative (continued)

Report Submission

April 11, 2025: This final report includes the results of all requested analyses.

April 07, 2025: This is a preliminary report.

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

Sample Receipt

L2518350-06: A sample identified as "TRIP BLANK" was received, but not listed on the chain of custody. At the client's request, this sample was analyzed.

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

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 04/11/25

ORGANICS

VOLATILES

Project Name: COA Q1 2025 GW
Lab Number: L2518350
Project Number: 21010210
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-01 D
Client ID: CO27-PZM012
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 10:10
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/05/25 15:07
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	13000		ug/l	50	16.	100
Toluene	4200		ug/l	75	20.	100
Ethylbenzene	130		ug/l	50	17.	100
p/m-Xylene	740		ug/l	100	33.	100
o-Xylene	320		ug/l	100	39.	100
Xylenes, Total	1100		ug/l	100	33.	100
Naphthalene	630		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	92		70-130

Project Name: COA Q1 2025 GW
Lab Number: L2518350
Project Number: 21010210
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-02 D
Client ID: CO27-PZM046
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 11:20
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/05/25 15:33
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12000		ug/l	50	16.	100
Toluene	4600		ug/l	75	20.	100
Ethylbenzene	160		ug/l	50	17.	100
p/m-Xylene	960		ug/l	100	33.	100
o-Xylene	390		ug/l	100	39.	100
Xylenes, Total	1400		ug/l	100	33.	100
Naphthalene	920		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	92		70-130

Project Name: COA Q1 2025 GW
Lab Number: L2518350
Project Number: 21010210
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-03 D
Client ID: CO182-MWI
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 12:20
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/05/25 15:58
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	18000		ug/l	100	32.	200
Toluene	2000		ug/l	150	41.	200
Ethylbenzene	89	J	ug/l	100	33.	200
p/m-Xylene	620		ug/l	200	66.	200
o-Xylene	240		ug/l	200	78.	200
Xylenes, Total	860		ug/l	200	66.	200
Naphthalene	56	J	ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q1 2025 GW
Lab Number: L2518350
Project Number: 21010210
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-04 D
Client ID: CO40-PZM008
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 13:30
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/05/25 16:24
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	6200		ug/l	25	8.0	50
Toluene	1200		ug/l	38	10.	50
Ethylbenzene	57		ug/l	25	8.4	50
p/m-Xylene	250		ug/l	50	17.	50
o-Xylene	120		ug/l	50	20.	50
Xylenes, Total	370		ug/l	50	17.	50
Naphthalene	1400		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	93		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518350
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-05 D
Client ID: CO195-MWS
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 15:00
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/05/25 16:49
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	36000		ug/l	120	40.	250
Toluene	3000		ug/l	190	51.	250
Ethylbenzene	60	J	ug/l	120	42.	250
p/m-Xylene	540		ug/l	250	83.	250
o-Xylene	230	J	ug/l	250	98.	250
Xylenes, Total	770	J	ug/l	250	83.	250
Naphthalene	1600		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518350
Report Date: 04/11/25

SAMPLE RESULTS

Lab ID: L2518350-06
Client ID: TRIP BLANK
Sample Location: SPARROWS POINT, MD

Date Collected: 03/27/25 00:00
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/10/25 13:53
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518350
Report Date: 04/11/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/05/25 08:45
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG2050422-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518350
Report Date: 04/11/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/10/25 08:40
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG2052604-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518350
Report Date: 04/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG2050422-3 WG2050422-4								
Benzene	110		99		70-130	11		20
Toluene	110		96		70-130	14		20
Ethylbenzene	110		99		70-130	11		20
p/m-Xylene	110		95		70-130	15		20
o-Xylene	110		95		70-130	15		20
Naphthalene	93		86		70-130	8		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		113		70-130
Toluene-d8	106		105		70-130
4-Bromofluorobenzene	108		105		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518350
Report Date: 04/11/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG2052604-3 WG2052604-4								
Benzene	100		110		70-130	10		20
Toluene	99		100		70-130	1		20
Ethylbenzene	100		110		70-130	10		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	105		110		70-130	5		20
Naphthalene	97		100		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		101		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	98		100		70-130

Project Name: COA Q1 2025 GW
Project Number: 21010210

Lab Number: L2518350
Report Date: 04/11/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2518350-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-03A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-03B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-03C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-04A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-04B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-04C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-05A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-05B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-05C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-06A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-06B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-06C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518350-06D	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518350
Project Number:	21010210	**Report Date:**	04/11/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518350
Project Number:	21010210	**Report Date:**	04/11/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q1 2025 GW	**Lab Number:**	L2518350
Project Number:	21010210	**Report Date:**	04/11/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q1 2025 GW
Project Number: 21010210
Lab Number: L2518350
Report Date: 04/11/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 03/28/25

ALPHA Job #: L2518350

Client Information

Client: Tradepoint Atlantic
Address: 6495 Bethleham Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
kGuille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q1 2025 GW
Project Location: Sparrows Point
Project #: 21010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 5-day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
18350-01	C027-PZM012	3/27	1010	GW	CN	X	pH>10	3
-02	C027-PZM046	3/27	1120	GW	CN	X	pH>10	3
-03	C0182-MWI	3/27	1220	GW	CN	X	pH>10	3
-04	C040-PZM008	3/27	1330	GW	CN	X	pH>10	3
-05	C0195-MW5	3/27	1500	GW	CN	X	pH>10	3
		3/27						
								15

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	3/27 1600	Dave	3/28/25 0530
	3/27/25 1840		3.27.1840
Anthony Green	3.21	Anthony Green MAR 27 2025 22AD	3/28/25 0245

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2518351
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	Not Specified
Project Number:	Not Specified
Report Date:	04/09/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2518351-01	CO56-PZP001	WATER	Not Specified	03/27/25 10:30	03/27/25
L2518351-02	CO25-PZM008	WATER	Not Specified	03/27/25 13:30	03/27/25
L2518351-03	CO23-PZM008	WATER	Not Specified	03/27/25 14:30	03/27/25
L2518351-04	TB-001	WATER	Not Specified	03/27/25 00:00	03/27/25

Project Name:	Not Specified	**Lab Number:**	L2518351
Project Number:	Not Specified	**Report Date:**	04/09/25

Case Narrative

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

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

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

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

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

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

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature:  Caitlin Walukevich

Title: Technical Director/Representative Date: 04/09/25

ORGANICS

VOLATILES

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518351-01 D
Client ID: CO56-PZP001
Sample Location: Not Specified

Date Collected: 03/27/25 10:30
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 14:06
Analyst: JIC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	130		ug/l	5.0	1.6	10
Toluene	68		ug/l	7.5	2.0	10
Ethylbenzene	5.6		ug/l	5.0	1.7	10
p/m-Xylene	87		ug/l	10	3.3	10
o-Xylene	33		ug/l	10	3.9	10
Xylenes, Total	120		ug/l	10	3.3	10
Naphthalene	1800		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	119		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518351-02 D
Client ID: CO25-PZM008
Sample Location: Not Specified

Date Collected: 03/27/25 13:30
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 13:42
Analyst: JIC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1100		ug/l	50	16.	100
Toluene	910		ug/l	75	20.	100
Ethylbenzene	34	J	ug/l	50	17.	100
p/m-Xylene	580		ug/l	100	33.	100
o-Xylene	200		ug/l	100	39.	100
Xylenes, Total	780		ug/l	100	33.	100
Naphthalene	20000		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518351-03 D
Client ID: CO23-PZM008
Sample Location: Not Specified

Date Collected: 03/27/25 14:30
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 14:31
Analyst: JIC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	370		ug/l	12	4.0	25
Toluene	200		ug/l	19	5.1	25
Ethylbenzene	19		ug/l	12	4.2	25
p/m-Xylene	220		ug/l	25	8.3	25
o-Xylene	89		ug/l	25	9.8	25
Xylenes, Total	310		ug/l	25	8.3	25
Naphthalene	4700		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

SAMPLE RESULTS

Lab ID: L2518351-04
Client ID: TB-001
Sample Location: Not Specified

Date Collected: 03/27/25 00:00
Date Received: 03/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/08/25 13:17
Analyst: JIC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Project Name: Not Specified
Project Number: Not Specified
Lab Number: L2518351
Report Date: 04/09/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/08/25 09:07
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2051567-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2051567-3 WG2051567-4								
Benzene	110		100		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		100		70-130	5		20
Naphthalene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		107		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	99		105		70-130
Dibromofluoromethane	105		102		70-130

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2518351-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-03A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-03B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-03C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-04A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-04B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-04C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2518351-04D	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	Not Specified	**Lab Number:**	L2518351
Project Number:	Not Specified	**Report Date:**	04/09/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L2518351
Project Number:	Not Specified	**Report Date:**	04/09/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L2518351
Project Number:	Not Specified	**Report Date:**	04/09/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2518351
Report Date: 04/09/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd In Lab: 03/28/25

Pace Job #: 12518351

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point MD 21219
Phone:
Fax:
Email: JBarna@armgroup.net
hGuille@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name:
Project Location:
Project #:
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

PH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING: Sample Specific Comments	TOTAL # BOTTLES
18351-01	C056-PZP001	3/27	1030	GW	BKL	X	PH>10	3
-02	C025-PZM008	3/27	1330	GW	BKL	X	PH>10	3
-03	C023-PZM008	3/27	1430	GW	BKL	X	PH>10	3
-04	TB-001	—	—	—	—	X		4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Sarah Lowy ARM	3/27/25 1500	Pace	3/27/25 1530
	3/27/25 1840	Anthony Green	3.27.25 1840
Anthony Green	3.27		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

Anthony Green Pace 3/28/25 0450 DT 03/28/25 04:50

ANALYTICAL REPORT

Lab Number:	L2504444
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA GW
Project Number:	21010210
Report Date:	02/03/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA GW
Project Number: 21010210

Lab Number: L2504444
Report Date: 02/03/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2504444-01	GD01-MWI	WATER	Not Specified	01/27/25 12:00	01/27/25
L2504444-02	GD02-MWI	WATER	Not Specified	01/27/25 12:55	01/27/25

Project Name:	COA GW	**Lab Number:**	L2504444
Project Number:	21010210	**Report Date:**	02/03/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA GW	**Lab Number:**	L2504444
Project Number:	21010210	**Report Date:**	02/03/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Kelly O'Neill

Title: Technical Director/Representative Date: 02/03/25

ORGANICS

VOLATILES

Project Name: COA GW
Project Number: 21010210
Lab Number: L2504444
Report Date: 02/03/25

SAMPLE RESULTS

Lab ID: L2504444-01
Client ID: GD01-MWI
Sample Location: Not Specified

Date Collected: 01/27/25 12:00
Date Received: 01/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/31/25 04:24
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	114		70-130

Project Name: COA GW
Project Number: 21010210
Lab Number: L2504444
Report Date: 02/03/25

SAMPLE RESULTS

Lab ID: L2504444-02 D2
Client ID: GD02-MWI
Sample Location: Not Specified

Date Collected: 01/27/25 12:55
Date Received: 01/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 02/03/25 10:21
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	240000		ug/l	1000	320	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: COA GW
Project Number: 21010210
Lab Number: L2504444
Report Date: 02/03/25

SAMPLE RESULTS

Lab ID: L2504444-02 D
Client ID: GD02-MWI
Sample Location: Not Specified

Date Collected: 01/27/25 12:55
Date Received: 01/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/31/25 04:46
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	48000	E	ug/l	12	4.0	25
Toluene	3100		ug/l	19	5.1	25
Ethylbenzene	430		ug/l	12	4.2	25
p/m-Xylene	650		ug/l	25	8.3	25
o-Xylene	780		ug/l	25	9.8	25
Xylenes, Total	1400		ug/l	25	8.3	25
Naphthalene	1200		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	85		70-130

Project Name: COA GW
Project Number: 21010210
Lab Number: L2504444
Report Date: 02/03/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 01/30/25 20:48
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2026048-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: COA GW
Project Number: 21010210
Lab Number: L2504444
Report Date: 02/03/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 02/03/25 09:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2026197-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA GW
Project Number: 21010210

Lab Number: L2504444
Report Date: 02/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2026048-3 WG2026048-4								
Benzene	92		89		70-130	3		20
Toluene	98		86		70-130	13		20
Ethylbenzene	95		84		70-130	12		20
p/m-Xylene	90		80		70-130	12		20
o-Xylene	90		80		70-130	12		20
Naphthalene	110		92		70-130	18		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		93		70-130
Toluene-d8	102		98		70-130
4-Bromofluorobenzene	100		94		70-130
Dibromofluoromethane	103		105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA GW
Project Number: 21010210

Lab Number: L2504444
Report Date: 02/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2026197-3 WG2026197-4								
Benzene	110		100		70-130	10		20
Toluene	100		99		70-130	1		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	110		100		70-130	10		20
Naphthalene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		109		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	95		97		70-130
Dibromofluoromethane	101		98		70-130

Project Name: COA GW
Project Number: 21010210

Lab Number: L2504444
Report Date: 02/03/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2504444-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2504444-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2504444-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2504444-02A	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2504444-02B	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2504444-02C	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA GW	**Lab Number:**	L2504444
Project Number:	21010210	**Report Date:**	02/03/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA GW	**Lab Number:**	L2504444
Project Number:	21010210	**Report Date:**	02/03/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA GW	**Lab Number:**	L2504444
Project Number:	21010210	**Report Date:**	02/03/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA GW
Project Number: 21010210

Lab Number: L2504444
Report Date: 02/03/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE _____ OF _____

Date Rec'd in Lab: 1/28/25

L2504444 03FEB25
TRADEPOINT

ALPHA LABORATORIES
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA GW
Project Location:
Project #: 210/0210
Project Manager: Matt Newman
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING	TOTAL # BOTTLES
04444-01	~~GD-01 MWI~~ GD01-MWI	1/27/25	1200	GW	TP	X		3
02	~~GD-02 MWI~~ GD02-MWI	1/27/25	1255	GW	TP	X		3

SAMPLE HANDLING
Filtration _____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)
Sample Specific Comments

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
ARM	1/27/25 1:34		1/27/25 13:42
	1/27/25 18:40		1/27 1840
Anthony Green	1/28/25 0035	Anthony Green	JAN 27 2025 2240 1/28/25 0035

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

01/28/25-0230

ANALYTICAL REPORT

Lab Number:	L2533492
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/12/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533492
Report Date: 06/12/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2533492-01	GD01-MWI	WATER	COA	05/29/25 12:35	05/29/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533492
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533492
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 06/12/25

INORGANICS
&
MISCELLANEOUS

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533492
Report Date: 06/12/25

SAMPLE RESULTS

Lab ID: L2533492-01
Client ID: GD01-MWI
Sample Location: COA

Date Collected: 05/29/25 12:35
Date Received: 05/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	52.9		ug/l	5.00	1.80	1	06/06/25 17:30	06/07/25 09:54	1,9010C/9012B	JER

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533492
Report Date: 06/12/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2075872-1										
Cyanide, Total	ND		ug/l	5.00	1.80	1	06/06/25 17:30	06/07/25 09:23	1,9010C/9012B	JER

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533492
Report Date: 06/12/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2075872-2 WG2075872-3								
Cyanide, Total	88		95		85-115	8		20

Matrix Spike Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533492
Report Date: 06/12/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2075872-4 WG2075872-5 QC Sample: L2533293-01 Client ID: MS Sample												
Cyanide, Total	ND	200	198	99		190	95		80-120	4		20

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533492
Report Date: 06/12/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2533492-01A	Plastic 250ml NaOH preserved	A	>12	>12	2.9	Y	Absent		TCN-9010-PPB(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533492
Project Number:	21010210	**Report Date:**	06/12/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533492
Project Number:	21010210	**Report Date:**	06/12/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533492
Project Number:	21010210	**Report Date:**	06/12/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533492
Report Date: 06/12/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/30/25

Pace Job #: L2533492

Client Information

Client: TPA
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBrnx@armgroup.net
KGulle@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 21010210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: Total Cyanide	SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
33492 01	GD01-MW1	5/29	1235	GW	CN	X			

Container Type	P
Preservative	E

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/29/25 1400	D. Rohrman PACE	5/29/25 1400
D. Rohrman PACE	5/29/25 1850		5/29 1850
Anthony Green	5/29	Anthony Green	MAY 29 2025 2315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

5/30 0340

FORM NO: 01-01 (rev. 25-FEB-25)

ANALYTICAL REPORT

Lab Number:	L2530998
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/02/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530998
Report Date: 06/02/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2530998-01	CO190-MWS	WATER	COA	05/16/25 10:35	05/16/25
L2530998-02	CO209-MWI	WATER	COA	05/16/25 12:45	05/16/25
L2530998-03	CO209-MWS	WATER	COA	05/16/25 13:30	05/16/25
L2530998-04	CO28-PZM048	WATER	COA	05/16/25 14:10	05/16/25
L2530998-05	CO28-PZM010	WATER	COA	05/16/25 14:45	05/16/25
L2530998-06	TB-001	WATER	COA	05/16/25 00:00	05/16/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530998
Project Number:	21010210	**Report Date:**	06/02/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530998
Project Number:	21010210	**Report Date:**	06/02/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 06/02/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-01 D
Client ID: CO190-MWS
Sample Location: COA

Date Collected: 05/16/25 10:35
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 15:25
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	33000		ug/l	120	40.	250
Toluene	740		ug/l	190	51.	250
Ethylbenzene	ND		ug/l	120	42.	250
p/m-Xylene	ND		ug/l	250	83.	250
o-Xylene	ND		ug/l	250	98.	250
Xylenes, Total	ND		ug/l	250	83.	250
Naphthalene	ND		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-02 D
Client ID: CO209-MWI
Sample Location: COA

Date Collected: 05/16/25 12:45
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 15:50
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2100		ug/l	50	16.	100
Toluene	34	J	ug/l	75	20.	100
Ethylbenzene	68		ug/l	50	17.	100
p/m-Xylene	ND		ug/l	100	33.	100
o-Xylene	ND		ug/l	100	39.	100
Xylenes, Total	ND		ug/l	100	33.	100
Naphthalene	13000		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	114		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-03 D
Client ID: CO209-MWS
Sample Location: COA

Date Collected: 05/16/25 13:30
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 16:14
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	280		ug/l	12	4.0	25
Toluene	20		ug/l	19	5.1	25
Ethylbenzene	ND		ug/l	12	4.2	25
p/m-Xylene	14	J	ug/l	25	8.3	25
o-Xylene	ND		ug/l	25	9.8	25
Xylenes, Total	14	J	ug/l	25	8.3	25
Naphthalene	2600		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	113		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-04 D
Client ID: CO28-PZM048
Sample Location: COA

Date Collected: 05/16/25 14:10
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 16:38
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	100000		ug/l	500	160	1000
Toluene	950		ug/l	750	200	1000
Ethylbenzene	230	J	ug/l	500	170	1000
p/m-Xylene	2900		ug/l	1000	330	1000
o-Xylene	970	J	ug/l	1000	390	1000
Xylenes, Total	3900	J	ug/l	1000	330	1000
Naphthalene	3100		ug/l	1000	220	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	113		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-05 D
Client ID: CO28-PZM010
Sample Location: COA

Date Collected: 05/16/25 14:45
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 17:02
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	710		ug/l	5.0	1.6	10
Toluene	24		ug/l	7.5	2.0	10
Ethylbenzene	7.5		ug/l	5.0	1.7	10
p/m-Xylene	94		ug/l	10	3.3	10
o-Xylene	28		ug/l	10	3.9	10
Xylenes, Total	120		ug/l	10	3.3	10
Naphthalene	240		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	109		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

SAMPLE RESULTS

Lab ID: L2530998-06
Client ID: TB-001
Sample Location: COA
Date Collected: 05/16/25 00:00
Date Received: 05/16/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/29/25 09:20
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/29/25 08:55
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2073119-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530998
Report Date: 06/02/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2073119-3 WG2073119-4								
Benzene	93		94		70-130	1		20
Toluene	93		92		70-130	1		20
Ethylbenzene	96		95		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
Naphthalene	96		97		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		88		70-130
Toluene-d8	93		94		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	106		101		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530998
Report Date: 06/02/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2530998-01A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-01B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-01C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-02A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-02B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-02C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-03A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-03B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-03C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-04A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-04B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-04C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-05A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-05B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-05C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-06A	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-06B	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-06C	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)
L2530998-06D	Vial HCl preserved	A	NA		4.4	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530998
Project Number:	21010210	**Report Date:**	06/02/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530998
Project Number:	21010210	**Report Date:**	06/02/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530998
Project Number:	21010210	**Report Date:**	06/02/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530998
Report Date: 06/02/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/17/25

Pace Job #: 62530998

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGuile@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 21010210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH >10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naph.	Sample Specific Comments	TOTAL # BOTTLES
30998 01	C0190-MWS	5/16	1035	GW	CN	X		
02	C0209-MWI	5/16	1245	GW	CN	X	pH >10	
03	C0209-MWS	5/16	1330	GW	CN	X	pH >10	
04	C028-PZM048	5/16	1410	GW	CN	X	pH >10	
05	C028-PZM010	5/16	1445	GW	CN	X	pH >10	
06	TB-001	5/16	—	—	—	X		

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/16/25 1540	D. Robinson PACE	5/16/25 1540
D. Robinson PACE	5/16/25 1845		5.16 1845
	5.16	RECEPACE	5.16.25 22:50
RECEPACE 5.17.25		Cin Pace	5/17/25 0735
Cin Pace 5/17/25 0420			

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

05/17/25 04:20

ANALYTICAL REPORT

Lab Number:	L2531294
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/03/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531294
Report Date: 06/03/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2531294-01	CO27-PZM012	WATER	COA	05/19/25 10:55	05/19/25
L2531294-02	CO27-PZM046	WATER	COA	05/19/25 11:25	05/19/25
L2531294-03	CO180-MWI	WATER	COA	05/19/25 12:00	05/19/25
L2531294-04	CO180-MWS	WATER	COA	05/19/25 12:35	05/19/25
L2531294-05	CO181-MWI	WATER	COA	05/19/25 13:15	05/19/25
L2531294-06	CO181-MWS	WATER	COA	05/19/25 13:50	05/19/25
L2531294-07	CO201-MWS	WATER	COA	05/19/25 14:40	05/19/25
L2531294-08	TB-001	WATER	COA	05/19/25 00:00	05/19/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531294
Project Number:	21010210	**Report Date:**	06/03/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531294
Project Number:	21010210	**Report Date:**	06/03/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 06/03/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-01 D
Client ID: CO27-PZM012
Sample Location: COA

Date Collected: 05/19/25 10:55
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 16:53
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9300		ug/l	50	16.	100
Toluene	2900		ug/l	75	20.	100
Ethylbenzene	100		ug/l	50	17.	100
p/m-Xylene	540		ug/l	100	33.	100
o-Xylene	240		ug/l	100	39.	100
Xylenes, Total	780		ug/l	100	33.	100
Naphthalene	640		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-02 D
Client ID: CO27-PZM046
Sample Location: COA

Date Collected: 05/19/25 11:25
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 17:18
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	26000		ug/l	120	40.	250
Toluene	4700		ug/l	190	51.	250
Ethylbenzene	170		ug/l	120	42.	250
p/m-Xylene	880		ug/l	250	83.	250
o-Xylene	330		ug/l	250	98.	250
Xylenes, Total	1200		ug/l	250	83.	250
Naphthalene	830		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-03 D
Client ID: CO180-MWI
Sample Location: COA
Date Collected: 05/19/25 12:00
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 17:42
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9200		ug/l	50	16.	100
Toluene	2100		ug/l	75	20.	100
Ethylbenzene	44	J	ug/l	50	17.	100
p/m-Xylene	460		ug/l	100	33.	100
o-Xylene	170		ug/l	100	39.	100
Xylenes, Total	630		ug/l	100	33.	100
Naphthalene	580		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-04 D
Client ID: CO180-MWS
Sample Location: COA
Date Collected: 05/19/25 12:35
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 18:06
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	7400		ug/l	25	8.0	50
Toluene	1300		ug/l	38	10.	50
Ethylbenzene	35		ug/l	25	8.4	50
p/m-Xylene	410		ug/l	50	17.	50
o-Xylene	150		ug/l	50	20.	50
Xylenes, Total	560		ug/l	50	17.	50
Naphthalene	390		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-05 D
Client ID: CO181-MWI
Sample Location: COA
Date Collected: 05/19/25 13:15
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 18:30
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	22000		ug/l	120	40.	250
Toluene	5600		ug/l	190	51.	250
Ethylbenzene	99	J	ug/l	120	42.	250
p/m-Xylene	1100		ug/l	250	83.	250
o-Xylene	400		ug/l	250	98.	250
Xylenes, Total	1500		ug/l	250	83.	250
Naphthalene	2100		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-06 D
Client ID: CO181-MWS
Sample Location: COA
Date Collected: 05/19/25 13:50
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 18:55
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	6700		ug/l	25	8.0	50
Toluene	1600		ug/l	38	10.	50
Ethylbenzene	31		ug/l	25	8.4	50
p/m-Xylene	350		ug/l	50	17.	50
o-Xylene	120		ug/l	50	20.	50
Xylenes, Total	470		ug/l	50	17.	50
Naphthalene	400		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-07 D
Client ID: CO201-MWS
Sample Location: COA
Date Collected: 05/19/25 14:40
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 19:19
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	870		ug/l	5.0	1.6	10
Toluene	140		ug/l	7.5	2.0	10
Ethylbenzene	6.1		ug/l	5.0	1.7	10
p/m-Xylene	54		ug/l	10	3.3	10
o-Xylene	20		ug/l	10	3.9	10
Xylenes, Total	74		ug/l	10	3.3	10
Naphthalene	220		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

SAMPLE RESULTS

Lab ID: L2531294-08
Client ID: TB-001
Sample Location: COA
Date Collected: 05/19/25 00:00
Date Received: 05/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/30/25 11:38
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	115		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/30/25 11:14
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG2073459-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	118		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531294
Report Date: 06/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG2073459-3 WG2073459-4								
Benzene	99		98		70-130	1		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	90		95		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		114		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	99		104		70-130
Dibromofluoromethane	113		113		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531294
Report Date: 06/03/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2531294-01A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-01B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-01C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-02A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-02B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-02C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-03A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-03B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-03C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-04A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-04B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-04C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-05A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-05B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-05C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-06A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-06B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-06C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-07A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-07B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-07C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-08A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-08B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531294
Report Date: 06/03/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2531294-08C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)
L2531294-08D	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531294
Project Number:	21010210	**Report Date:**	06/03/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531294
Project Number:	21010210	**Report Date:**	06/03/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531294
Project Number:	21010210	**Report Date:**	06/03/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531294
Report Date: 06/03/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE ____ OF ____

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/20/25

Pace Job #: L2531294

Client Information

Client: ~~COA Q2 2025 GW~~ TPA

Address: 6995 Bethlehem Blvd
Sparrows Point, MD

Phone:

Fax:

Email: JBarna@armgroup.net
KGuile@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW

Project Location: COA

Project #: 21010210

Project Manager:

Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH >10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
31294-01	C027-PZM012	5/19	1055	GW	CN	X		pH>10	3
02	C027-PZM046	5/19	1125	GW	CN	X		pH>10	3
03	C0180-MWI	5/19	1200	GW	CN	X		pH>10	3
04	C0180-MWS	5/19	1235	GW	CN	X		pH>10	3
05	C0181-MWI	5/19	1315	GW	CN	X		pH>10	3
06	C0181-MWS	5/19	1350	GW	CN	X		pH>10	3
07	C0201-MWS	5/19	1440	GW	CN	X		pH>10	3
08	TB-001	—	—	—	—	X			

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/19/25 1645		5/19/25 1645
	5/19/25 1840		5/19 1840
	5/19		5-19-25 2150

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

Charlotte Norris ARM 5/19/25 1645
Charlotte Norris 5/19/25 1840
Charlotte Norris 5/19 1840
Charlotte Norris 5-19-25 2150
Charlotte Norris 05/20/25 03:00

FORM NO: 01-01 (rev. 25-FEB-25)

ANALYTICAL REPORT

Lab Number:	L2530731
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	05/30/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530731
Report Date: 05/30/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2530731-01	CO41-PZM001	WATER	COA	05/15/25 10:25	05/15/25
L2530731-02	CO186-MWS	WATER	COA	05/15/25 11:35	05/15/25
L2530731-03	CO182-MWI	WATER	COA	05/15/25 12:15	05/15/25
L2530731-04	CO38-PZM043	WATER	COA	05/15/25 12:55	05/15/25
L2530731-05	CO38-PZM006	WATER	COA	05/15/25 13:25	05/15/25
L2530731-06	CO36-PZM043	WATER	COA	05/15/25 14:05	05/15/25
L2530731-07	CO36-PZM008	WATER	COA	05/15/25 14:40	05/15/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530731
Project Number:	21010210	**Report Date:**	05/30/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530731
Project Number:	21010210	**Report Date:**	05/30/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 05/30/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-01 D
Client ID: CO41-PZM001
Sample Location: COA

Date Collected: 05/15/25 10:25
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 14:57
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	7300		ug/l	20	6.4	40
Toluene	630		ug/l	30	8.1	40
Ethylbenzene	93		ug/l	20	6.7	40
p/m-Xylene	200		ug/l	40	13.	40
o-Xylene	100		ug/l	40	16.	40
Xylenes, Total	300		ug/l	40	13.	40
Naphthalene	28	J	ug/l	40	8.6	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-02 D
Client ID: CO186-MWS
Sample Location: COA

Date Collected: 05/15/25 11:35
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 15:23
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1800		ug/l	5.0	1.6	10
Toluene	270		ug/l	7.5	2.0	10
Ethylbenzene	7.8		ug/l	5.0	1.7	10
p/m-Xylene	35		ug/l	10	3.3	10
o-Xylene	22		ug/l	10	3.9	10
Xylenes, Total	57		ug/l	10	3.3	10
Naphthalene	ND		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-03 D
Client ID: CO182-MWI
Sample Location: COA
Date Collected: 05/15/25 12:15
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 17:29
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	290000		ug/l	1000	320	2000
Toluene	32000		ug/l	1500	410	2000
Ethylbenzene	710	J	ug/l	1000	330	2000
p/m-Xylene	5300		ug/l	2000	660	2000
o-Xylene	1800	J	ug/l	2000	780	2000
Xylenes, Total	7100	J	ug/l	2000	660	2000
Naphthalene	ND		ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-04 D
Client ID: CO38-PZM043
Sample Location: COA

Date Collected: 05/15/25 12:55
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 15:48
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1600		ug/l	5.0	1.6	10
Toluene	490		ug/l	7.5	2.0	10
Ethylbenzene	18		ug/l	5.0	1.7	10
p/m-Xylene	150		ug/l	10	3.3	10
o-Xylene	48		ug/l	10	3.9	10
Xylenes, Total	200		ug/l	10	3.3	10
Naphthalene	2.5	J	ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-05 D
Client ID: CO38-PZM006
Sample Location: COA

Date Collected: 05/15/25 13:25
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 16:14
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	3000		ug/l	12	4.0	25
Toluene	590		ug/l	19	5.1	25
Ethylbenzene	28		ug/l	12	4.2	25
p/m-Xylene	180		ug/l	25	8.3	25
o-Xylene	62		ug/l	25	9.8	25
Xylenes, Total	240		ug/l	25	8.3	25
Naphthalene	290		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-06 D
Client ID: CO36-PZM043
Sample Location: COA

Date Collected: 05/15/25 14:05
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 16:39
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	390		ug/l	1.2	0.40	2.5
Toluene	140		ug/l	1.9	0.51	2.5
Ethylbenzene	6.9		ug/l	1.2	0.42	2.5
p/m-Xylene	59		ug/l	2.5	0.83	2.5
o-Xylene	18		ug/l	2.5	0.98	2.5
Xylenes, Total	77		ug/l	2.5	0.83	2.5
Naphthalene	5.3		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

SAMPLE RESULTS

Lab ID: L2530731-07 D
Client ID: CO36-PZM008
Sample Location: COA

Date Collected: 05/15/25 14:40
Date Received: 05/15/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 17:04
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2900		ug/l	10	3.2	20
Toluene	400		ug/l	15	4.1	20
Ethylbenzene	7.5	J	ug/l	10	3.3	20
p/m-Xylene	190		ug/l	20	6.6	20
o-Xylene	68		ug/l	20	7.8	20
Xylenes, Total	260		ug/l	20	6.6	20
Naphthalene	61		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/28/25 09:00
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2072704-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530731
Report Date: 05/30/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2072704-3 WG2072704-4								
Benzene	100		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	96		95		70-130	1		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		95		70-130	5		20
Naphthalene	71		70		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		95		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	91		91		70-130
Dibromofluoromethane	102		100		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530731
Report Date: 05/30/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2530731-01A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-01B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-01C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-02A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-02B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-02C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-03A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-03B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-03C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-04A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-04B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-04C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-05A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-05B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-05C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-06A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-06B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-06C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-07A	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-07B	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)
L2530731-07C	Vial HCl preserved	A	NA		3.9	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530731
Project Number:	21010210	**Report Date:**	05/30/25

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530731
Project Number:	21010210	**Report Date:**	05/30/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530731
Project Number:	21010210	**Report Date:**	05/30/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530731
Report Date: 05/30/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

Serial_No:05302510:41

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 05/16/25

Pace Job #: L2530731

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGuille@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 21010210
Project Manager: Kaye Guille
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
30731-01	C041-PZM001	5/15	1025	GW	CN	X		
-02	C086-MW5	5/15	1135	GW	CN	X		
-03	C082-MW1	5/15	1215	GW	CN	X		
-04	C038-PZM043	5/15	1255	GW	CN	X		
-05	C038-PZM006	5/15	1325	GW	CN	X	pH>10	
-06	C036-PZM043	5/15	1405	GW	CN	X	pH>10	
-07	C036-PZM008	5/15	1440	GW	CN	X	pH>10	

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/15/25 1600	RVB	5-15 1820
RVB	5-15 1820	Anthony Green	5.15 1820
Anthony Green		MAY 15 2025 2345	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

Anthony Green Pace Client Status Online Pace Client Status 2345

05116125-0435

ANALYTICAL REPORT

Lab Number:	L2530272
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	05/29/25

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530272
Report Date: 05/29/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2530272-01	CO191-MWS	WATER	COA	05/14/25 09:45	05/14/25
L2530272-02	CO93-PZM	WATER	COA	05/14/25 11:15	05/14/25
L2530272-03	CO39-PZM042	WATER	COA	05/14/25 12:05	05/14/25
L2530272-04	CO39-PZM007	WATER	COA	05/14/25 12:30	05/14/25
L2530272-05	CO37-PZM003	WATER	COA	05/14/25 13:20	05/14/25
L2530272-06	CO40-PZM008	WATER	COA	05/14/25 14:25	05/14/25
L2530272-07	CO41-PZM036	WATER	COA	05/14/25 15:00	05/14/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530272
Project Number:	21010210	**Report Date:**	05/29/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530272
Project Number:	21010210	**Report Date:**	05/29/25

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2530272-02: The Client ID was specified by the client.

Volatile Organics

L2530272-01D: Differences were noted between the results of the analyses which have been attributed to vial discrepancies. Further re-analysis could not be performed due to the existing vials being compromised.

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

Authorized Signature: Kelly O'Neill

Title: Technical Director/Representative Date: 05/29/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-01 D2
Client ID: CO191-MWS
Sample Location: COA
Date Collected: 05/14/25 09:45
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/28/25 17:41
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	42000	E	ug/l	100	32.	200
Toluene	4000		ug/l	150	41.	200
Ethylbenzene	120		ug/l	100	33.	200
p/m-Xylene	850		ug/l	200	66.	200
o-Xylene	320		ug/l	200	78.	200
Xylenes, Total	1200		ug/l	200	66.	200
Naphthalene	220		ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-01 D
Client ID: CO191-MWS
Sample Location: COA

Date Collected: 05/14/25 09:45
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 17:03
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	26000		ug/l	200	64.	400

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-02 D
Client ID: CO93-PZM
Sample Location: COA

Date Collected: 05/14/25 11:15
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 17:25
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	140000		ug/l	500	160	1000
Toluene	40000		ug/l	750	200	1000
Ethylbenzene	860		ug/l	500	170	1000
p/m-Xylene	7500		ug/l	1000	330	1000
o-Xylene	2600		ug/l	1000	390	1000
Xylenes, Total	10000		ug/l	1000	330	1000
Naphthalene	1200		ug/l	1000	220	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-03 D
Client ID: CO39-PZM042
Sample Location: COA

Date Collected: 05/14/25 12:05
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 17:47
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	10000		ug/l	50	16.	100
Toluene	3800		ug/l	75	20.	100
Ethylbenzene	140		ug/l	50	17.	100
p/m-Xylene	920		ug/l	100	33.	100
o-Xylene	320		ug/l	100	39.	100
Xylenes, Total	1200		ug/l	100	33.	100
Naphthalene	630		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-04 D
Client ID: CO39-PZM007
Sample Location: COA

Date Collected: 05/14/25 12:30
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 19:15
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	380		ug/l	2.0	0.64	4
Toluene	190		ug/l	3.0	0.81	4
Ethylbenzene	7.4		ug/l	2.0	0.67	4
p/m-Xylene	56		ug/l	4.0	1.3	4
o-Xylene	19		ug/l	4.0	1.6	4
Xylenes, Total	75		ug/l	4.0	1.3	4
Naphthalene	36		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-05 D
Client ID: CO37-PZM003
Sample Location: COA

Date Collected: 05/14/25 13:20
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 18:09
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4600		ug/l	25	8.0	50
Toluene	1400		ug/l	38	10.	50
Ethylbenzene	31		ug/l	25	8.4	50
p/m-Xylene	270		ug/l	50	17.	50
o-Xylene	130		ug/l	50	20.	50
Xylenes, Total	400		ug/l	50	17.	50
Naphthalene	190		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-06 D
Client ID: CO40-PZM008
Sample Location: COA

Date Collected: 05/14/25 14:25
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 18:31
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	14000		ug/l	50	16.	100
Toluene	3700		ug/l	75	20.	100
Ethylbenzene	110		ug/l	50	17.	100
p/m-Xylene	600		ug/l	100	33.	100
o-Xylene	260		ug/l	100	39.	100
Xylenes, Total	860		ug/l	100	33.	100
Naphthalene	1500		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

SAMPLE RESULTS

Lab ID: L2530272-07 D
Client ID: CO41-PZM036
Sample Location: COA

Date Collected: 05/14/25 15:00
Date Received: 05/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/27/25 18:53
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	300000		ug/l	1200	400	2500
Toluene	96000		ug/l	1900	510	2500
Ethylbenzene	920	J	ug/l	1200	420	2500
p/m-Xylene	14000		ug/l	2500	830	2500
o-Xylene	4400		ug/l	2500	980	2500
Xylenes, Total	18000		ug/l	2500	830	2500
Naphthalene	1500	J	ug/l	2500	540	2500

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/27/25 11:38
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2072103-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	0.31	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	**134**	Q	70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/28/25 09:04
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2072616-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	0.50	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530272
Report Date: 05/29/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2072103-3 WG2072103-4								
Benzene	110		100		70-130	10		20
Toluene	110		99		70-130	11		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	115		105		70-130	9		20
o-Xylene	115		105		70-130	9		20
Naphthalene	86		81		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		109		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	87		87		70-130
Dibromofluoromethane	112		106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530272
Report Date: 05/29/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2072616-3 WG2072616-4								
Benzene	99		99		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
Naphthalene	71		82		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	94		93		70-130
Dibromofluoromethane	105		106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2530272
Report Date: 05/29/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2530272-01A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-01B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-01C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-02A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-02B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-02C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-03A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-03B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-03C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-04A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-04B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-04C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-05A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-05B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-05C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-06A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-06B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-06C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-07A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-07B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)
L2530272-07C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530272
Project Number:	21010210	**Report Date:**	05/29/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530272
Project Number:	21010210	**Report Date:**	05/29/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2530272
Project Number:	21010210	**Report Date:**	05/29/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2530272
Report Date: 05/29/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/15/25

L2530272
TRADEPOINT

Pace ANALYTICAL SERVICES
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethleham Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGuille@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: 21010210 5
Project #: COA
Project Manager: Kaye Guille
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliver

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Regulatory Requirements/Report

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH >10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments	Total # Bottles
30272-01	C0191-MWS	5/14	0945	GW	CN	X	pH>10	
-02	C093-MWS	5/14	1115	GW	CN	X	pH>10	
-03	C039-PZM042	5/14	1205	GW	CN	X	pH>10	
-04	C039-PZM007	5/14	1230	GW	CN	X	pH>10	
-05	C037-PZM003	5/14	1320	GW	CN	X	pH>10	
-06	C040-PZM003	5/14	1425	GW	CN	X	pH>10	
-07	C041-PZM036	5/14	1500	GW	CN	X	pH>10	

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM Group	5/14/25	J Duncan PACE	5/14/25 15
J Duncan PACE	5/14/25	Anthony Green	
Anthony Green	5/15/25 0415		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

0529 5125-0415

FORM NO: 01-01 (rev. 25 FEB-25)

ANALYTICAL REPORT

Lab Number:	L2532421
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/09/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532421
Report Date: 06/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2532421-01	GD02-MWI	WATER	COA	05/22/25 10:15	05/22/25
L2532421-02	CO194-MWS	WATER	COA	05/22/25 12:10	05/22/25
L2532421-03	CO195-MWS	WATER	COA	05/22/25 12:50	05/22/25
L2532421-04	CO196-MWS	WATER	COA	05/22/25 13:25	05/22/25
L2532421-05	CO198-MWS	WATER	COA	05/22/25 14:20	05/22/25
L2532421-06	TB-001	WATER	COA	05/22/25 00:00	05/22/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532421
Project Number:	21010210	**Report Date:**	06/09/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532421
Project Number:	21010210	**Report Date:**	06/09/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 06/09/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-01 D
Client ID: GD02-MWI
Sample Location: COA

Date Collected: 05/22/25 10:15
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 15:31
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12000		ug/l	50	16.	100
Toluene	ND		ug/l	75	20.	100
Ethylbenzene	29	J	ug/l	50	17.	100
p/m-Xylene	ND		ug/l	100	33.	100
o-Xylene	44	J	ug/l	100	39.	100
Xylenes, Total	44	J	ug/l	100	33.	100
Naphthalene	44	J	ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	93		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-02 D
Client ID: CO194-MWS
Sample Location: COA

Date Collected: 05/22/25 12:10
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 16:45
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	300		ug/l	5.0	1.6	10
Toluene	62		ug/l	7.5	2.0	10
Ethylbenzene	2.8	J	ug/l	5.0	1.7	10
p/m-Xylene	20		ug/l	10	3.3	10
o-Xylene	11		ug/l	10	3.9	10
Xylenes, Total	31		ug/l	10	3.3	10
Naphthalene	1500		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-03 D
Client ID: CO195-MWS
Sample Location: COA

Date Collected: 05/22/25 12:50
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 15:56
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	28000		ug/l	120	40.	250
Toluene	2300		ug/l	190	51.	250
Ethylbenzene	54	J	ug/l	120	42.	250
p/m-Xylene	430		ug/l	250	83.	250
o-Xylene	190	J	ug/l	250	98.	250
Xylenes, Total	620	J	ug/l	250	83.	250
Naphthalene	1600		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-04 D
Client ID: CO196-MWS
Sample Location: COA

Date Collected: 05/22/25 13:25
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 16:21
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	260		ug/l	1.2	0.40	2.5
Toluene	51		ug/l	1.9	0.51	2.5
Ethylbenzene	2.8		ug/l	1.2	0.42	2.5
p/m-Xylene	25		ug/l	2.5	0.83	2.5
o-Xylene	9.8		ug/l	2.5	0.98	2.5
Xylenes, Total	35		ug/l	2.5	0.83	2.5
Naphthalene	170		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-05 D
Client ID: CO198-MWS
Sample Location: COA
Date Collected: 05/22/25 14:20
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 17:10
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	230		ug/l	5.0	1.6	10
Toluene	59		ug/l	7.5	2.0	10
Ethylbenzene	2.0	J	ug/l	5.0	1.7	10
p/m-Xylene	19		ug/l	10	3.3	10
o-Xylene	8.2	J	ug/l	10	3.9	10
Xylenes, Total	27	J	ug/l	10	3.3	10
Naphthalene	1000		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

SAMPLE RESULTS

Lab ID: L2532421-06
Client ID: TB-001
Sample Location: COA
Date Collected: 05/22/25 00:00
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/05/25 09:23
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	108		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/05/25 08:44
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2076315-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	115		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532421
Report Date: 06/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2076315-3 WG2076315-4								
Benzene	97		96		70-130	1		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	87		86		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		104		70-130
Toluene-d8	102		104		70-130
4-Bromofluorobenzene	102		101		70-130
Dibromofluoromethane	113		109		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532421
Report Date: 06/09/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2532421-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-02A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-02B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-02C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-03A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-03B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-03C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-04A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-04B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-04C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-05A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-05B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-05C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-06A	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-06B	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-06C	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)
L2532421-06D	Vial HCl preserved	A	NA		2.6	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532421
Project Number:	21010210	**Report Date:**	06/09/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532421
Project Number:	21010210	**Report Date:**	06/09/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532421
Project Number:	21010210	**Report Date:**	06/09/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532421
Report Date: 06/09/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/23/25

Pace Job #: L2532421

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net KGuille@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 21010210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING / Sample Specific Comments	TOTAL # BOTTLES
32421 01	GD02-MWI	5/22	1015	GW	CN	X		3
02	C0194-MWS	5/22	1210	GW	CN	X	pH>10	3
03	C0195-MWS	5/22	1250	GW	CN	X	pH>10	3
04	C0196-MWS	5/22	1325	GW	CN	X	pH>10	3
05	C0198-MWS	5/22	1420	GW	CN	X	pH>10	3
06	TB-001	—	—	—	—	X		4

SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/22/25 1520	RNB	5-22 1700
RNB	5-22 1910		5-23 1810
Anthony Green	5-22	Anthony Green	MAY 22 2025 2350

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

ANALYTICAL REPORT

Lab Number:	L2531523
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/04/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531523
Report Date: 06/04/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2531523-01	CO23-PZM008	WATER	COA	05/20/25 10:05	05/20/25
L2531523-02	CO24-PZM007	WATER	COA	05/20/25 11:15	05/20/25
L2531523-03	CO25-PZM008	WATER	COA	05/20/25 12:00	05/20/25
L2531523-04	CO26-PZM007	WATER	COA	05/20/25 14:00	05/20/25
L2531523-05	CO58-PZM001	WATER	COA	05/20/25 14:50	05/20/25
L2531523-06	TB-001	WATER	COA	05/20/25 00:00	05/20/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531523
Project Number:	21010210	**Report Date:**	06/04/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531523
Project Number:	21010210	**Report Date:**	06/04/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 06/04/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-01 D
Client ID: CO23-PZM008
Sample Location: COA

Date Collected: 05/20/25 10:05
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 20:52
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	430		ug/l	12	4.0	25
Toluene	230		ug/l	19	5.1	25
Ethylbenzene	18		ug/l	12	4.2	25
p/m-Xylene	240		ug/l	25	8.3	25
o-Xylene	90		ug/l	25	9.8	25
Xylenes, Total	330		ug/l	25	8.3	25
Naphthalene	3000		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-02 D
Client ID: CO24-PZM007
Sample Location: COA

Date Collected: 05/20/25 11:15
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 21:17
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	5.7		ug/l	5.0	1.6	10
Toluene	3.9	J	ug/l	7.5	2.0	10
Ethylbenzene	2.4	J	ug/l	5.0	1.7	10
p/m-Xylene	4.6	J	ug/l	10	3.3	10
o-Xylene	ND		ug/l	10	3.9	10
Xylenes, Total	4.6	J	ug/l	10	3.3	10
Naphthalene	1400		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	110		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-03 D
Client ID: CO25-PZM008
Sample Location: COA

Date Collected: 05/20/25 12:00
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 21:43
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1100		ug/l	50	16.	100
Toluene	1100		ug/l	75	20.	100
Ethylbenzene	30	J	ug/l	50	17.	100
p/m-Xylene	610		ug/l	100	33.	100
o-Xylene	210		ug/l	100	39.	100
Xylenes, Total	820		ug/l	100	33.	100
Naphthalene	14000		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-04 D
Client ID: CO26-PZM007
Sample Location: COA

Date Collected: 05/20/25 14:00
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 22:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	33		ug/l	2.0	0.64	4
Toluene	35		ug/l	3.0	0.81	4
Ethylbenzene	1.8	J	ug/l	2.0	0.67	4
p/m-Xylene	32		ug/l	4.0	1.3	4
o-Xylene	11		ug/l	4.0	1.6	4
Xylenes, Total	43		ug/l	4.0	1.3	4
Naphthalene	580		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-05 D
Client ID: CO58-PZM001
Sample Location: COA

Date Collected: 05/20/25 14:50
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 22:34
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	6.1		ug/l	1.0	0.32	2
Toluene	10		ug/l	1.5	0.41	2
Ethylbenzene	0.68	J	ug/l	1.0	0.33	2
p/m-Xylene	11		ug/l	2.0	0.66	2
o-Xylene	3.5		ug/l	2.0	0.78	2
Xylenes, Total	15		ug/l	2.0	0.66	2
Naphthalene	220		ug/l	2.0	0.43	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

SAMPLE RESULTS

Lab ID: L2531523-06
Client ID: TB-001
Sample Location: COA
Date Collected: 05/20/25 00:00
Date Received: 05/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/25 16:38
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	117		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 05/31/25 14:05
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2074240-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531523
Report Date: 06/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2074240-3 WG2074240-4								
Benzene	110		110		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	105		105		70-130	0		20
Naphthalene	70		72		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		104		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	86		87		70-130
Dibromofluoromethane	106		103		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2531523
Report Date: 06/04/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2531523-01A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-01B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-01C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-02A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-02B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-02C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-03A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-03B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-03C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-04A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-04B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-04C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-05A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-05B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-05C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-06A	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-06B	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-06C	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)
L2531523-06D	Vial HCl preserved	A	NA		3.2	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531523
Project Number:	21010210	**Report Date:**	06/04/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531523
Project Number:	21010210	**Report Date:**	06/04/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2531523
Project Number:	21010210	**Report Date:**	06/04/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2531523
Report Date: 06/04/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/21/25

Pace Job #: L2531523

Client Information

Client: TPA

Address: 6995 Bethlehem Blvd
Sparrows Point, MD

Phone:

Fax:

Email: JBarna@armgroup.net
KGuille@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW

Project Location: COA

Project #: 2010210

Project Manager:

Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH > 10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING	TOTAL # BOTTLES	Sample Specific Comments
31523 01	C023-PZM008	5/20	1005	GW	CN	X			pH > 10
02	C024-PZM007	5/20	1115	GW	CN	X			pH > 10
03	C025-PZM008	5/20	1200	GW	CN	X			pH > 10
04	C026-PZM007	5/20	1400	GW	CN	X			pH > 10
05	C058-PZM001	5/20	1450	GW	CN	X			pH > 10
06	TB-001	—	—	—	—	X			

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norkarm	5/20/25 1515	D. Robinson PACE	5/20/25 1515
D. Robinson PACE	5/20/25 1845	Anthony Green	5/20 1845
Anthony Green		MAY 20 2025 2317	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

Anthony Green 5/20/25 0340 5/21/25 0200 05/21/25 05:46

ANALYTICAL REPORT

Lab Number:	L2532784
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 GW
Project Number:	21010210
Report Date:	06/10/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 GW
Project Number: 21010210

Lab Number: L2532784
Report Date: 06/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2532784-01	CO30-PZM060	WATER	COA	05/23/25 09:55	05/23/25
L2532784-02	CO30-PZM015	WATER	COA	05/23/25 10:25	05/23/25
L2532784-03	CO56-PZP001	WATER	COA	05/23/25 11:25	05/23/25
L2532784-04	CO206R-MWS	WATER	COA	05/23/25 12:45	05/23/25
L2532784-05	CO57-PZP002	WATER	COA	05/23/25 13:45	05/23/25
L2532784-06	CO59-PZP002	WATER	COA	05/23/25 14:30	05/23/25
L2532784-07	TB-001	WATER	COA	05/23/25 00:00	05/23/25

Project Name:	COA Q2 GW	**Lab Number:**	L2532784
Project Number:	21010210	**Report Date:**	06/10/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 GW	**Lab Number:**	L2532784
Project Number:	21010210	**Report Date:**	06/10/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 06/10/25

ORGANICS

VOLATILES

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-01 D
Client ID: CO30-PZM060
Sample Location: COA

Date Collected: 05/23/25 09:55
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 02:20
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4900		ug/l	25	8.0	50
Toluene	110		ug/l	38	10.	50
Ethylbenzene	ND		ug/l	25	8.4	50
p/m-Xylene	ND		ug/l	50	17.	50
o-Xylene	ND		ug/l	50	20.	50
Xylenes, Total	ND		ug/l	50	17.	50
Naphthalene	40	J	ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-02 D
Client ID: CO30-PZM015
Sample Location: COA

Date Collected: 05/23/25 10:25
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 02:42
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	24000		ug/l	120	40.	250
Toluene	2000		ug/l	190	51.	250
Ethylbenzene	52	J	ug/l	120	42.	250
p/m-Xylene	440		ug/l	250	83.	250
o-Xylene	210	J	ug/l	250	98.	250
Xylenes, Total	650	J	ug/l	250	83.	250
Naphthalene	1600		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-03 D
Client ID: CO56-PZP001
Sample Location: COA

Date Collected: 05/23/25 11:25
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 03:27
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	270		ug/l	5.0	1.6	10
Toluene	84		ug/l	7.5	2.0	10
Ethylbenzene	6.1		ug/l	5.0	1.7	10
p/m-Xylene	84		ug/l	10	3.3	10
o-Xylene	35		ug/l	10	3.9	10
Xylenes, Total	120		ug/l	10	3.3	10
Naphthalene	1100		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-04 D
Client ID: CO206R-MWS
Sample Location: COA

Date Collected: 05/23/25 12:45
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 03:04
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	640		ug/l	20	6.4	40
Toluene	440		ug/l	30	8.1	40
Ethylbenzene	15	J	ug/l	20	6.7	40
p/m-Xylene	270		ug/l	40	13.	40
o-Xylene	110		ug/l	40	16.	40
Xylenes, Total	380		ug/l	40	13.	40
Naphthalene	4900		ug/l	40	8.6	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-05
Client ID: CO57-PZP002
Sample Location: COA

Date Collected: 05/23/25 13:45
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 01:58
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	21		ug/l	0.50	0.16	1
Toluene	8.2		ug/l	0.75	0.20	1
Ethylbenzene	0.44	J	ug/l	0.50	0.17	1
p/m-Xylene	6.4		ug/l	1.0	0.33	1
o-Xylene	2.1		ug/l	1.0	0.39	1
Xylenes, Total	8.5		ug/l	1.0	0.33	1
Naphthalene	77		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-06 D
Client ID: CO59-PZP002
Sample Location: COA

Date Collected: 05/23/25 14:30
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 03:49
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	8.5		ug/l	1.0	0.32	2
Toluene	2.8		ug/l	1.5	0.41	2
Ethylbenzene	ND		ug/l	1.0	0.33	2
p/m-Xylene	2.4		ug/l	2.0	0.66	2
o-Xylene	ND		ug/l	2.0	0.78	2
Xylenes, Total	2.4		ug/l	2.0	0.66	2
Naphthalene	32		ug/l	2.0	0.43	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

SAMPLE RESULTS

Lab ID: L2532784-07
Client ID: TB-001
Sample Location: COA

Date Collected: 05/23/25 00:00
Date Received: 05/23/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/06/25 01:36
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	108		70-130

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/05/25 21:32
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2076301-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 GW
Project Number: 21010210

Lab Number: L2532784
Report Date: 06/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2076301-3 WG2076301-4								
Benzene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
Naphthalene	100		110		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		105		70-130
Toluene-d8	100		103		70-130
4-Bromofluorobenzene	93		99		70-130
Dibromofluoromethane	99		101		70-130

Project Name: COA Q2 GW
Project Number: 21010210

Lab Number: L2532784
Report Date: 06/10/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2532784-01A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-01B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-01C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-02A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-02B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-02C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-03A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-03B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-03C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-04A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-04B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-04C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-05A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-05B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-05C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-06A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-06B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-06C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-07A	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-07B	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-07C	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)
L2532784-07D	Vial HCl preserved	A	NA		4.6	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 GW	**Lab Number:**	L2532784
Project Number:	21010210	**Report Date:**	06/10/25

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 GW	**Lab Number:**	L2532784
Project Number:	21010210	**Report Date:**	06/10/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 GW	**Lab Number:**	L2532784
Project Number:	21010210	**Report Date:**	06/10/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 GW
Project Number: 21010210
Lab Number: L2532784
Report Date: 06/10/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/24/25

Pace Job #: 92537784

Pace Analytical Services
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarr@armgrp.net
bGuille@armgrp.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 GW
Project Location: COA
Project #: 21010210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
92537784 01	C030-PZM060	5/23	0955	GW	CN	X	pH>10	3
02	C030-PZM015	5/23	1025	GW	CN	X	pH>10	3
03	C056-PZP001	5/23	1125	GW	CN	X	pH>10	3
04	C0206R-MW5	5/23	1245	GW	CN	X	pH>10	3
05	C057-PZP002	5/23	1345	GW	CN	X	pH>10	3
06	C059-PZP002	5/23	1430	GW	CN	X	pH>10	3
07	TB-001	—	—	—	—	X		4

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/23/25 1500	RVB	5-23 1600
RVB	5-23 1920		5-23 1600
523		Anthony Green	MAY 23 2025 2240
Anthony Green	Charlotte 5/24/25 0920		5/24/25 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

M 05/24/25 0320

ANALYTICAL REPORT

Lab Number:	L2532464
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/06/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532464
Report Date: 06/06/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2532464-01	GD02-MWI	WATER	COA	05/22/25 10:15	05/22/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532464
Project Number:	21010210	**Report Date:**	06/06/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532464
Project Number:	21010210	**Report Date:**	06/06/25

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 06/06/25

INORGANICS
&
MISCELLANEOUS

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532464
Report Date: 06/06/25

SAMPLE RESULTS

Lab ID: L2532464-01
Client ID: GD02-MWI
Sample Location: COA

Date Collected: 05/22/25 10:15
Date Received: 05/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		ug/l	5.00	1.80	1	06/03/25 14:15	06/04/25 11:55	1,9010C/9012B	JER

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532464
Report Date: 06/06/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2074458-1										
Cyanide, Total	ND		ug/l	5.00	1.80	1	06/03/25 14:15	06/04/25 11:16	1,9010C/9012B	JER

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532464
Report Date: 06/06/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2074458-2 WG2074458-3								
Cyanide, Total	90		94		85-115	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532464
Report Date: 06/06/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2074458-4 WG2074458-5 QC Sample: L2532464-01 Client ID: GD02-MWI												
Cyanide, Total	ND	200	197	98		187	94		80-120	5		20

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2532464
Report Date: 06/06/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2532464-01A	Plastic 250ml NaOH preserved	A	>12	>12	3.5	Y	Absent		TCN-9010-PPB(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532464
Project Number:	21010210	**Report Date:**	06/06/25

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532464
Project Number:	21010210	**Report Date:**	06/06/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2532464
Project Number:	21010210	**Report Date:**	06/06/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2532464
Report Date: 06/06/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE ____ OF ____

Date Rec'd in Lab: 5/23/25

Pace Job #: 25324164

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarnes@armgroup.net KGuille@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 210210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: Total Cyanide	SAMPLE HANDLING	Sample Specific Comments	TOTAL # BOTTLES
25324101	GD02-MW1	5/22	1015	GW	CN	X			

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	P
Preservative	E

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/22/25 1520	RNB	5-22 1700
RNB	5-22 1905		5-23 1405
Anthony Green	5/23	Anthony Green MAY 22 2025 2225	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

Courier 5/24/25 0900 Courier 5/24/25 0230 RB 05/23/25 04:40

ANALYTICAL REPORT

Lab Number:	L2533490
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/12/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533490
Report Date: 06/12/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2533490-01	CO55-PZM000	WATER	COA	05/27/25 10:35	05/29/25
L2533490-02	TRIP BLANK	WATER	COA	05/27/25 00:00	05/29/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533490
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative

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

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

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

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

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

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

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533490
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2533490-02: A sample identified as "TRIP BLANK" was received, but not listed on the chain of custody. At the client's request, this sample was analyzed.

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 06/12/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533490
Report Date: 06/12/25

SAMPLE RESULTS

Lab ID: L2533490-01
Client ID: CO55-PZM000
Sample Location: COA

Date Collected: 05/27/25 10:35
Date Received: 05/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/07/25 13:06
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9.0		ug/l	0.50	0.16	1
Toluene	4.6		ug/l	0.75	0.20	1
Ethylbenzene	0.54		ug/l	0.50	0.17	1
p/m-Xylene	4.7		ug/l	1.0	0.33	1
o-Xylene	2.5		ug/l	1.0	0.39	1
Xylenes, Total	7.2		ug/l	1.0	0.33	1
Naphthalene	11		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	108		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533490
Report Date: 06/12/25

SAMPLE RESULTS

Lab ID: L2533490-02
Client ID: TRIP BLANK
Sample Location: COA

Date Collected: 05/27/25 00:00
Date Received: 05/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/08/25 09:43
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	120		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533490
Report Date: 06/12/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/08/25 08:51
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2076474-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	120		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533490
Report Date: 06/12/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/25 11:46
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2076722-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533490
Report Date: 06/12/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2076474-3 WG2076474-4								
Benzene	97		93		70-130	4		20
Toluene	100		98		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	84		83		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	110		111		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533490
Report Date: 06/12/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2076722-3 WG2076722-4								
Benzene	120		120		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	115		110		70-130	4		20
o-Xylene	110		110		70-130	0		20
Naphthalene	92		75		70-130	20		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	125		121		70-130
Toluene-d8	97		95		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	103		102		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533490
Report Date: 06/12/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2533490-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533490-02D	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533490
Project Number:	21010210	**Report Date:**	06/12/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533490
Project Number:	21010210	**Report Date:**	06/12/25

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

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

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533490
Project Number:	21010210	**Report Date:**	06/12/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533490
Report Date: 06/12/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/30/25

Pace Job #: L2933490

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA

Address: 6995 Bethlehem Blvd
Sparrows Point, MD

Phone:

Fax:

Email: JBarns@armgroup.net
KGville@armgroup.net

☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW

Project Location: COA

Project #: 21010210

Project Manager:

Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

PH > 10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments
35410 01	C055-PZM000	5/27	1035	GW	CN	X	PH > 10
						X	

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

TOTAL # BOTTLES

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	5/29/25 1400	D. Robinson PACE	5/29/25 1445
D. Robinson PACE	5/29/25 1530		5.29 1530
Anthony Green	5.29	Anthony Green	MAY 29 2025 2315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

5/30 0345

ANALYTICAL REPORT

Lab Number:	L2533489
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q2 2025 GW
Project Number:	21010210
Report Date:	06/12/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533489
Report Date: 06/12/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2533489-01	GD01-MWI	WATER	COA	05/29/25 12:35	05/29/25
L2533489-02	TB-002	WATER	COA	05/29/25 00:00	05/29/25

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533489
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533489
Project Number:	21010210	**Report Date:**	06/12/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 06/12/25

ORGANICS

VOLATILES

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533489
Report Date: 06/12/25

SAMPLE RESULTS

Lab ID: L2533489-01
Client ID: GD01-MWI
Sample Location: COA

Date Collected: 05/29/25 12:35
Date Received: 05/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/07/25 13:33
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	17		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	1.7		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533489
Report Date: 06/12/25

SAMPLE RESULTS

Lab ID: L2533489-02
Client ID: TB-002
Sample Location: COA

Date Collected: 05/29/25 00:00
Date Received: 05/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/08/25 09:19
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533489
Report Date: 06/12/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/08/25 08:51
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2076474-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	120		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533489
Report Date: 06/12/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/25 11:46
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2076722-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533489
Report Date: 06/12/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2076474-3 WG2076474-4								
Benzene	97		93		70-130	4		20
Toluene	100		98		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	84		83		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	110		111		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533489
Report Date: 06/12/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2076722-3 WG2076722-4								
Benzene	120		120		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	115		110		70-130	4		20
o-Xylene	110		110		70-130	0		20
Naphthalene	92		75		70-130	20		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	125		121		70-130
Toluene-d8	97		95		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	103		102		70-130

Project Name: COA Q2 2025 GW
Project Number: 21010210

Lab Number: L2533489
Report Date: 06/12/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2533489-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2533489-02D	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533489
Project Number:	21010210	**Report Date:**	06/12/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533489
Project Number:	21010210	**Report Date:**	06/12/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q2 2025 GW	**Lab Number:**	L2533489
Project Number:	21010210	**Report Date:**	06/12/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q2 2025 GW
Project Number: 21010210
Lab Number: L2533489
Report Date: 06/12/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/30/25

Pace Job #: L2533489

Client Information

Client: TPA
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
Kgville@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q2 2025 GW
Project Location: COA
Project #: 21010210
Project Manager:
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: BTEX + Naphthalene

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sample Specific Comments	TOTAL # BOTTLES
33489 01	GD01-MW1	5/29	1235	GW	CN	X	
02	TB-002	—	—	—	—	X	

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM Alliance Mgr	5/29/25 1400	D. Robinson PACE	5/29/25 1440
D. Robinson PACE	5/29/25 1830		5.29.1850
Anthony Green	5/29	Anthony Green MAY 29 2025	2315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

Container Condition Status OK — Container Condition Status OK — 5/30 0340

FORM NO: 01-01 (rev. 25-FEB-25)

ANALYTICAL REPORT

Lab Number:	L2550995
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 GW 2025
Project Number:	21010210
Report Date:	08/27/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Project Name: COA Q3 GW 2025
Project Number: 21010210

Lab Number: L2550995
Report Date: 08/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2550995-01	CO36-PZM043	WATER	COA	08/13/25 13:45	08/13/25
L2550995-02	CO36-PZM008	WATER	COA	08/13/25 14:45	08/13/25
L2550995-03	TB-001	WATER	COA	08/13/25 00:00	08/13/25

Project Name:	COA Q3 GW 2025	**Lab Number:**	L2550995
Project Number:	21010210	**Report Date:**	08/27/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 GW 2025	**Lab Number:**	L2550995
Project Number:	21010210	**Report Date:**	08/27/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 08/27/25

ORGANICS

VOLATILES

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

SAMPLE RESULTS

Lab ID: L2550995-01 D
Client ID: CO36-PZM043
Sample Location: COA

Date Collected: 08/13/25 13:45
Date Received: 08/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/27/25 10:30
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	6800		ug/l	25	8.0	50
Toluene	1200		ug/l	38	10.	50
Ethylbenzene	24	J	ug/l	25	8.4	50
p/m-Xylene	250		ug/l	50	17.	50
o-Xylene	87		ug/l	50	20.	50
Xylenes, Total	340		ug/l	50	17.	50
Naphthalene	190		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	94		70-130

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

SAMPLE RESULTS

Lab ID: L2550995-02 D
Client ID: CO36-PZM008
Sample Location: COA

Date Collected: 08/13/25 14:45
Date Received: 08/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 16:51
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4000		ug/l	25	8.0	50
Toluene	780		ug/l	38	10.	50
Ethylbenzene	17	J	ug/l	25	8.4	50
p/m-Xylene	220		ug/l	50	17.	50
o-Xylene	83		ug/l	50	20.	50
Xylenes, Total	300		ug/l	50	17.	50
Naphthalene	170		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

SAMPLE RESULTS

Lab ID: L2550995-03 Date Collected: 08/13/25 00:00

Client ID: TB-001 Date Received: 08/13/25

Sample Location: COA Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/26/25 16:28

Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/26/25 09:16
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG2107609-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/27/25 09:11
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2107916-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 GW 2025
Project Number: 21010210

Lab Number: L2550995
Report Date: 08/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG2107609-3 WG2107609-4								
Benzene	98		97		70-130	1		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		98		70-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	95		96		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		104		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	97		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 GW 2025
Project Number: 21010210

Lab Number: L2550995
Report Date: 08/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2107916-3 WG2107916-4								
Benzene	96		94		70-130	2		20
Toluene	97		94		70-130	3		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
Naphthalene	85		82		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		112		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	98		96		70-130

Project Name: COA Q3 GW 2025
Project Number: 21010210

Lab Number: L2550995
Report Date: 08/27/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2550995-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550995-03D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 GW 2025	**Lab Number:**	L2550995
Project Number:	21010210	**Report Date:**	08/27/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 GW 2025	**Lab Number:**	L2550995
Project Number:	21010210	**Report Date:**	08/27/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 GW 2025	**Lab Number:**	L2550995
Project Number:	21010210	**Report Date:**	08/27/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 GW 2025 **Lab Number:** L2550995

Project Number: 21010210 **Report Date:** 08/27/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace Analytical Services

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 08/14/25

Pace Job #: L2550995

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net KGuille@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q3 GW 2025
Project Location: COA
Project #: 21010210
Project Manager: Kaige Guille
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 15-day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + NAPH	Sample Specific Comments	TOTAL # BOTTLES
50995-01	C036-PZM043	8/13	1345	GW	CN	X	pH>10	
-02	C036-PZM008	8/13	1445	GW	CN	X	pH>10	
-03	TB-001	—	—	—	—	X		

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do (Please specify below)

Container Type	V																							
Preservative	B																							

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/13/25 1515		
	8-15-25		8/13 1855
	8/13	Anthony Green AUG 13 2025 2357	
Anthony Green			

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

SH50 Sample

FORM NO: 01-01 (rev. 25-FEB-25)

Sample Delivery Group Summary

Pace Job Number : L2550995

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 GW 2025

Received : 13-AUG-2025
Reviewer : Jordan Riley

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.2	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis? Following containers were received with headspace: -03B	**NO**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2551357
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025 GW
Project Number:	21010210
Report Date:	08/28/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551357
Report Date: 08/28/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2551357-01	CO37-PZM003	WATER	COA	08/14/25 10:40	08/14/25
L2551357-02	CO38-PZM043	WATER	COA	08/14/25 11:55	08/14/25
L2551357-03	CO38-PZM006	WATER	COA	08/14/25 13:00	08/14/25
L2551357-04	TB-001	WATER	COA	08/14/25 00:00	08/14/25

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551357
Project Number:	21010210	**Report Date:**	08/28/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551357
Project Number:	21010210	**Report Date:**	08/28/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 08/28/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

SAMPLE RESULTS

Lab ID: L2551357-01 D
Client ID: CO37-PZM003
Sample Location: COA

Date Collected: 08/14/25 10:40
Date Received: 08/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 12:52
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4300		ug/l	25	8.0	50
Toluene	1600		ug/l	38	10.	50
Ethylbenzene	38		ug/l	25	8.4	50
p/m-Xylene	310		ug/l	50	17.	50
o-Xylene	150		ug/l	50	20.	50
Xylenes, Total	460		ug/l	50	17.	50
Naphthalene	210		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

SAMPLE RESULTS

Lab ID: L2551357-02
Client ID: CO38-PZM043
Sample Location: COA
Date Collected: 08/14/25 11:55
Date Received: 08/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 13:40
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	18		ug/l	0.50	0.16	1
Toluene	17		ug/l	0.75	0.20	1
Ethylbenzene	0.65		ug/l	0.50	0.17	1
p/m-Xylene	6.3		ug/l	1.0	0.33	1
o-Xylene	2.3		ug/l	1.0	0.39	1
Xylenes, Total	8.6		ug/l	1.0	0.33	1
Naphthalene	4.3		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

SAMPLE RESULTS

Lab ID: L2551357-03 D
Client ID: CO38-PZM006
Sample Location: COA

Date Collected: 08/14/25 13:00
Date Received: 08/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 13:16
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2300		ug/l	12	4.0	25
Toluene	310		ug/l	19	5.1	25
Ethylbenzene	25		ug/l	12	4.2	25
p/m-Xylene	120		ug/l	25	8.3	25
o-Xylene	49		ug/l	25	9.8	25
Xylenes, Total	170		ug/l	25	8.3	25
Naphthalene	510		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

SAMPLE RESULTS

Lab ID: L2551357-04
Client ID: TB-001
Sample Location: COA
Date Collected: 08/14/25 00:00
Date Received: 08/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 12:28
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/26/25 09:16
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2107609-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551357
Report Date: 08/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2107609-3 WG2107609-4								
Benzene	98		97		70-130	1		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		98		70-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Naphthalene	95		96		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		104		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	97		98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551357
Report Date: 08/28/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2551357-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551357-04D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551357
Project Number:	21010210	**Report Date:**	08/28/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551357
Project Number:	21010210	**Report Date:**	08/28/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551357
Project Number:	21010210	**Report Date:**	08/28/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551357
Report Date: 08/28/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 08/15/25 | Pace Job #: L2551357

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarn>@armgroup.net
RGuille@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q3 2025 GW
Project Location: COA
Project #: 21010210
Project Manager: Kaige Guille
Pace Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING	TOTAL # BOTTLES
51357-01	C037-PZM003	8/14	1040	GW	CN	X	pH>10	
-02	C038-PZM043	8/14	1155	GW	CN	X		
-03	C038-PZM006	8/14	1300	GW	CN	X	pH>10	
-04	TB-001	—	—	—	—	X		

SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below); Sample Specific Comments

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/14/25 1500		8.14.25 1500
	1838		8.14 1836
Anthony Green	8.14	Anthony Green AUG 14 2025 9327	

Anthony Green Alberto Liz 4:25 8.15-25 Alberto Liz 2:10 8.15-25

8/15 8240 04/25-(D)

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 25-FEB-25)

Sample Delivery Group Summary

Pace Job Number : L2551357

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025 GW

Received : 14-AUG-2025
Reviewer : Jordan Riley

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.5	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2550596
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025 GW
Project Number:	21010210
Report Date:	08/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2550596
Report Date: 08/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2550596-01	CO93-PZM	WATER	COA	08/12/25 10:25	08/12/25
L2550596-02	CO190-MWS	WATER	COA	08/12/25 11:15	08/12/25
L2550596-03	CO27-PZM012	WATER	COA	08/12/25 12:30	08/12/25
L2550596-04	CO27-PZM046	WATER	COA	08/12/25 13:00	08/12/25
L2550596-05	TB-001	WATER	COA	08/12/25 00:00	08/12/25

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2550596
Project Number:	21010210	**Report Date:**	08/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2550596
Project Number:	21010210	**Report Date:**	08/26/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 08/26/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-01 D
Client ID: CO93-PZM
Sample Location: COA

Date Collected: 08/12/25 10:25
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/23/25 22:40
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	160000		ug/l	500	160	1000
Toluene	50000		ug/l	750	200	1000
Ethylbenzene	910		ug/l	500	170	1000
p/m-Xylene	7600		ug/l	1000	330	1000
o-Xylene	2400		ug/l	1000	390	1000
Xylenes, Total	10000		ug/l	1000	330	1000
Naphthalene	1200		ug/l	1000	220	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-02 D2
Client ID: CO190-MWS
Sample Location: COA
Date Collected: 08/12/25 11:15
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/26/25 10:01
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	670000		ug/l	5000	1600	10000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-02 D
Client ID: CO190-MWS
Sample Location: COA
Date Collected: 08/12/25 11:15
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/23/25 23:53
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	640000	E	ug/l	1000	320	2000
Toluene	27000		ug/l	1500	410	2000
Ethylbenzene	ND		ug/l	1000	330	2000
p/m-Xylene	ND		ug/l	2000	660	2000
o-Xylene	ND		ug/l	2000	780	2000
Xylenes, Total	ND		ug/l	2000	660	2000
Naphthalene	ND		ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-03 D
Client ID: CO27-PZM012
Sample Location: COA

Date Collected: 08/12/25 12:30
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/23/25 23:04
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	15000		ug/l	100	32.	200
Toluene	4400		ug/l	150	41.	200
Ethylbenzene	120		ug/l	100	33.	200
p/m-Xylene	640		ug/l	200	66.	200
o-Xylene	280		ug/l	200	78.	200
Xylenes, Total	920		ug/l	200	66.	200
Naphthalene	700		ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-04 D
Client ID: CO27-PZM046
Sample Location: COA
Date Collected: 08/12/25 13:00
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/23/25 23:29
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12000		ug/l	50	16.	100
Toluene	3800		ug/l	75	20.	100
Ethylbenzene	100		ug/l	50	17.	100
p/m-Xylene	610		ug/l	100	33.	100
o-Xylene	230		ug/l	100	39.	100
Xylenes, Total	840		ug/l	100	33.	100
Naphthalene	620		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

SAMPLE RESULTS

Lab ID: L2550596-05
Client ID: TB-001
Sample Location: COA
Date Collected: 08/12/25 00:00
Date Received: 08/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/23/25 22:15
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	116		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/23/25 15:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG2107254-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	110		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/26/25 08:41
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2107396-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2550596
Report Date: 08/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG2107254-3 WG2107254-4								
Benzene	100		91		70-130	9		20
Toluene	99		94		70-130	5		20
Ethylbenzene	100		95		70-130	5		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	105		95		70-130	10		20
Naphthalene	89		90		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		100		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	91		96		70-130
Dibromofluoromethane	104		101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2550596
Report Date: 08/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2107396-3 WG2107396-4								
Benzene	100		110		70-130	10		20
Toluene	94		96		70-130	2		20
Ethylbenzene	89		91		70-130	2		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		95		70-130	5		20
Naphthalene	**58**	Q	**57**	Q	70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		116		70-130
Toluene-d8	99		98		70-130
4-Bromofluorobenzene	91		90		70-130
Dibromofluoromethane	108		107		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2550596
Report Date: 08/26/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2550596-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550596-05D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2550596
Project Number:	21010210	**Report Date:**	08/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2550596
Project Number:	21010210	**Report Date:**	08/26/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2550596
Project Number:	21010210	**Report Date:**	08/26/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2550596
Report Date: 08/26/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Pace ANALYTICAL SERVICES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 08/13/25 | Pace Job #: L2550596

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: KGville@armgroup.net
JBarna@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q3 2025 GW
Project Location: COA
Project #: 21010210
Project Manager: Kaye Gville
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 15-days Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH >10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX & NAPH	Sample Specific Comments	TOTAL # BOTTLES
50596-01	C093-PZM	8/12	1025	GW	CN	X	pH >10	3
-02	C090-MWS	8/12	1115	GW	CN	X		3
-03	C027-PZM012	8/12	1230	GW	CN	X	pH >10	3
-04	C027-PZM046	8/12	1300	GW	CN	X	pH >10	3
-05	TB-001	—	—	—	—	X		4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/12/25 1530	J Duncan PKS	8/12/25 1530
J Duncan PKS	8/12/25 1830		
Anthony Green		Anthony Green AUG 12 2025 2355	
Anthony Green	Alberto Liz 4:45	8/13/25 Alberto Liz	7:40 8/13/25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

8/13 0445

Sample Delivery Group Summary

Pace Job Number : L2550596

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025 GW

Received : 12-AUG-2025
Reviewer : Jordan Riley

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.5	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis? Following containers were received with headspace: -05B	**NO**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2555292
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(410) 709-1286
Project Name:	GD01+GD02 ADD'L
Project Number:	Not Specified
Report Date:	09/19/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified

Lab Number: L2555292
Report Date: 09/19/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2555292-01	GD01-MWI	WATER	COA	09/03/25 14:25	09/03/25
L2555292-02	GD02-MWI	WATER	COA	09/03/25 15:10	09/03/25
L2555292-03	TB-001	WATER	COA	09/03/25 00:00	09/03/25

Project Name:	GD01+GD02 ADD'L	**Lab Number:**	L2555292
Project Number:	Not Specified	**Report Date:**	09/19/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	GD01+GD02 ADD'L	**Lab Number:**	L2555292
Project Number:	Not Specified	**Report Date:**	09/19/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analyses of Total Cyanide and Amenable Cyanide were subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 09/19/25

ORGANICS

VOLATILES

Project Name: GD01+GD02 ADD'L
Lab Number: L2555292
Project Number: Not Specified
Report Date: 09/19/25

SAMPLE RESULTS

Lab ID: L2555292-01
Client ID: GD01-MWI
Sample Location: COA
Date Collected: 09/03/25 14:25
Date Received: 09/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/13/25 02:33
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	120		ug/l	0.50	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Project Name: GD01+GD02 ADD'L
Lab Number: L2555292
Project Number: Not Specified
Report Date: 09/19/25

SAMPLE RESULTS

Lab ID: L2555292-02 D
Client ID: GD02-MWI
Sample Location: COA
Date Collected: 09/03/25 15:10
Date Received: 09/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/13/25 02:07
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	170000		ug/l	500	160	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified
Lab Number: L2555292
Report Date: 09/19/25

SAMPLE RESULTS

Lab ID: L2555292-03
Client ID: TB-001
Sample Location: COA
Date Collected: 09/03/25 00:00
Date Received: 09/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/13/25 01:40
Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified
Lab Number: L2555292
Report Date: 09/19/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/12/25 23:01
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2114692-5					
Benzene	ND		ug/l	0.50	0.16

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified

Lab Number: L2555292
Report Date: 09/19/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2114692-3 WG2114692-4								
Benzene	100		98		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	126		123		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	100		98		70-130
Dibromofluoromethane	104		103		70-130

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified

Lab Number: L2555292
Report Date: 09/19/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2555292-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-01D	Plastic 250ml NaOH preserved	NA	>12	>12		Y	Absent		SUB-ACN(14)
L2555292-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-02D	Plastic 250ml NaOH preserved	NA	>12	>12		Y	Absent		SUB-ACN(14)
L2555292-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)
L2555292-03D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260-BTEX(14)

*Values in parentheses indicate holding time in days

Project Name:	GD01+GD02 ADD'L	**Lab Number:**	L2555292
Project Number:	Not Specified	**Report Date:**	09/19/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	GD01+GD02 ADD'L	**Lab Number:**	L2555292
Project Number:	Not Specified	**Report Date:**	09/19/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	GD01+GD02 ADD'L	**Lab Number:**	L2555292
Project Number:	Not Specified	**Report Date:**	09/19/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: GD01+GD02 ADD'L
Project Number: Not Specified
Lab Number: L2555292
Report Date: 09/19/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 9/4/25

ALPHA Job #: L2555292

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGulle@armgroup.net

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: GD01 & GD02 Add'l
Project Location: COA
Project #:
Project Manager: Kaye Gulle
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Benzene	Amenable Cyanide	Sample Specific Comments	Total # Bottles
55292-01	GD01-MWI	9/3	1425	GW	CN	X	X		
02	GD02-MWI	9/3	1510	GW	CN	X	X		
03	TB-001	—	—	—	—	X			

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	P
Preservative	B	E

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	9/3/25 1550	RMB	9-3 1550
RMB	9-3 1835	Anthony Green	9/3/1830
	9/3	Anthony Green	SEP 03 2025 0225
Anthony Green	9/4/25 0415		9/4/25 0415

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

09/04/25 04115

FORM NO: 01-01 (rev. 14-OCT-07)

Sample Delivery Group Summary

Pace Job Number : L2555292

Account Name : Tradepoint Atlantic
Project Number :
Project Name : GD01+GD02 ADD'L

Received : 03-SEP-2025
Reviewer : Monique Irving

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.3	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

September 12, 2025

Reports
Pace West
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2555292
Pace Project No.: 70377831

Dear Reports:

Enclosed are the analytical results for sample(s) received by the laboratory on September 05, 2025. 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 - Newburgh

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Cusack

Renee Cusack
renee.cusack@pacelabs.com
(845)562-0890
Project Manager

Enclosures

Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

CERTIFICATIONS

Project: L2555292
Pace Project No.: 70377831

Pace Analytical Services, LLC- Newburgh, NY
315 Fullerton Avenue, Newburgh, NY 12550
New York Certification #: 10142 Primary Accrediting Body
New Jersey Certification #: NY015
Connecticut Certification #: PH-0823

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

ANALYTICAL RESULTS

Project: L2555292
Pace Project No.: 70377831

Sample: GD01-MWI **Lab ID: 70377831001** Collected: 09/03/25 14:25 Received: 09/05/25 09:41 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
NB 4500CNE Cyanide, Total	Analytical Method: 4500-CN-E Preparation Method: 4500-CN-C Pace Analytical Services - Newburgh							
Cyanide	**0.086**	mg/L	0.0050	1	09/10/25 10:30	09/11/25 17:37	57-12-5	
NB 4500CNG Cyanide, Amenable	Analytical Method: SM22 4500-CN-E Preparation Method: SM22 4500-CN-G Pace Analytical Services - Newburgh							
Amenable Cyanide	**0.029**	mg/L	0.0050	1	09/10/25 10:31	09/11/25 17:54	57-12-5	

Sample: GD02-MWI **Lab ID: 70377831002** Collected: 09/03/25 15:10 Received: 09/05/25 09:41 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
NB 4500CNE Cyanide, Total	Analytical Method: 4500-CN-E Preparation Method: 4500-CN-C Pace Analytical Services - Newburgh							
Cyanide	**0.056**	mg/L	0.0050	1	09/10/25 10:30	09/11/25 17:39	57-12-5	
NB 4500CNG Cyanide, Amenable	Analytical Method: SM22 4500-CN-E Preparation Method: SM22 4500-CN-G Pace Analytical Services - Newburgh							
Amenable Cyanide	**0.056**	mg/L	0.0050	1	09/10/25 10:31	09/11/25 17:56	57-12-5	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

QUALITY CONTROL DATA

Project: L2555292
Pace Project No.: 70377831

QC Batch: 418295
QC Batch Method: 4500-CN-C
Analysis Method: 4500-CN-E
Analysis Description: NB 4500CNE Cyanide, Total
Laboratory: Pace Analytical Services - Newburgh
Associated Lab Samples: 70377831001, 70377831002

METHOD BLANK: 2222853 Matrix: Water
Associated Lab Samples: 70377831001, 70377831002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0050	0.0050	09/11/25 17:12	

LABORATORY CONTROL SAMPLE: 2222854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.11	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2222855 2222856

Parameter	Units	70377515002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Cyanide	mg/L	<0.0050	0.1	0.1	<0.0050	<0.0050	1	0	90-110		M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

QUALIFIERS

Project: L2555292
Pace Project No.: 70377831

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

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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Pace Analytical Services, LLC
315 Fullerton Avenue
Newburgh, NY 12550
(845)562-0890

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2555292
Pace Project No.: 70377831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70377831001	**GD01-MWI**	4500-CN-C	418295	4500-CN-E	418308
70377831002	**GD02-MWI**	4500-CN-C	418295	4500-CN-E	418308
70377831001	**GD01-MWI**	SM22 4500-CN-G	418294	SM22 4500-CN-E	418322
70377831002	**GD02-MWI**	SM22 4500-CN-G	418294	SM22 4500-CN-E	418322

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Serial_No:09192510:35

Subcontract Chain of Custody

Pace Newburgh
315 Fullerton Avenue
Newburgh, NY 12550

Pace Job Number
L2555292

Page 1

Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 201.812.2633
Email: Benjamin.Rao@pacelabs.com

Project Information

Project Location: MD
Project Manager: Ben Rao

Turnaround & Deliverables Information

Due Date:
Deliverables: Full Data Deliverable Package

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2555292 Report to include Method and/or Regulatory required batch QC

Additional Comments:

Lab ID	Pace ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
	L2555292-01	GD01-MWI	09-03-25 14:25	WATER	Amenable Cyanide SM 4500			1
	L2555292-02	GD02-MWI	09-03-25 15:10	WATER	Amenable Cyanide SM 4500			1

WO# : 70377831

70377831

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/4/25 1827		9/4 1827
	eCedeno	9.5.25 0941	eCedeno	9.5.25 0930
			MRR 0.1°C ICE	9/5 0941

Form No: AL_subcoc

*Please see attached for updated COC - PR

Serial_No:09192510:35

Pace

Subcontract Chain of Custody

Pace Newburgh
315 Fullerton Avenue
Newburgh, NY 12550

Pace Job Number
L2555292

Page 1

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Pace Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Report To:west.subreports@pacelabs.com Bill To:invoices@pacelabs.coupahost.com Phone: 201.812.2633 Email: Benjamin.Rao@pacelabs.com	Project Location: MD Project Manager: Ben Rao **Turnaround & Deliverables Information** Due Date: 09/17/25 Deliverables: Full Data Deliverable Package	State/Federal Program: Regulatory Criteria: Report to MDL

Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2555292 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need 5 ppb RLs.

Lab ID	Pace ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
	L2555292-01	GD01-MWI	09-03-25 14:25	WATER	Amenable Cyanide SM 4500	Run total CN as needed for amenable		1
	L2555292-02	GD02-MWI	09-03-25 15:10	WATER	Amenable Cyanide SM 4500	Run total CN as needed for amenable		1

WO#: 70377831
PM: RC1 Due Date: 09/19/25
CLIENT: NB-ALPHA

	Relinquished By:	Date/Time:	Received By:	Date/Time:
Form No: AL_subcoc				

Updated COC-PR

DC#_Title: ENV-FRM-NEWB-0002 Sample Condition Upon Receipt Form
Effective Date: 7/21/2022

Sample Condition Upon Receipt Form (SCUR)

WO#: 70377831
PM: RC1 Due Date: 09/19/25
CLIENT: NB-ALPHA

Project #
Client:

Date and Initials of person:
Examining contents:
Label:
Deliver to location:
pH:

Thermometer Used: IRG4 Date: 9/5 Time: 0941 Initials:

State of Origin: ~~NY~~ MD

Cooler #1 Temp.°C 0.1 (Visual) 0.1@0°C,-0.1@20°C (Correction Factor) (Actual) ☒ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ Other

Tracking #

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No Ice: (Wet) Blue Melted None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Samples were collected by Pace employee ☐ Yes ☐ No ☐ N/A

		Comments:
Chain of Custody Present	☒Yes ☐ No ☐ N/A	
Chain of Custody Filled Out	☒Yes ☐ No ☐ N/A	
Relinquished Signature on COC	☒Yes ☐ No ☐ N/A	
Sampler Name and Signature on COC	☒Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☒Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☐Yes ☐ No ☐ N/A	
Sufficient Volume	☒Yes ☐ No ☐ N/A	
Correct Containers Used	☒Yes ☐ No ☐ N/A	
Containers Intact	☒Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☒Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☒Yes ☐ No ☐ N/A	Preservation Information: Preservative:
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒Yes ☐ No ☐ N/A	Lot #/Trace #: Date: Time:
Exceptions: Vials, Microbiology, O&G, Metals		Initials:
Headspace in VOA Vials? (>6mm):	☐Yes ☐ No ☒N/A	
Trip Blank Present:	☐Yes ☐ No ☒N/A	

Additional Login Comments:

Client notification/ Resolution
Person Contacted: Date/Time:
Comments/Resolution:

ANALYTICAL REPORT

Lab Number:	L2552648
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025
Project Number:	21010210
Report Date:	09/04/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q3 2025
Project Number: 21010210

Lab Number: L2552648
Report Date: 09/04/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2552648-01	CO182-MWI	WATER	COA	08/20/25 11:25	08/20/25
L2552648-02	CO30-PZM015	WATER	COA	08/20/25 12:30	08/20/25
L2552648-03	CO195-MWS	WATER	COA	08/20/25 13:20	08/20/25
L2552648-04	CO23-PZM008	WATER	COA	08/20/25 14:10	08/20/25
L2552648-05	TB-001	WATER	COA	08/20/25 00:00	08/20/25

Project Name:	COA Q3 2025	**Lab Number:**	L2552648
Project Number:	21010210	**Report Date:**	09/04/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025	**Lab Number:**	L2552648
Project Number:	21010210	**Report Date:**	09/04/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2552648-04D2: Differences were noted between the results of the analyses which have been attributed to vial discrepancies. Further re-analysis could not be performed due to the existing vials being compromised.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/04/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-01 D
Client ID: CO182-MWI
Sample Location: COA

Date Collected: 08/20/25 11:25
Date Received: 08/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/31/25 15:10
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	250000		ug/l	1000	320	2000
Toluene	28000		ug/l	1500	410	2000
Ethylbenzene	710	J	ug/l	1000	330	2000
p/m-Xylene	4300		ug/l	2000	660	2000
o-Xylene	1700	J	ug/l	2000	780	2000
Xylenes, Total	6000	J	ug/l	2000	660	2000
Naphthalene	700	J	ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	91		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-02 D
Client ID: CO30-PZM015
Sample Location: COA

Date Collected: 08/20/25 12:30
Date Received: 08/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/31/25 15:35
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	30000		ug/l	120	40.	250
Toluene	2800		ug/l	190	51.	250
Ethylbenzene	75	J	ug/l	120	42.	250
p/m-Xylene	670		ug/l	250	83.	250
o-Xylene	280		ug/l	250	98.	250
Xylenes, Total	950		ug/l	250	83.	250
Naphthalene	2000		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	92		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-03 D
Client ID: CO195-MWS
Sample Location: COA

Date Collected: 08/20/25 13:20
Date Received: 08/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/31/25 15:59
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	20000		ug/l	120	40.	250
Toluene	1800		ug/l	190	51.	250
Ethylbenzene	43	J	ug/l	120	42.	250
p/m-Xylene	350		ug/l	250	83.	250
o-Xylene	130	J	ug/l	250	98.	250
Xylenes, Total	480	J	ug/l	250	83.	250
Naphthalene	1200		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	93		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-04 D2 Date Collected: 08/20/25 14:10
Client ID: CO23-PZM008 Date Received: 08/20/25
Sample Location: COA Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/02/25 11:03
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	2400		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-04 D
Client ID: CO23-PZM008
Sample Location: COA

Date Collected: 08/20/25 14:10
Date Received: 08/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/31/25 16:23
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	890		ug/l	10	3.2	20
Toluene	370		ug/l	15	4.1	20
Ethylbenzene	26		ug/l	10	3.3	20
p/m-Xylene	310		ug/l	20	6.6	20
o-Xylene	110		ug/l	20	7.8	20
Xylenes, Total	420		ug/l	20	6.6	20
Naphthalene	4200	E	ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q3 2025
Project Number: 21010210
Lab Number: L2552648
Report Date: 09/04/25

SAMPLE RESULTS

Lab ID: L2552648-05
Client ID: TB-001
Sample Location: COA
Date Collected: 08/20/25 00:00
Date Received: 08/20/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/31/25 12:21
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	101		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/31/25 11:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG2110208-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q3 2025 **Lab Number:** L2552648

Project Number: 21010210 **Report Date:** 09/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/02/25 09:21
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG2110334-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025
Project Number: 21010210

Lab Number: L2552648
Report Date: 09/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG2110208-3 WG2110208-4								
Benzene	94		92		70-130	2		20
Toluene	100		97		70-130	3		20
Ethylbenzene	99		100		70-130	1		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	95		100		70-130	5		20
Naphthalene	93		98		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	115		109		70-130
Toluene-d8	105		102		70-130
4-Bromofluorobenzene	110		110		70-130
Dibromofluoromethane	92		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025
Project Number: 21010210

Lab Number: L2552648
Report Date: 09/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG2110334-3 WG2110334-4								
Benzene	100		99		70-130	1		20
Toluene	99		96		70-130	3		20
Ethylbenzene	100		99		70-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
Naphthalene	88		82		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		100		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	101		96		70-130
Dibromofluoromethane	99		99		70-130

Project Name: COA Q3 2025
Project Number: 21010210

Lab Number: L2552648
Report Date: 09/04/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2552648-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2552648-05D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 2025	**Lab Number:**	L2552648
Project Number:	21010210	**Report Date:**	09/04/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025	**Lab Number:**	L2552648
Project Number:	21010210	**Report Date:**	09/04/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025	**Lab Number:**	L2552648
Project Number:	21010210	**Report Date:**	09/04/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025
Project Number: 21010210
Lab Number: L2552648
Report Date: 09/04/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 8/21/25

ALPHA Job #: L2552648

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBorna@armgroup.net
KGuille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q3 2025
Project Location: COA
Project #: 21010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments
L2552648 01	C0182-MWI	8/20	1125	GW	CN	X	
02	C030-PZM015	8/20	1230	GW	CN	X	pH>10
03	C0195-MWS	8/20	1320	GW	CN	X	pH>10
04	C023-PZM008	8/20	1410	GW	CN	X	pH>10
05	TB-001	—	—	—	—	X	

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

TOTAL # BOTTLES

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/20/25 1545	RNB	8-20 1830
RNB	8.20		8-20 1845
Anthony Green	820	Anthony Green AUG 20 2025 22:55	
Alberto Liz	8-21-25 0515	Alberto Liz	8-21-25 0300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

12112505 15

Sample Delivery Group Summary

Pace Job Number : L2552648

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025

Received : 20-AUG-2025
Reviewer : Julie Convery

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.7	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2551916
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025 GW
Project Number:	21010210
Report Date:	08/31/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551916
Report Date: 08/31/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2551916-01	CO39-PZM042	WATER	COA	08/18/25 10:15	08/18/25
L2551916-02	CO39-PZM007	WATER	COA	08/18/25 10:40	08/18/25
L2551916-03	CO40-PZM008	WATER	COA	08/18/25 12:00	08/18/25
L2551916-04	CO41-PZM036	WATER	COA	08/18/25 13:10	08/18/25
L2551916-05	CO41-PZM001	WATER	COA	08/18/25 13:55	08/18/25
L2551916-06	TB-001	WATER	COA	08/18/25 00:00	08/18/25

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551916
Project Number:	21010210	**Report Date:**	08/31/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551916
Project Number:	21010210	**Report Date:**	08/31/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2551916-04C: The container for Volatile Organics was received broken; however, there was adequate sample remaining to perform the requested analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly O'Neill

Title: Technical Director/Representative Date: 08/31/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 GW
Lab Number: L2551916
Project Number: 21010210
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-01 D
Client ID: CO39-PZM042
Sample Location: COA

Date Collected: 08/18/25 10:15
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 15:29
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	13000		ug/l	50	16.	100
Toluene	2900		ug/l	75	20.	100
Ethylbenzene	130		ug/l	50	17.	100
p/m-Xylene	740		ug/l	100	33.	100
o-Xylene	260		ug/l	100	39.	100
Xylenes, Total	1000		ug/l	100	33.	100
Naphthalene	560		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551916
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-02 D
Client ID: CO39-PZM007
Sample Location: COA

Date Collected: 08/18/25 10:40
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 15:53
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	460		ug/l	2.0	0.64	4
Toluene	62		ug/l	3.0	0.81	4
Ethylbenzene	2.6		ug/l	2.0	0.67	4
p/m-Xylene	14		ug/l	4.0	1.3	4
o-Xylene	4.6		ug/l	4.0	1.6	4
Xylenes, Total	19		ug/l	4.0	1.3	4
Naphthalene	44		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551916
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-03 D
Client ID: CO40-PZM008
Sample Location: COA
Date Collected: 08/18/25 12:00
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 16:18
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	7600		ug/l	50	16.	100
Toluene	1700		ug/l	75	20.	100
Ethylbenzene	66		ug/l	50	17.	100
p/m-Xylene	280		ug/l	100	33.	100
o-Xylene	120		ug/l	100	39.	100
Xylenes, Total	400		ug/l	100	33.	100
Naphthalene	1100		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551916
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-04 D
Client ID: CO41-PZM036
Sample Location: COA
Date Collected: 08/18/25 13:10
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 16:42
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	270000		ug/l	1000	320	2000
Toluene	84000		ug/l	1500	410	2000
Ethylbenzene	730	J	ug/l	1000	330	2000
p/m-Xylene	11000		ug/l	2000	660	2000
o-Xylene	3300		ug/l	2000	780	2000
Xylenes, Total	14000		ug/l	2000	660	2000
Naphthalene	580	J	ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551916
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-05 D
Client ID: CO41-PZM001
Sample Location: COA
Date Collected: 08/18/25 13:55
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 17:06
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2000		ug/l	10	3.2	20
Toluene	900		ug/l	15	4.1	20
Ethylbenzene	21		ug/l	10	3.3	20
p/m-Xylene	240		ug/l	20	6.6	20
o-Xylene	60		ug/l	20	7.8	20
Xylenes, Total	300		ug/l	20	6.6	20
Naphthalene	18	J	ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2551916
Report Date: 08/31/25

SAMPLE RESULTS

Lab ID: L2551916-06
Client ID: TB-001
Sample Location: COA
Date Collected: 08/18/25 00:00
Date Received: 08/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/28/25 15:04
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/28/25 08:53
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2108569-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551916
Report Date: 08/31/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2108569-3 WG2108569-4								
Benzene	100		90		70-130	11		20
Toluene	100		93		70-130	7		20
Ethylbenzene	110		96		70-130	14		20
p/m-Xylene	115		100		70-130	14		20
o-Xylene	115		100		70-130	14		20
Naphthalene	120		110		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		96		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	101		99		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2551916
Report Date: 08/31/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2551916-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-04C	Vial HCl preserved	NA	NA			Y	Absent		ARCHIVE()
L2551916-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551916-06D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551916
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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2551916
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Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025 GW
Project Number: 21010210
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REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 8/19/25

L2551916
TRADEPOINT

Pace ANALYTICAL SERVICES
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarn@armgroup.net
KGuille@armgroup.net
☐ These samples have been previously analyzed by Pace

Project Information

Project Name: COA Q3 2025 GW
Project Location: COA
Project #: 2100210
Project Manager: Kaige Guille
Pace Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH>10

Pace Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	SAMPLE HANDLING: Filtration (☐ Done ☐ Not needed ☐ Lab to do) Preservation (☐ Lab to do) (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
519/6-01	CO39-PZM042	8/18	1015	GW	CN	X		pH>10	
-02	CO39-PZM007	8/18	1040	GW	CN	X		pH>10	
-03	CO40-PZM008	8/18	1200	GW	CN	X		pH>10	
-04	CO41-PZM036	8/18	1310	GW	CN	X		pH>10	
-05	CO41-PZM001	8/18	1355	GW	CN	X		—	
-06	TB-001	—	—	—	—	X			

Container Type	✓
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/18/25 1500	D. Burton PACE	8/18/25 1500
D. Burton PACE	8/18/25	Anthony Green	AUG 18 2025 2300
Anthony Green		Alberto Liz	8-19-25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Pace's Terms and Conditions. See reverse side.

Sample Delivery Group Summary

Pace Job Number : L2551916

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025 GW

Received : 18-AUG-2025
Reviewer : Geoffry Grace

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.0	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies? L2551916-04C (ARCHIVE) was received in broken container.	**YES**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2553301
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025 GW
Project Number:	21010210
Report Date:	09/08/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2553301-01	CO206R-MWS	WATER	COA	08/21/25 10:05	08/22/25
L2553301-02	CO25-PZM008	WATER	COA	08/21/25 11:05	08/22/25
L2553301-03	CO26-PZM007	WATER	COA	08/21/25 11:50	08/22/25
L2553301-04	CO55-PZM000	WATER	COA	08/21/25 12:30	08/22/25
L2553301-05	CO56-PZP001	WATER	COA	08/21/25 13:35	08/22/25
L2553301-06	CO57-PZP002	WATER	COA	08/21/25 14:25	08/22/25
L2553301-07	TB-001	WATER	COA	08/21/25 00:00	08/22/25

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553301
Project Number:	21010210	**Report Date:**	09/08/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553301
Project Number:	21010210	**Report Date:**	09/08/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2553301-04: One of the container(s) for Volatile Organics was received empty; however, there was adequate sample remaining to perform the requested analysis.

Volatile Organics

L2553301-04D: The sample was analyzed with the method required holding time exceeded.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/08/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-01 D
Client ID: CO206R-MWS
Sample Location: COA
Date Collected: 08/21/25 10:05
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 16:34
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	690		ug/l	12	4.0	25
Toluene	430		ug/l	19	5.1	25
Ethylbenzene	14		ug/l	12	4.2	25
p/m-Xylene	240		ug/l	25	8.3	25
o-Xylene	90		ug/l	25	9.8	25
Xylenes, Total	330		ug/l	25	8.3	25
Naphthalene	4100		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-02 D
Client ID: CO25-PZM008
Sample Location: COA

Date Collected: 08/21/25 11:05
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 17:00
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1300		ug/l	50	16.	100
Toluene	1100		ug/l	75	20.	100
Ethylbenzene	32	J	ug/l	50	17.	100
p/m-Xylene	640		ug/l	100	33.	100
o-Xylene	220		ug/l	100	39.	100
Xylenes, Total	860		ug/l	100	33.	100
Naphthalene	16000		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-03 D
Client ID: CO26-PZM007
Sample Location: COA

Date Collected: 08/21/25 11:50
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 17:27
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	86		ug/l	2.5	0.80	5
Toluene	48		ug/l	3.8	1.0	5
Ethylbenzene	3.0		ug/l	2.5	0.84	5
p/m-Xylene	48		ug/l	5.0	1.7	5
o-Xylene	20		ug/l	5.0	2.0	5
Xylenes, Total	68		ug/l	5.0	1.7	5
Naphthalene	870		ug/l	5.0	1.1	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-04 D
Client ID: CO55-PZM000
Sample Location: COA

Date Collected: 08/21/25 12:30
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/05/25 10:37
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	6.1		ug/l	1.0	0.32	2
Toluene	8.7		ug/l	1.5	0.41	2
Ethylbenzene	0.75	J	ug/l	1.0	0.33	2
p/m-Xylene	9.9		ug/l	2.0	0.66	2
o-Xylene	4.0		ug/l	2.0	0.78	2
Xylenes, Total	14		ug/l	2.0	0.66	2
Naphthalene	220		ug/l	2.0	0.43	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	110		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-05 D
Client ID: CO56-PZP001
Sample Location: COA

Date Collected: 08/21/25 13:35
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 17:53
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	140		ug/l	10	3.2	20
Toluene	24		ug/l	15	4.1	20
Ethylbenzene	4.5	J	ug/l	10	3.3	20
p/m-Xylene	66		ug/l	20	6.6	20
o-Xylene	24		ug/l	20	7.8	20
Xylenes, Total	90		ug/l	20	6.6	20
Naphthalene	1300		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-06
Client ID: CO57-PZP002
Sample Location: COA

Date Collected: 08/21/25 14:25
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 18:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2.1		ug/l	0.50	0.16	1
Toluene	3.7		ug/l	0.75	0.20	1
Ethylbenzene	0.27	J	ug/l	0.50	0.17	1
p/m-Xylene	5.6		ug/l	1.0	0.33	1
o-Xylene	1.7		ug/l	1.0	0.39	1
Xylenes, Total	7.3		ug/l	1.0	0.33	1
Naphthalene	150		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553301-07
Client ID: TB-001
Sample Location: COA
Date Collected: 08/21/25 00:00
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/06/25 15:46
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/03/25 12:09
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,05-06 Batch: WG2111249-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/06/25 14:07
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG2111832-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/05/25 09:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG2111849-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab	Associated sample(s):	01-03,05-06	Batch:	WG2111249-3	WG2111249-4			
Benzene	92		95		70-130	3		20
Toluene	92		91		70-130	1		20
Ethylbenzene	93		91		70-130	2		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
Naphthalene	91		87		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		100		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	99		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG2111832-3 WG2111832-4								
Benzene	88		95		70-130	8		20
Toluene	93		100		70-130	7		20
Ethylbenzene	93		100		70-130	7		20
p/m-Xylene	95		110		70-130	15		20
o-Xylene	95		105		70-130	10		20
Naphthalene	91		100		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		110		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	103		105		70-130
Dibromofluoromethane	100		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG2111849-3 WG2111849-4								
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	110		105		70-130	5		20
Naphthalene	76		72		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		98		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	96		100		70-130
Dibromofluoromethane	102		101		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2553301-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-04B	Vial HCl preserved	NA	NA			Y	Absent		ARCHIVE()
L2553301-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-07A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-07B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-07C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553301-07D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553301
Report Date: 09/08/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

Container Comments

L2553301-04B Container Received Empty.

*Values in parentheses indicate holding time in days

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553301
Project Number:	21010210	**Report Date:**	09/08/25

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553301
Project Number:	21010210	**Report Date:**	09/08/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553301
Project Number:	21010210	**Report Date:**	09/08/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553301
Report Date: 09/08/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Serial_No:09082516356

L2553301
TRADEPOINT

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 08/23/25

ALPHA Job #:

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarns@armgroup.net
KGville@armgroup.net

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q3 2025 GW
Project Location: COA
Project #: 21010210
Project Manager: Kaige Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-Day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

pH >10

ANALYSIS: BTEX + Naphthalene

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
53301-01	C0206R-MWS	8/21	1005	GW	CN	X	pH>10	3
-02	C025-PZM008	8/21	1105	GW	CN	X	pH>10	3
-03	C026-PZM007	8/21	1150	GW	CN	X	pH>10	3
-04	C055-PZM000	8/21	1230	GW	CN	X	pH>10	3
-05	C056-PZP001	8/21	1335	GW	CN	X	pH>10	3
-06	C057-PZP002	8/21	1425	GW	CN	X	pH>10	3
-07	TB-001	—	—	—	—	X		4

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris ARM	8/21/25 1515		8-22-25 1457
	8-22-25 1900		8-22-25 1900
Anthony Green		Anthony Green	AUG 22 2025 2330
Alberto Liz	8-23-25 0455	Alberto Liz	8-23-25 0220

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

08/23/25 0455

FORM NO: 01-01 (rev. 14-OCT-07)

Sample Delivery Group Summary

Pace Job Number : L2553301

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025 GW

Received : 22-AUG-2025
Reviewer : Jordan Riley

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.6	
B	Absent/	Ice	4.9	

Condition Information

1) All samples on COC received? **YES**

2) Extra samples received? **NO**

3) Are there any sample container discrepancies? **YES**
L2553301-04B (PA-8260) was received in inappropriate container.

4) Are there any discrepancies between COC & sample labels? **NO**

5) Are samples in appropriate containers for requested analysis? **NO**
Please refer to information noted in Question 3 above.

6) Are samples properly preserved for requested analysis? **YES**

7) Are samples within holding time for requested analysis? **YES**

8) All sampling equipment returned? **NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client? **NO**

Comments

L2553301-04B Container Received Empty.

ANALYTICAL REPORT

Lab Number:	L2553303
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q3 2025 GW
Project Number:	21010210
Report Date:	09/08/25

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Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553303
Report Date: 09/08/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2553303-01	CO58-PZM001	WATER	COA	08/22/25 10:45	08/22/25
L2553303-02	CO59-PZP002	WATER	COA	08/22/25 11:25	08/22/25
L2553303-03	CO24-PZM007	WATER	COA	08/22/25 12:35	08/22/25
L2553303-04	TB-001	WATER	COA	08/22/25 00:00	08/22/25

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553303
Project Number:	21010210	**Report Date:**	09/08/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553303
Project Number:	21010210	**Report Date:**	09/08/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/08/25

ORGANICS

VOLATILES

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553303-01 D
Client ID: CO58-PZM001
Sample Location: COA

Date Collected: 08/22/25 10:45
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 15:41
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	42		ug/l	1.2	0.40	2.5
Toluene	10		ug/l	1.9	0.51	2.5
Ethylbenzene	2.0		ug/l	1.2	0.42	2.5
p/m-Xylene	23		ug/l	2.5	0.83	2.5
o-Xylene	9.5		ug/l	2.5	0.98	2.5
Xylenes, Total	33		ug/l	2.5	0.83	2.5
Naphthalene	360		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	101		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553303-02
Client ID: CO59-PZP002
Sample Location: COA

Date Collected: 08/22/25 11:25
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 14:48
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.59		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	0.84	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.84	J	ug/l	1.0	0.33	1
Naphthalene	7.8		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553303-03 D
Client ID: CO24-PZM007
Sample Location: COA

Date Collected: 08/22/25 12:35
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/03/25 16:07
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4.8	J	ug/l	5.0	1.6	10
Toluene	2.0	J	ug/l	7.5	2.0	10
Ethylbenzene	2.0	J	ug/l	5.0	1.7	10
p/m-Xylene	ND		ug/l	10	3.3	10
o-Xylene	ND		ug/l	10	3.9	10
Xylenes, Total	ND		ug/l	10	3.3	10
Naphthalene	1200		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	101		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

SAMPLE RESULTS

Lab ID: L2553303-04
Client ID: TB-001
Sample Location: COA

Date Collected: 08/22/25 00:00
Date Received: 08/22/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/06/25 16:11
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/03/25 12:09
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2111249-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/06/25 14:07
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG2111832-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553303
Report Date: 09/08/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2111249-3 WG2111249-4								
Benzene	92		95		70-130	3		20
Toluene	92		91		70-130	1		20
Ethylbenzene	93		91		70-130	2		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
Naphthalene	91		87		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		100		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	99		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553303
Report Date: 09/08/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG2111832-3 WG2111832-4								
Benzene	88		95		70-130	8		20
Toluene	93		100		70-130	7		20
Ethylbenzene	93		100		70-130	7		20
p/m-Xylene	95		110		70-130	15		20
o-Xylene	95		105		70-130	10		20
Naphthalene	91		100		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		110		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	103		105		70-130
Dibromofluoromethane	100		98		70-130

Project Name: COA Q3 2025 GW
Project Number: 21010210

Lab Number: L2553303
Report Date: 09/08/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2553303-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553303-04D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q3 2025 GW	**Lab Number:**	L2553303
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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

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Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q3 2025 GW
Project Number: 21010210
Lab Number: L2553303
Report Date: 09/08/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 08/23/25

ALPHA Job #: L2553303

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem Blvd
Sparrows Point, MD
Phone:
Fax:
Email: JBarna@armgroup.net
KGuille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: COA Q3 2025 GW
Project Location: COA
Project #: 2/010210
Project Manager: Kaye Guille
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: (5-day) Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: BTEX + Naphthalene	Sample Specific Comments	TOTAL # BOTTLES
53303-01	CO58-PZM001	8/22	1045	GW	CN	X	pH>10	
-02	CO59-PZP002	8/22	1125	GW	CN	X	pH>10	
-03	CO24-PZM007	8/22	1235	GW	CN	X	pH>10	
-04	TB-001	—	—	—	—	X		

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
Charlotte Norris	8/22/25 1500		8-22-25 1500
	8-22-25 1900		8-22-25 1900
Anthony Green		Anthony Green	AUG 22 2025 2330
Alberto Liz	8-23-25 0455	Alberto Liz	8-23-25 0230

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

08/23/25-0455

FORM NO: 01-01 (rev. 14-OCT-07)

Sample Delivery Group Summary

Pace Job Number : L2553303

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q3 2025 GW

Received : 22-AUG-2025
Reviewer : Jordan Riley

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.6	
B	Absent/	Ice	4.9	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2572043
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	11/21/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572043
Report Date: 11/21/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2572043-01	CO201-MWS	WATER	COA	11/12/25 10:30	11/12/25
L2572043-02	CO30-PZM015	WATER	COA	11/12/25 11:25	11/12/25
L2572043-03	CO198-MWS	WATER	COA	11/12/25 13:05	11/12/25
L2572043-04	CO194-MWS	WATER	COA	11/12/25 13:50	11/12/25
L2572043-05	CO195-MWS	WATER	COA	11/12/25 14:25	11/12/25
L2572043-06	CO196-MWS	WATER	COA	11/12/25 15:05	11/12/25
L2572043-07	TB-001	WATER	COA	11/12/25 00:00	11/12/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572043
Project Number:	21010210	**Report Date:**	11/21/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572043
Project Number:	21010210	**Report Date:**	11/21/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The sample location was specified by the client.

L2572043-02: The collection date and time on the chain of custody was 12-NOV-25 11:25; however, the collection date/time on the container label was 12-NOV-25 10:30. At the client's request, the collection date/time is reported as 12-NOV-25 11:25.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 11/21/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-01 D
Client ID: CO201-MWS
Sample Location: COA
Date Collected: 11/12/25 10:30
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 18:44
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	21000		ug/l	120	40.	250
Toluene	1700		ug/l	190	51.	250
Ethylbenzene	ND		ug/l	120	42.	250
p/m-Xylene	380		ug/l	250	83.	250
o-Xylene	160	J	ug/l	250	98.	250
Xylenes, Total	540	J	ug/l	250	83.	250
Naphthalene	1600		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-02
Client ID: CO30-PZM015
Sample Location: COA

Date Collected: 11/12/25 11:25
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 03:49
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	73		ug/l	0.50	0.16	1
Toluene	0.64	J	ug/l	0.75	0.20	1
Ethylbenzene	0.25	J	ug/l	0.50	0.17	1
p/m-Xylene	0.92	J	ug/l	1.0	0.33	1
o-Xylene	0.79	J	ug/l	1.0	0.39	1
Xylenes, Total	1.7	J	ug/l	1.0	0.33	1
Naphthalene	6.7		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-03 D
Client ID: CO198-MWS
Sample Location: COA
Date Collected: 11/12/25 13:05
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 04:14
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	280		ug/l	5.0	1.6	10
Toluene	67		ug/l	7.5	2.0	10
Ethylbenzene	2.7	J	ug/l	5.0	1.7	10
p/m-Xylene	24		ug/l	10	3.3	10
o-Xylene	10		ug/l	10	3.9	10
Xylenes, Total	34		ug/l	10	3.3	10
Naphthalene	890		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-04 D2
Client ID: CO194-MWS
Sample Location: COA
Date Collected: 11/12/25 13:50
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/21/25 14:04
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	410		ug/l	5.0	1.6	10
Toluene	77		ug/l	7.5	2.0	10
Ethylbenzene	2.9	J	ug/l	5.0	1.7	10
p/m-Xylene	24		ug/l	10	3.3	10
o-Xylene	10		ug/l	10	3.9	10
Xylenes, Total	34		ug/l	10	3.3	10
Naphthalene	1200	E	ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: COA Q4 2025 GW
Lab Number: L2572043
Project Number: 21010210
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-04 D
Client ID: CO194-MWS
Sample Location: COA
Date Collected: 11/12/25 13:50
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 04:38
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	1100		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q4 2025 GW
Lab Number: L2572043
Project Number: 21010210
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-05 D
Client ID: CO195-MWS
Sample Location: COA
Date Collected: 11/12/25 14:25
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 05:03
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	18000		ug/l	120	40.	250
Toluene	1500		ug/l	190	51.	250
Ethylbenzene	ND		ug/l	120	42.	250
p/m-Xylene	330		ug/l	250	83.	250
o-Xylene	140	J	ug/l	250	98.	250
Xylenes, Total	470	J	ug/l	250	83.	250
Naphthalene	1100		ug/l	250	54.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-06 D
Client ID: CO196-MWS
Sample Location: COA
Date Collected: 11/12/25 15:05
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/21/25 13:37
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	5800		ug/l	25	8.0	50
Toluene	420		ug/l	38	10.	50
Ethylbenzene	10	J	ug/l	25	8.4	50
p/m-Xylene	73		ug/l	50	17.	50
o-Xylene	31	J	ug/l	50	20.	50
Xylenes, Total	100	J	ug/l	50	17.	50
Naphthalene	610		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2572043-07
Client ID: TB-001
Sample Location: COA
Date Collected: 11/12/25 00:00
Date Received: 11/12/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 18:19
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/19/25 21:43
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG2144420-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/20/25 10:16
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,07 Batch: WG2144495-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/21/25 09:38
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04,06 Batch: WG2145030-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	0.30	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572043
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG2144420-3 WG2144420-4								
Benzene	97		92		70-130	5		20
Toluene	100		93		70-130	7		20
Ethylbenzene	110		99		70-130	11		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	100		90		70-130	11		20
Naphthalene	85		81		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		118		70-130
Toluene-d8	105		102		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	99		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572043
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,07 Batch: WG2144495-3 WG2144495-4								
Benzene	100		96		70-130	4		20
Toluene	99		92		70-130	7		20
Ethylbenzene	99		93		70-130	6		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		95		70-130	10		20
Naphthalene	95		89		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		105		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	90		90		70-130
Dibromofluoromethane	103		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572043
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04,06 Batch: WG2145030-3 WG2145030-4								
Benzene	100		99		70-130	1		20
Toluene	99		94		70-130	5		20
Ethylbenzene	99		94		70-130	5		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
Naphthalene	80		81		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	95		98		70-130
Dibromofluoromethane	94		95		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572043
Report Date: 11/21/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2572043-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-07A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-07B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-07C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572043-07D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572043
Project Number:	21010210	**Report Date:**	11/21/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572043
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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572043
Project Number:	21010210	**Report Date:**	11/21/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572043
Report Date: 11/21/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L2572043

Scan QR Code for instructions 11/13/25

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguile@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other
	Date Results Requested:
	DW PWSID # or WW Permit # as applicable:
	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (BI), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

	Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
-01	C0201-MWS	GW				11/12	1030				X	
-02	C030-P2M015	GW				11/12	1125				X	pH>10
-03	C0198-MWS	GW				11/12	1305				X	pH>10
-04	C0194-MWS	GW				11/12	1350				X	pH>10
-05	C0195-MWS	GW				11/12	1425				X	pH>10
-06	C0196-MWS	GW				11/12	1505				X	pH>10
-07	TB-001										X	

Lab Use Only: Proj. Mgr: | AcctNum / Client ID: | Table #: | Profile / Template: | Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample:

Additional Instructions from Pace*: pH>10

Collected By: Printed Name Charlotte Norris Signature

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	[ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
ARM	11/12/25 1545	Alberto Lic	11/12/25 15:45	
Alberto Lic	11/12/25		11/12 1870	Delivered by: [ ] In-Person [ ] Courier
	11/12	Anthony Green	NOV 12 2025 0915	[ ] FedEx [ ] UPS [ ] Other
Anthony Green		Alberto Lic	11-13-25 0200	Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace* Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORO-0019_v02_110123 ©

Alberto Lic 11-13-25 0355

11/13/25 0355

Sample Delivery Group Summary

Pace Job Number : L2572043

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 12-NOV-2025
Reviewer : Daniel King

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.4	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels? L2572043-02: 12-NOV-25 11:25 vs. 12-NOV-25 10:30	**YES**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2572371
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	11/24/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572371
Report Date: 11/24/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2572371-01	CO41-PZM036	WATER	COA	11/13/25 10:40	11/13/25
L2572371-02	CO41-PZM001	WATER	COA	11/13/25 11:15	11/13/25
L2572371-03	CO27-PZM012	WATER	COA	11/13/25 12:05	11/13/25
L2572371-04	CO27-PZM046	WATER	COA	11/13/25 13:00	11/13/25
L2572371-05	CO36-PZM008	WATER	COA	11/13/25 14:00	11/13/25
L2572371-06	CO36-PZM043	WATER	COA	11/13/25 15:05	11/13/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572371
Project Number:	21010210	**Report Date:**	11/24/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572371
Project Number:	21010210	**Report Date:**	11/24/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 11/24/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-01 D
Client ID: CO41-PZM036
Sample Location: COA

Date Collected: 11/13/25 10:40
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 11:32
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	300000		ug/l	1000	320	2000
Toluene	94000		ug/l	1500	410	2000
Ethylbenzene	830	J	ug/l	1000	330	2000
p/m-Xylene	13000		ug/l	2000	660	2000
o-Xylene	3800		ug/l	2000	780	2000
Xylenes, Total	17000		ug/l	2000	660	2000
Naphthalene	ND		ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-02 D
Client ID: CO41-PZM001
Sample Location: COA

Date Collected: 11/13/25 11:15
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/23/25 13:33
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	3200		ug/l	12	4.0	25
Toluene	1400		ug/l	19	5.1	25
Ethylbenzene	32		ug/l	12	4.2	25
p/m-Xylene	430		ug/l	25	8.3	25
o-Xylene	100		ug/l	25	9.8	25
Xylenes, Total	530		ug/l	25	8.3	25
Naphthalene	17	J	ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	94		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-03 D
Client ID: CO27-PZM012
Sample Location: COA

Date Collected: 11/13/25 12:05
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/21/25 12:44
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	16000		ug/l	50	16.	100
Toluene	5600		ug/l	75	20.	100
Ethylbenzene	140		ug/l	50	17.	100
p/m-Xylene	1000		ug/l	100	33.	100
o-Xylene	390		ug/l	100	39.	100
Xylenes, Total	1400		ug/l	100	33.	100
Naphthalene	620		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	91		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-04 D
Client ID: CO27-PZM046
Sample Location: COA
Date Collected: 11/13/25 13:00
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 12:23
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9900		ug/l	50	16.	100
Toluene	3500		ug/l	75	20.	100
Ethylbenzene	97		ug/l	50	17.	100
p/m-Xylene	650		ug/l	100	33.	100
o-Xylene	250		ug/l	100	39.	100
Xylenes, Total	900		ug/l	100	33.	100
Naphthalene	650		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-05 D
Client ID: CO36-PZM008
Sample Location: COA
Date Collected: 11/13/25 14:00
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/21/25 13:11
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	18000		ug/l	50	16.	100
Toluene	4300		ug/l	75	20.	100
Ethylbenzene	72		ug/l	50	17.	100
p/m-Xylene	960		ug/l	100	33.	100
o-Xylene	310		ug/l	100	39.	100
Xylenes, Total	1300		ug/l	100	33.	100
Naphthalene	510		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	91		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

SAMPLE RESULTS

Lab ID: L2572371-06 D
Client ID: CO36-PZM043
Sample Location: COA
Date Collected: 11/13/25 15:05
Date Received: 11/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 13:14
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	220		ug/l	1.2	0.40	2.5
Toluene	210		ug/l	1.9	0.51	2.5
Ethylbenzene	5.6		ug/l	1.2	0.42	2.5
p/m-Xylene	83		ug/l	2.5	0.83	2.5
o-Xylene	22		ug/l	2.5	0.98	2.5
Xylenes, Total	110		ug/l	2.5	0.83	2.5
Naphthalene	25		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/20/25 10:16
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04,06 Batch: WG2144495-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/21/25 09:38
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,05 Batch: WG2145030-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	0.30	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/23/25 11:25
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2145951-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572371
Report Date: 11/24/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04,06 Batch: WG2144495-3 WG2144495-4								
Benzene	100		96		70-130	4		20
Toluene	99		92		70-130	7		20
Ethylbenzene	99		93		70-130	6		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		95		70-130	10		20
Naphthalene	95		89		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		105		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	90		90		70-130
Dibromofluoromethane	103		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572371
Report Date: 11/24/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,05 Batch: WG2145030-3 WG2145030-4								
Benzene	100		99		70-130	1		20
Toluene	99		94		70-130	5		20
Ethylbenzene	99		94		70-130	5		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
Naphthalene	80		81		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	95		98		70-130
Dibromofluoromethane	94		95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572371
Report Date: 11/24/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2145951-3 WG2145951-4								
Benzene	100		100		70-130	0		20
Toluene	99		97		70-130	2		20
Ethylbenzene	99		98		70-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
Naphthalene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		96		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	97		98		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572371
Report Date: 11/24/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2572371-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572371-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572371
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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572371
Project Number:	21010210	**Report Date:**	11/24/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572371
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Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572371
Report Date: 11/24/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields.

L2572371
TRADEPOINT

L2572371

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguile@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other _____ Date Results Requested:
	DW PWSID # or WW Permit # as applicable: Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (BI), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
C041-PZM036	GW				11/13	1040				X	pH>10
C041-PZM001	GW				11/13	1115				X	
C027-PZM012	GW				11/13	1205				X	pH>10
C027-PZM046	GW				11/13	1300				X	pH>10
C036-PZM008	GW				11/13	1400				X	pH>10
C036-PZM043	GW				11/13	1505				X	pH>10

Additional Instructions from Pace®: All samples have potential of Benzene >1000 ug/L pH>10

Collected By: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARM	11/13/25 1550	PACE	11/13/25 1600
PACE	11/13/25	Client Liz	11-14-25 0810
Client Liz	11-14-25 0400		11/14/25 0400

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORO-0019_v02_110123 ©

Sample Delivery Group Summary

Pace Job Number : L2572371

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 13-NOV-2025
Reviewer : Julie Convery

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.4	
B	Absent/	Ice	3.6	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2571666
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	11/22/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2571666
Report Date: 11/22/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2571666-01	CO55-PZM000	WATER	COA	11/11/25 12:05	11/11/25
L2571666-02	CO56-PZP001	WATER	COA	11/11/25 13:05	11/11/25
L2571666-03	CO23-PZM008	WATER	COA	11/11/25 14:20	11/11/25
L2571666-04	CO24-PZM007	WATER	COA	11/11/25 15:40	11/11/25
L2571666-05	TB-001	WATER	COA	11/11/25 00:00	11/11/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2571666
Project Number:	21010210	**Report Date:**	11/22/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2571666
Project Number:	21010210	**Report Date:**	11/22/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The sample location was specified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 11/22/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-01
Client ID: CO55-PZM000
Sample Location: COA
Date Collected: 11/11/25 12:05
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 02:12
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.86		ug/l	0.50	0.16	1
Toluene	0.47	J	ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	0.35	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.35	J	ug/l	1.0	0.33	1
Naphthalene	2.2		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-02 D
Client ID: CO56-PZP001
Sample Location: COA
Date Collected: 11/11/25 13:05
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 02:36
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	210		ug/l	10	3.2	20
Toluene	63		ug/l	15	4.1	20
Ethylbenzene	7.4	J	ug/l	10	3.3	20
p/m-Xylene	110		ug/l	20	6.6	20
o-Xylene	43		ug/l	20	7.8	20
Xylenes, Total	150		ug/l	20	6.6	20
Naphthalene	1600		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-03 D
Client ID: CO23-PZM008
Sample Location: COA

Date Collected: 11/11/25 14:20
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 03:00
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	380		ug/l	20	6.4	40
Toluene	190		ug/l	30	8.1	40
Ethylbenzene	21		ug/l	20	6.7	40
p/m-Xylene	230		ug/l	40	13.	40
o-Xylene	88		ug/l	40	16.	40
Xylenes, Total	320		ug/l	40	13.	40
Naphthalene	2800		ug/l	40	8.6	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-04 D2
Client ID: CO24-PZM007
Sample Location: COA
Date Collected: 11/11/25 15:40
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/21/25 14:31
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	5.9		ug/l	5.0	1.6	10
Toluene	3.2	J	ug/l	7.5	2.0	10
Ethylbenzene	2.2	J	ug/l	5.0	1.7	10
p/m-Xylene	3.8	J	ug/l	10	3.3	10
o-Xylene	ND		ug/l	10	3.9	10
Xylenes, Total	3.8	J	ug/l	10	3.3	10
Naphthalene	1300	E	ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q4 2025 GW
Lab Number: L2571666
Project Number: 21010210
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-04 D
Client ID: CO24-PZM007
Sample Location: COA

Date Collected: 11/11/25 15:40
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 03:25
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	1100		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

SAMPLE RESULTS

Lab ID: L2571666-05
Client ID: TB-001
Sample Location: COA
Date Collected: 11/11/25 00:00
Date Received: 11/11/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 01:47
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/19/25 21:43
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG2144420-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/21/25 09:38
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG2145030-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	0.30	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2571666
Report Date: 11/22/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG2144420-3 WG2144420-4								
Benzene	97		92		70-130	5		20
Toluene	100		93		70-130	7		20
Ethylbenzene	110		99		70-130	11		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	100		90		70-130	11		20
Naphthalene	85		81		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		118		70-130
Toluene-d8	105		102		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	99		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2571666
Report Date: 11/22/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG2145030-3 WG2145030-4								
Benzene	100		99		70-130	1		20
Toluene	99		94		70-130	5		20
Ethylbenzene	99		94		70-130	5		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
Naphthalene	80		81		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	95		98		70-130
Dibromofluoromethane	94		95		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2571666
Report Date: 11/22/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2571666-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2571666-05D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2571666
Project Number:	21010210	**Report Date:**	11/22/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2571666
Project Number:	21010210	**Report Date:**	11/22/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2571666
Project Number:	21010210	**Report Date:**	11/22/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2571666
Report Date: 11/22/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

L2571666
TRADEPOINT

L2571666

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guille / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguille@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other _____
	Date Results Requested:
	DW PWSID # or WW Permit # as applicable:
	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 50mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
C055-PZM000	GW				11/11	1205				X	pH >10
C056-PZP001	GW				11/11	1305				X	pH >10
C023-PZM008	GW				11/11	1420				X	pH >10
C024-PZM007	GW				11/11	1540				X	pH >0
TB-001										X	

Lab Use Only: Proj. Mgr: | AcctNum / Client ID: | Table #: | Profile / Template: | Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample:

Additional Instructions from Pace®: pH >10

Collected By: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: | Thermometer ID: | Correction Factor (°C): | Obs. Temp. (°C): | Corrected Temp. (°C): | [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARM	11/11/25 1615	PACE	11/11/25 1615
PACE	11/11/25 1835		11-11 1835
Anthony Green	11-11	Anthony Green	NOV 11 2025 2050
		Alberto Liz	11-12-25 0200

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORQ-0019_v02_110123 ©

Alberto Liz 11-12-25 0350

11/12/25-0350

Sample Delivery Group Summary

Pace Job Number : L2571666

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 11-NOV-2025
Reviewer : Julie Convery

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.0	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2573908
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	12/09/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573908
Report Date: 12/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2573908-01	CO190-MWS	WATER	COA	11/19/25 10:30	11/19/25
L2573908-02	CO37-PZM003	WATER	COA	11/19/25 11:10	11/19/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573908
Project Number:	21010210	**Report Date:**	12/09/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573908
Project Number:	21010210	**Report Date:**	12/09/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 12/09/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573908
Report Date: 12/09/25

SAMPLE RESULTS

Lab ID: L2573908-01 D
Client ID: CO190-MWS
Sample Location: COA
Date Collected: 11/19/25 10:30
Date Received: 11/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/30/25 18:39
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	670000		ug/l	2500	800	5000
Toluene	18000		ug/l	3800	1000	5000
Ethylbenzene	ND		ug/l	2500	840	5000
p/m-Xylene	ND		ug/l	5000	1700	5000
o-Xylene	ND		ug/l	5000	2000	5000
Xylenes, Total	ND		ug/l	5000	1700	5000
Naphthalene	ND		ug/l	5000	1100	5000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573908
Report Date: 12/09/25

SAMPLE RESULTS

Lab ID: L2573908-02 D
Client ID: CO37-PZM003
Sample Location: COA

Date Collected: 11/19/25 11:10
Date Received: 11/19/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/30/25 18:14
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9600		ug/l	50	16.	100
Toluene	1800		ug/l	75	20.	100
Ethylbenzene	39	J	ug/l	50	17.	100
p/m-Xylene	270		ug/l	100	33.	100
o-Xylene	120		ug/l	100	39.	100
Xylenes, Total	390		ug/l	100	33.	100
Naphthalene	200		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573908
Report Date: 12/09/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/30/25 10:26
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2147820-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573908
Report Date: 12/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2147820-3 WG2147820-4								
Benzene	110		110		70-130	0		20
Toluene	100		99		70-130	1		20
Ethylbenzene	100		96		70-130	4		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		90		70-130	5		20
Naphthalene	90		97		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		110		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	102		107		70-130
Dibromofluoromethane	101		102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573908
Report Date: 12/09/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2573908-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573908-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573908-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573908-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573908-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573908-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573908
Project Number:	21010210	**Report Date:**	12/09/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573908
Project Number:	21010210	**Report Date:**	12/09/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573908
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Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573908
Report Date: 12/09/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

L2573908
TRADEPOINT

L2573908

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguile@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other Date Results Requested:
	DW PWSID # or WW Permit # as applicable: Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

(4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
C0190-MWS	GW				11/19	1030				X	potentially elevated benzene
C037-PZM003	GW				11/19	1110				X	pH>10, potentially elevated benzene

Additional Instructions from Pace®: pH >10, potentially elevated benzene

Collected By: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARM	11/19/25 1200	PACE	11/19/25 1600
PACE	11/19/25	Anthony Green	NOV 19 2025 2320
Anthony Green		Liz	11-20-25 0215
Liz	11-20-25 0420		11/20/25 04:00

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORO-0019_v02_110123 ID

Sample Delivery Group Summary

Pace Job Number : L2573908

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 19-NOV-2025
Reviewer : Julie Convery

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.4	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2570950
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	11/21/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2570950-01	CO58-PZM001	WATER	COA	11/07/25 10:00	11/07/25
L2570950-02	CO26-PZM007	WATER	COA	11/07/25 11:05	11/07/25
L2570950-03	CO25-PZM008	WATER	COA	11/07/25 12:00	11/07/25
L2570950-04	CO206R-MWS	WATER	COA	11/07/25 12:40	11/07/25
L2570950-05	CO57-PZP002	WATER	COA	11/07/25 13:30	11/07/25
L2570950-06	CO59-PZP002	WATER	COA	11/07/25 14:35	11/07/25
L2570950-07	TB-001	WATER	COA	11/07/25 00:00	11/07/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2570950
Project Number:	21010210	**Report Date:**	11/21/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2570950
Project Number:	21010210	**Report Date:**	11/21/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2570950-05: The collection date and time on the chain of custody was 07-NOV-25 13:30; however, the collection date/time on the container label was 07-NOV-25 13:00. At the client's request, the collection date/time is reported as 07-NOV-25 13:30.

Volatile Organics

L2570950-06: The analysis was performed utilizing a compromised vial. Three vials were submitted. One was used for screening and two for preparing dilutions. However the sample needed to rerun at 1x and the least compromised vial was utilized.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 11/21/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-01 D
Client ID: CO58-PZM001
Sample Location: COA

Date Collected: 11/07/25 10:00
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 13:34
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	54		ug/l	2.0	0.64	4
Toluene	14		ug/l	3.0	0.81	4
Ethylbenzene	2.2		ug/l	2.0	0.67	4
p/m-Xylene	24		ug/l	4.0	1.3	4
o-Xylene	10		ug/l	4.0	1.6	4
Xylenes, Total	34		ug/l	4.0	1.3	4
Naphthalene	430		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-02 D
Client ID: CO26-PZM007
Sample Location: COA

Date Collected: 11/07/25 11:05
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 13:58
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	180		ug/l	5.0	1.6	10
Toluene	86		ug/l	7.5	2.0	10
Ethylbenzene	4.0	J	ug/l	5.0	1.7	10
p/m-Xylene	60		ug/l	10	3.3	10
o-Xylene	25		ug/l	10	3.9	10
Xylenes, Total	85		ug/l	10	3.3	10
Naphthalene	1100		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	126		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q4 2025 GW
Lab Number: L2570950
Project Number: 21010210
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-03 D
Client ID: CO25-PZM008
Sample Location: COA

Date Collected: 11/07/25 12:00
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 15:09
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1900		ug/l	50	16.	100
Toluene	1600		ug/l	75	20.	100
Ethylbenzene	42	J	ug/l	50	17.	100
p/m-Xylene	810		ug/l	100	33.	100
o-Xylene	280		ug/l	100	39.	100
Xylenes, Total	1100		ug/l	100	33.	100
Naphthalene	18000		ug/l	100	22.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-04 D
Client ID: CO206R-MWS
Sample Location: COA
Date Collected: 11/07/25 12:40
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 14:22
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	530		ug/l	12	4.0	25
Toluene	320		ug/l	19	5.1	25
Ethylbenzene	13		ug/l	12	4.2	25
p/m-Xylene	230		ug/l	25	8.3	25
o-Xylene	80		ug/l	25	9.8	25
Xylenes, Total	310		ug/l	25	8.3	25
Naphthalene	5000		ug/l	25	5.4	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	127		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-05 D
Client ID: CO57-PZP002
Sample Location: COA

Date Collected: 11/07/25 13:30
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/19/25 12:00
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	4.5		ug/l	1.2	0.40	2.5
Toluene	9.0		ug/l	1.9	0.51	2.5
Ethylbenzene	0.46	J	ug/l	1.2	0.42	2.5
p/m-Xylene	9.2		ug/l	2.5	0.83	2.5
o-Xylene	3.0		ug/l	2.5	0.98	2.5
Xylenes, Total	12		ug/l	2.5	0.83	2.5
Naphthalene	200		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	106		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-06
Client ID: CO59-PZP002
Sample Location: COA
Date Collected: 11/07/25 14:35
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/20/25 06:06
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2.4		ug/l	0.50	0.16	1
Toluene	4.9		ug/l	0.75	0.20	1
Ethylbenzene	0.32	J	ug/l	0.50	0.17	1
p/m-Xylene	5.8		ug/l	1.0	0.33	1
o-Xylene	1.9		ug/l	1.0	0.39	1
Xylenes, Total	7.7		ug/l	1.0	0.33	1
Naphthalene	120		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-06 D
Client ID: CO59-PZP002
Sample Location: COA
Date Collected: 11/07/25 14:35
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 13:10
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	2.6		ug/l	1.2	0.40	2.5
Toluene	5.3		ug/l	1.9	0.51	2.5
Ethylbenzene	ND		ug/l	1.2	0.42	2.5
p/m-Xylene	5.0		ug/l	2.5	0.83	2.5
o-Xylene	1.6	J	ug/l	2.5	0.98	2.5
Xylenes, Total	6.6	J	ug/l	1.0	0.33	2.5
Naphthalene	100		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

SAMPLE RESULTS

Lab ID: L2570950-07
Client ID: TB-001
Sample Location: COA
Date Collected: 11/07/25 00:00
Date Received: 11/07/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/18/25 07:39
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	108		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/18/25 07:15
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-07 Batch: WG2143621-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/19/25 09:21
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG2143867-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/20/25 05:40
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG2144261-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG2143621-3 WG2143621-4								
Benzene	100		100		70-130	0		20
Toluene	99		96		70-130	3		20
Ethylbenzene	95		92		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	80		90		70-130	12		20
Naphthalene	89		88		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		114		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	87		106		70-130
Dibromofluoromethane	103		103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG2143867-3 WG2143867-4								
Benzene	98		94		70-130	4		20
Toluene	92		93		70-130	1		20
Ethylbenzene	92		91		70-130	1		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	90		90		70-130	0		20
Naphthalene	92		90		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		87		70-130
Toluene-d8	96		98		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	97		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG2144261-3 WG2144261-4								
Benzene	96		97		70-130	1		20
Toluene	93		92		70-130	1		20
Ethylbenzene	92		91		70-130	1		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
Naphthalene	100		98		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	87		90		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	101		102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2570950-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-07A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-07B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-07C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2570950-07D	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2570950
Report Date: 11/21/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2570950
Project Number:	21010210	**Report Date:**	11/21/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2570950
Project Number:	21010210	**Report Date:**	11/21/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2570950
Project Number:	21010210	**Report Date:**	11/21/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2570950
Report Date: 11/21/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

L2570950
TRADEPOINT

L2570950

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd, Sparrows Point, MD	Phone #:
	E-Mail: kguile@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other

Date Results Requested:

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 99mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
C058-PZM001	GW				11/7	1000				X	pH >10
C026-PZM007	GW				11/7	1105				X	pH >10
C025-PZM008	GW				11/7	1200				X	possible benzene >1000 ug/L
C026R-MW5	GW				11/7	1240				X	pH >10
C057-PZP002	GW				11/7	1330				X	pH >10
C059-PZP002	GW				11/7	1435				X	
TB-001	—				—	—				X	

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

Additional Instructions from Pace®: pH >10

Collected By: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARM	11/7/25 1515	PACE	11/7/25 1515
PACE	11/7/25	Anthony Green	NOV 07 2025 2215
Anthony Green		Alberto Liz	11-8-25 0145
Alberto Liz	11-8-25 0340		

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORO-0019_v02_110123 ©

Sample Delivery Group Summary

Pace Job Number : L2570950

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 07-NOV-2025
Reviewer : Julie Convery

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.6	
B	Absent/	Ice	2.7	

Condition Information

1) All samples on COC received? **YES**

2) Extra samples received? **NO**

3) Are there any sample container discrepancies? **NO**

4) Are there any discrepancies between COC & sample labels? **YES**
L2570950-05: 07-NOV-25 13:30 vs. 07-NOV-25 13:00

5) Are samples in appropriate containers for requested analysis? **YES**

6) Are samples properly preserved for requested analysis? **YES**

7) Are samples within holding time for requested analysis? **YES**

8) All sampling equipment returned? **NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client? **NO**

ANALYTICAL REPORT

Lab Number:	L2572761
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	11/26/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572761
Report Date: 11/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2572761-01	C039-PZM042	WATER	COA	11/14/25 09:00	11/14/25
L2572761-02	C039-PZM007	WATER	COA	11/14/25 09:30	11/14/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572761
Project Number:	21010210	**Report Date:**	11/26/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572761
Project Number:	21010210	**Report Date:**	11/26/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The project location was specified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 11/26/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572761
Report Date: 11/26/25

SAMPLE RESULTS

Lab ID: L2572761-01 D
Client ID: C039-PZM042
Sample Location: COA
Date Collected: 11/14/25 09:00
Date Received: 11/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/24/25 17:48
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	8900		ug/l	100	32.	200
Toluene	2100		ug/l	150	41.	200
Ethylbenzene	100		ug/l	100	33.	200
p/m-Xylene	590		ug/l	200	66.	200
o-Xylene	200		ug/l	200	78.	200
Xylenes, Total	790		ug/l	200	66.	200
Naphthalene	510		ug/l	200	43.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	96		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572761
Report Date: 11/26/25

SAMPLE RESULTS

Lab ID: L2572761-02 D
Client ID: C039-PZM007
Sample Location: COA

Date Collected: 11/14/25 09:30
Date Received: 11/14/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/24/25 17:22
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	840		ug/l	5.0	1.6	10
Toluene	120		ug/l	7.5	2.0	10
Ethylbenzene	4.2	J	ug/l	5.0	1.7	10
p/m-Xylene	25		ug/l	10	3.3	10
o-Xylene	7.8	J	ug/l	10	3.9	10
Xylenes, Total	33	J	ug/l	10	3.3	10
Naphthalene	46		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	95		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572761
Report Date: 11/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/24/25 08:56
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2146351-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572761
Report Date: 11/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2146351-3 WG2146351-4								
Benzene	95		100		70-130	5		20
Toluene	91		92		70-130	1		20
Ethylbenzene	90		94		70-130	4		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
Naphthalene	78		84		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	98		96		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	95		98		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2572761
Report Date: 11/26/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2572761-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572761-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572761-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572761-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572761-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2572761-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572761
Project Number:	21010210	**Report Date:**	11/26/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572761
Project Number:	21010210	**Report Date:**	11/26/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2572761
Project Number:	21010210	**Report Date:**	11/26/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2572761
Report Date: 11/26/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

11/15/25

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L2572761

Scan QR Code for instructions

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguille@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other Date Results Requested:
	DW PWSID # or WW Permit # as applicable: Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Specify Container Size **: 6

Identify Container Preservative Type***: 4

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 50mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (BI), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

	Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
01	C039-PZM042	GW				11/14	0900				X	see notes
02	C039-PZM007	GW				11/14	0930				X	

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample

Additional Instructions from Pace®: All samples have potentially elevated benzene and pH>10

Collected By: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time	Received by/Company: (Signature)	Date/Time
ARM	11/14/25 1030	DUNCAR PO 03	11/14/25 1030
[illegible]	11/14/25	Anthony Green	NOV 14 2025 2330
Anthony Green		Alecto Liz	11-15-25 0210
Alecto Liz	11-15-25 0330		11-15-25 0330

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORO-0019_v02_110123 ID

Sample Delivery Group Summary

Pace Job Number : L2572761

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 14-NOV-2025
Reviewer : Brendan Grady

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.1	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

ANALYTICAL REPORT

Lab Number:	L2573449
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Matthew Newman
Phone:	(443) 649-5073
Project Name:	COA Q4 2025 GW
Project Number:	21010210
Report Date:	12/05/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2573449-01	CO38-PZM006	WATER	COA	11/18/25 10:30	11/18/25
L2573449-02	CO38-PZM043	WATER	COA	11/18/25 11:15	11/18/25
L2573449-03	CO182-MWI	WATER	COA	11/18/25 11:55	11/18/25
L2573449-04	CO40-PZM008	WATER	COA	11/18/25 12:35	11/18/25
L2573449-05	CO93-PZM	WATER	COA	11/18/25 14:55	11/18/25

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573449
Project Number:	21010210	**Report Date:**	12/05/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573449
Project Number:	21010210	**Report Date:**	12/05/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative Date: 12/05/25

ORGANICS

VOLATILES

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

SAMPLE RESULTS

Lab ID: L2573449-01 D
Client ID: CO38-PZM006
Sample Location: COA

Date Collected: 11/18/25 10:30
Date Received: 11/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 12/01/25 14:15
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	3200		ug/l	10	3.2	20
Toluene	450		ug/l	15	4.1	20
Ethylbenzene	34		ug/l	10	3.3	20
p/m-Xylene	150		ug/l	20	6.6	20
o-Xylene	64		ug/l	20	7.8	20
Xylenes, Total	210		ug/l	20	6.6	20
Naphthalene	790		ug/l	20	4.3	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

SAMPLE RESULTS

Lab ID: L2573449-02
Client ID: CO38-PZM043
Sample Location: COA
Date Collected: 11/18/25 11:15
Date Received: 11/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/28/25 16:17
Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	8.9		ug/l	0.50	0.16	1
Toluene	3.2		ug/l	0.75	0.20	1
Ethylbenzene	0.38	J	ug/l	0.50	0.17	1
p/m-Xylene	2.2		ug/l	1.0	0.33	1
o-Xylene	0.54	J	ug/l	1.0	0.39	1
Xylenes, Total	2.7	J	ug/l	1.0	0.33	1
Naphthalene	10		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

SAMPLE RESULTS

Lab ID: L2573449-03 D
Client ID: CO182-MWI
Sample Location: COA
Date Collected: 11/18/25 11:55
Date Received: 11/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 12/01/25 12:26
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	280000		ug/l	1000	320	2000
Toluene	27000		ug/l	1500	410	2000
Ethylbenzene	780	J	ug/l	1000	330	2000
p/m-Xylene	5100		ug/l	2000	660	2000
o-Xylene	1600	J	ug/l	2000	780	2000
Xylenes, Total	6700	J	ug/l	2000	660	2000
Naphthalene	ND		ug/l	2000	430	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	93		70-130

Project Name: COA Q4 2025 GW
Lab Number: L2573449
Project Number: 21010210
Report Date: 12/05/25

SAMPLE RESULTS

Lab ID: L2573449-04 D
Client ID: CO40-PZM008
Sample Location: COA

Date Collected: 11/18/25 12:35
Date Received: 11/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 12/02/25 14:56
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	5900		ug/l	25	8.0	50
Toluene	1300		ug/l	38	10.	50
Ethylbenzene	62		ug/l	25	8.4	50
p/m-Xylene	340		ug/l	50	17.	50
o-Xylene	130		ug/l	50	20.	50
Xylenes, Total	470		ug/l	50	17.	50
Naphthalene	970		ug/l	50	11.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	100		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

SAMPLE RESULTS

Lab ID: L2573449-05 D
Client ID: CO93-PZM
Sample Location: COA
Date Collected: 11/18/25 14:55
Date Received: 11/18/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/28/25 20:50
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	94000		ug/l	500	160	1000
Toluene	26000		ug/l	750	200	1000
Ethylbenzene	680		ug/l	500	170	1000
p/m-Xylene	5300		ug/l	1000	330	1000
o-Xylene	1800		ug/l	1000	390	1000
Xylenes, Total	7100		ug/l	1000	330	1000
Naphthalene	1100		ug/l	1000	220	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/28/25 11:55
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG2147610-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	111		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/28/25 12:58
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2147931-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 12/01/25 09:31
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG2148482-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 12/01/25 09:01
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2148576-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 12/02/25 12:24
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG2149006-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG2147610-3 WG2147610-4								
Benzene	92		89		70-130	3		20
Toluene	87		86		70-130	1		20
Ethylbenzene	89		88		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
Naphthalene	91		92		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		109		70-130
Toluene-d8	92		91		70-130
4-Bromofluorobenzene	86		85		70-130
Dibromofluoromethane	110		107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2147931-3 WG2147931-4								
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		95		70-130	5		20
Naphthalene	87		92		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		110		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	97		100		70-130
Dibromofluoromethane	105		104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG2148482-3 WG2148482-4								
Benzene	100		100		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
Naphthalene	80		83		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		104		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	90		91		70-130
Dibromofluoromethane	100		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2148576-3 WG2148576-4								
Benzene	92		96		70-130	4		20
Toluene	95		96		70-130	1		20
Ethylbenzene	99		95		70-130	4		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	90		90		70-130	0		20
Naphthalene	84		84		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		109		70-130
Toluene-d8	102		98		70-130
4-Bromofluorobenzene	96		98		70-130
Dibromofluoromethane	102		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG2149006-3 WG2149006-4								
Benzene	100		93		70-130	7		20
Toluene	95		93		70-130	2		20
Ethylbenzene	97		95		70-130	2		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		100		70-130	5		20
Naphthalene	99		98		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		103		70-130
Toluene-d8	91		93		70-130
4-Bromofluorobenzene	86		87		70-130
Dibromofluoromethane	99		104		70-130

Project Name: COA Q4 2025 GW
Project Number: 21010210

Lab Number: L2573449
Report Date: 12/05/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2573449-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2573449-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573449
Project Number:	21010210	**Report Date:**	12/05/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573449
Project Number:	21010210	**Report Date:**	12/05/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers

Project Name:	COA Q4 2025 GW	**Lab Number:**	L2573449
Project Number:	21010210	**Report Date:**	12/05/25

Data Qualifiers

estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: COA Q4 2025 GW
Project Number: 21010210
Lab Number: L2573449
Report Date: 12/05/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

L2573449
TRADEPOINT

L2573449

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE O

Scan QR Code for instructions

Company Name: Tradepoint Atlantic	Contact/Report To: Kaye Guile / Josh Barna
Street Address: 6995 Bethlehem Blvd Sparrows Point, MD	Phone #:
	E-Mail: kguile@armgroup.net, jbarna@armgroup.net
	Cc E-Mail:
Customer Project #: 21010210	Invoice to:
Project Name: COA Q4 2025 GW	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other	DW PWSID # or WW Permit # as applicable:
Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (BI), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	BTEX + Naphthalene	Sample Comment
C038-PZM006	GW				11/18	1030				X	pH >10, elevated benzene
C038-PZM043	GW				11/18	1115				X	possibly elevated benzene
C0182-MWI	GW				11/18	1155				X	possibly elevated benzene
C040-PZM008	GW				11/18	1235				X	pH >10, elevated benzene
C093-PZM	GW				11/18	1455				X	pH >10, elevated benzene

Lab Use Only: Proj. Mgr: | Acct.Num / Client ID: | Table #: | Profile / Template: | Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample

Additional instructions from Pace®: pH >10, possibly elevated benzene

Collected by: Printed Name: Charlotte Norris Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
AGM	11/18/25 1545		11-18-25 1545	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
	11-18-25 1825		11-18-25 1825	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Anthony Green	11/18	Anthony Green	NOV 18 2025 2300	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: of
		Atlantic Liz	11-19-25 0210	

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORQ-0019_v02_110123 ©

Atlantic Liz 11-19-25 0400 11/19/25 10400

Sample Delivery Group Summary

Pace Job Number : L2573449

Account Name : Tradepoint Atlantic
Project Number : 21010210
Project Name : COA Q4 2025 GW

Received : 18-NOV-2025
Reviewer : Mohammed Wahed

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.4	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

APPENDIX B

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM015	Project Name: CPA AMS Additional Sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/16/25
Depth to Water (ft): 12.53	One Well Volume (gal): ~~20~~
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 27.67	Length of time Purged (min)

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		12.52	15.44	12.13	2.55	0.46	-72	8.2		
1035		12.53	16.02	12.77	2.54	0.07	-304	5.3		
1040		12.53	16.16	12.76	2.55	0.00	-309	3.9		
1045		12.53	16.15	12.77	2.54	0.00	-309	3.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM015	1050

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: PZ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM060	Project Name: CPA CMS Add. Sampl
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 07/10/25
Depth to Water (ft): 14.34	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 70
Depth to Bottom (ft): 20.6	Length of time Purged (min)

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	
1120		14.35	14.18	10.49	6.05	0.00	-104	12.0		
1125		14.35	14.24	9.00	6.11	0.00	-37	11.7		
1130		14.34	14.21	8.23	6.15	0.00	-32	11.3		
1135		14.34	14.18	7.87	6.22	0.00	-26	11.6		
1140		14.34	14.16	7.76	6.20	0.00	-44	11.5		
1145			14.19	7.66	6.22	0.00	-39	11.4		
1150			14.26	7.60	6.24	0.00	-36	11.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM060	1155

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0216-MW1	Project Name: CPA CMS Add. Sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/16/24
Depth to Water (ft): 14.67	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min): 200
Depth to Bottom (ft): 25	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1220		14.67	15.84	13.13	6.40	9.39	-273	2.8		
1225		14.67	16.03	13.14	6.39	8.72	-326	2.0		
1230		14.67	16.05	13.14	6.38	8.31	-329	1.9		
1235		14.67	16.13	13.14	6.34	8.33	-297	1.9		
1240		14.67	16.08	13.14	6.36	7.46	-302	2.0		
1245		14.67	16.12	13.16	6.36	6.44	-300	2.0		
1250		14.67	16.12	13.16	6.37	6.52	-330	2.0		
1255		14.67	16.18	13.15	6.36	6.09	-297	2.1		
1300		14.67	16.27	13.16	6.36	5.76	-297	2.1		
1305		14.67	16.16	13.17	6.37	5.43	-293	2.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0216-MW5	1330

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO210-MWS	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1310		14.67	16.14	13.11	6.38	5.11	-298	2.3		
1315		14.67	16.16	13.16	6.36	4.78	-301	2.1		
1320		14.67	16.16	1316	6.37	4.59	-303	2.1		
1325		14.67	16.16	13.17	6.36	4.27	-302	2.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
FB CO210-MWS	1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C020-MW1	Project Name: CPA CMS Add Sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/10/25
Depth to Water (ft): 14.53	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 55	Length of time Purged (min)

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		14.53	14.57	10.33	2.72	0.00	-200	2.1		
1350		14.53	14.70	9.87	2.54	0.00	-141	2.4		
1355		14.53	14.85	9.48	2.71	0.00	-96	2.6		
1400		14.53	14.84	9.34	2.83	0.00	-127	2.6		
1405		14.53	14.81	9.26	2.91	0.00	-113	2.9		
1410		14.53	14.80	9.04	3.04	0.00	-213	2.6		
1415		14.53	15.03	8.89	3.10	0.00	-214	2.6		
1420		14.53	15.60	8.83	3.15	0.00	-224	2.2		
1425		14.55	15.53	8.83	3.13	0.00	-232	2.1		
1430		14.53	15.87	8.80	3.14	0.00	-240	2.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C020-MW1	1425

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CU 147-MW5	Project Name: CPA cms Addis sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/16/25
Depth to Water (ft): 14.17	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 25	Length of time Purged (min)

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	
1500		14.53	16.26	11.97	6.68	0.00	-226	26.8		
1505		14.53	16.16	11.91	6.63	0.00	-228	22.6		
1510			16.00	11.94	6.17	0.00	-233	21.1		
1515			16.00	11.94	6.15	0.00	-233	19.5		
1520			16.06	11.94	6.05	0.00	-234	17.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CU 147-MW5	1525

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

C0203-MW5

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: 203-MW5	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft): NA	Date: 2/10/2025
Depth to Water (ft): 10.15	One Well Volume (gal):
Product Thickness (ft): NA	Flow Rate (mL/min)
Depth to Bottom (ft): 24.45	Length of time Purged (min)

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	
10:15		10.74	11.31	11.99	2.34	0.05	-12	70.6		
1020		10.76	11.30	12.00	2.35	0.00	-79	68.5		
1025		10.76	11.34	11.99	2.36	0.00	-116	56.5		
1030		10.76	11.45	12.00	2.35	0.00	-146	30.5		
1035		10.76	11.46	12.01	2.35	0.00	-164	23.0		
1040		10.77	11.40	12.01	2.37	0.00	-174	21.8		
1045		10.77	11.39	12.02	2.38	0.00	-179	17.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0203-MW5	1050

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs	X		
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: C.N

Comments:

Low Flow Sampling Purge Log

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ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO209-MWI	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/10/2025
Depth to Water (ft): 10.76	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 53.30	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235		10.75	8.87	10.05	1.71	8.06	-23	12.0		
1240		10.75	9.62	10.04	1.68	6.40	-30	8.0		
1245		10.75	10.11	10.06	1.68	5.98	-37	8.3		
1250		10.75	10.64	10.11	1.81	4.38	-65	7.9		
1255		10.75	11.12	10.38	2.00	1.57	-132	18.1		
1300		10.75	11.37	10.64	2.03	0.50	-147	9.6		
1305		10.75	11.67	11.03	2.04	0.32	-182	9.1		
1310		10.75	11.89	11.29	2.05	0.00	-206	7.7		
1315		10.75	12.17	11.37	2.06	0.00	-222	7.3		
1320		10.78	12.40	11.48	2.07	0.00	-234	7.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO209-MWI	

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: CN

Comments:

Low Flow Sampling Purge Log

p. 2 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C)209-MWE	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/10/25
Depth to Water (ft): 10.76	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 23.30	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1325			12.57	11.50	2.07	0.00	-231	7.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0209-MWE	1330

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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 _____

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO26-PZMW32	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/10/25
Depth to Water (ft): 15.40	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 47.50	Length of time Purged (min)

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	
1125		15.40	10.34	6.16	16.3	0.66	67	3.1		
1130		15.70	12.72	6.74	17.7	0.09	5	2.6		
1135		15.70	12.87	7.10	17.7	0.35	-41	1.1		
1140		15.70	11.84	7.34	18.1	0.17	-77	0.7		
1145		15.70	11.89	7.41	18.1	0.12	-90	1.2		
1150		15.70	12.10	7.47	17.8	0.07	-107	1.1		
1155		15.70	12.45	7.50	17.8	0.05	-115	1.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO26-PZMW32	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0193-MW1	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft): —	Date: 2/10/25
Depth to Water (ft): 16.84	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 51.94	Length of time Purged (min)

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	
1430		16.87	10.84	8.97	0.887	0.79	-70	5.6		
1435		16.87	11.12	8.82	0.880	0.00	-97	7.8		
1440		16.87	11.44	8.70	0.872	0.00	-123	4.9		
1445		16.87	11.58	8.66	0.871	0.00	-134	5.3		
1450		16.87	11.79	8.63	0.867	0.00	-146	4.1		
1455		16.87	11.95	8.61	0.861	0.00	-158	4.1		
1500		16.88	12.03	8.60	0.859	0.00	-165	3.5		
1505		16.88	12.15	8.58	0.860	0.00	-171	4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0193-MW1	1510

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CHL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO209-MW8	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 10.88	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 28.48	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235		10.88	10.91	11.41	6.93	-135	0.04	22.3		
1240		10.88	11.15	11.34	6.81	0.00	-129	16.6		
1245			11.43	11.29	6.86	0.00	-93	9.4		
1250		10.88	11.63	11.25	6.88	0.00	-48	9.9		
1255			12.02	11.17	6.86	0.00	-4	5.5		
1300		10.89	12.09	11.15	6.81	0.00	3	6.2		
1305		10.89	12.25	11.12	6.75	0.00	18	6.1		
1310		10.89	12.40	11.11	6.73	0.00	31	5.7		
1315			12.44	11.11	6.77	0.00	36	5.3		
			12.53	11.09	6.75	0.00	42	5.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO209-MW8	1320

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	X
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	X
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	X
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	X

Sampled By: SHL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO26-PZMO07	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 16.16	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.73	Length of time Purged (min)

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	
1120		17.58	10.18	12.50	2.66	1.13	-221	107	*	
1125		17.93	9.92	12.44	2.67	0.98	-240	74.2		
1130		18.28	9.79	12.40	2.66	0.76	-255	73.7		
1135		18.55	9.63	12.61	2.73	0.30	-265	44.3		
1140		18.77	9.60	12.51	2.71	0.20	-266	16.6		
1145		18.87	9.48	12.50	2.72	0.16	-271	13.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO26-PZMO07	1150

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: SHL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0193-MWS	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.95	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
~~1435~~ 1435		15.84	11.70	12.14	1.89	0.87	-181	5.9		
1440		15.84	12.79	12.19	1.86	0.30	-201	1.7		
1445		15.84	13.10	12.19	1.85	0.08	-219	1.1		
1450		15.84	13.13	12.19	1.85	0.00	-231	0.8		
1455		15.84	13.13	12.19	1.84	0.00	-239	1.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0193-MWS	1500

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C028-P2M048	Project Name: CPA CMS Additional Samples
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/2025
Depth to Water (ft): 12.96	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0930		13.49	13.69	8.79	0.211	0.30	-165	9.2		
0935		13.49	13.69	8.49	0.211	0.30	-165	9.2		
0940		13.49	12.23	9.14	0.214	0.00	-316	5.5		
0945		13.49	12.25	9.15	0.213	0.00	-319	5.4		
0950		13.49	12.23	9.16	0.213	0.00	-320	5.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C028-P2M048	0955

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	✓	Dissolved Zn and Cd	
TPH-GRO		BTEX and naphthalene	
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CN

Comments: ~~might to 12.2+ DTW due to silt blockage, will cont~~ ~~slowly~~

Low Flow Sampling Purge Log

Pg. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO180-MW1	Project Name: CSA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/2025
Depth to Water (ft): 12.05	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1035		12.05	9.95	11.89	4.09	10.0	-218	3.2		
1040		12.05	9.43	11.76	4.22	10.00	-212	2.5		
1045		12.05	9.12	11.64	4.36	0.00	-178	2.3		
1050		12.46	8.94	11.48	4.43	0.00	-160	2.1		
1055		12.46	8.55	11.36	4.50	0.00	-129	1.9		
1100		12.46	8.32	11.33	4.49	0.00	-114	1.9		
1105		12.46	8.17	11.25	4.49	0.00	-89	1.9		
1110		12.46	8.14	11.30	4.51	0.00	-57	2.0		
1115		12.46	8.12	11.20	4.54	0.00	-28	1.9		
1120		12.46	8.10	10.80	4.52	0.00	-14	2.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs	X		
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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 CN

Comments:

Low Flow Sampling Purge Log

Pg. 2 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0180 -MWI	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/2025
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1125		12.46	8.70	10.71	4.55	0.00	-3	2.0		
1130		12.46	8.76	10.70	4.58	0.00	5	2.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0108-MWI	1135

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs	X		
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZM043	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 7/11/2025
Depth to Water (ft): 11.30	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 53.30	Length of time Purged (min)

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	
1215		11.76	9.33	8.51	0.414	3.0	13	5.0		
1220		11.93	9.92	8.10	0.404	0.0	18	5.0		
1225		11.93	10.03	7.79	0.397	0.0	11	4.1		
1230		12.00	9.60	7.82	0.401	0.0	8	4.0		
1235		12.00	10.21	7.62	0.394	0.0	-7	4.6		
1240			9.94	7.37	0.398	0.0	-20	4.5		
1245			9.81	7.47	0.400	0.0	-23	4.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1255

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0178-MW5	Project Name: EPA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/2025
Depth to Water (ft): 7.53	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 17.80	Length of time Purged (min)

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	
1425		7.53	6.19	12.32	1.41	0.00	-245	11.4		
1430		7.55	6.97	12.33	1.38	0.00	-269	8.5		
1435		7.55	7.42	12.32	1.36	0.00	-284	6.8		
1440		7.65 ←→ 7.56		12.32	1.35	0.00	-296	5.7		
1445			7.97	12.31	1.33	0.00	-305	5.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0178-MW5	1450

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs	X		
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C028-PZM.010	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/25
Depth to Water (ft): 12.39	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.19	Length of time Purged (min)

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	
0920		12.41	11.51	8.78	7.13	3.12	222	4.9		
0925		12.41	10.72	8.85	7.33	0.97	219	3.1		
0930			10.45	8.86	7.47	0.77	217	1.4		
0935		12.41	10.09	8.86	7.59	0.57	219	0.7		
0940			9.82	8.86	7.68	0.41	221	0.1		
0945		12.41	9.53	8.87	7.80	0.38	222	0.0		
0950			9.41	8.87	7.86	0.56	220			

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C028-PZM010	0955

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: SHL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0180 – MW8	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 12.19	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 17.70	Length of time Purged (min)

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	
1035		12.20	7.76	12.65	4.34	0.00	-237	2.4		
1040		12.21	7.69	12.63	4.36	0.00	-250	2.6		
1045		12.21	7.65	12.64	4.37	0.00	-258	0.9		
1050		12.21	7.63	12.62	4.38	0.00	-263	0.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0180-MW8	1055

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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: SMC

Comments: pH > 10

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZMD06	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 13.64	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 20.54	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235			5.06	10.68	1.21	0.44	-176	196		
1240			5.36	10.68	1.25	0.00	-168	145		
1245			5.67	10.62	1.24	0.00	-169	108		
1250			5.95	10.61	1.24	0.00	-160	76.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZMD06	1255

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: BKL

Comments:

- struggled significantly to get tubing down PVC stickup. Tried to use PID probe to get tubing down.

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0178-MWI	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 9.48	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 33.29	Length of time Purged (min)

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	
1425		9.66	7.43	8.33	0.439	0.00	53	5.6		
1430		9.66	7.17	8.33	0.441	0.00	44	4.4		
1435		9.66	7.29	8.34	0.440	0.00	38	2.8		
1440			7.43	8.35	0.437	0.00	34	3.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0178-MWI	1445

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	X
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	X
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	X
Well permit is present	X

Sampled By: SHL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO54-PZMW02	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 12.80	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 19.05	Length of time Purged (min)

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	
1250		17.19	11.77	10.34	1.95	2.08	-15	0.0		
1255		17.16	11.70	9.72	1.88	0.36	3	0.0		
1300		17.23	12.35	9.60	1.71	0.07	8	0.0		
1305		17.26	17.47	9.72	1.64	0.00	8	0.0		
1310		17.25	12.70	9.78	1.62	0.00	6	0.0		
1315		17.25	12.76	9.89	1.69	0.00	1	0.0		
1320		17.25	12.96	10.02	1.67	0.00	-8	0.0		
1325		17.29	13.01	10.15	1.63	0.00	-14	0.0		
1330		17.26	12.95	10.28	1.61	0.00	-24	0.0		
1335		17.25	13.03	10.46	1.61	0.18	-36	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO54-PZMW02	1355

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZS

Comments:

Pg. 2 of 2

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CUS4-PLP002	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1340		17.17	12.84	10.56	1.61	0.58	-42	6.1		
1345		17.12	12.54	10.70	1.62	0.33	-48	6.0		
1350		17.10	12.51	10.77	1.63	0.21	-54	6.0		
1355		17.11	12.56	10.87	1.64	-0.24	-60	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CUS4-PLP002	1355

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments: Spud 11 Weed

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO206R-MW5	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/11/25
Depth to Water (ft): 14.78	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 22.55	Length of time Purged (min)

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	
1420		14.78	13.37	11.46	2.55	0.00	-236	69.1		
1425		14.78	13.40	11.47	2.53	0.00	-244	25.8		
1430		14.78	13.25	11.49	2.51	0.00	-250	16.5		
1435		14.78	13.50	11.49	2.50	0.0	-253	8.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO206R-MW5	1440

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CU58-PZMW01	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 14.34	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 19.33	Length of time Purged (min)

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	
1135		15.30	9.47	12.05	1.41	6.78	58	30.0		
1140		15.95	10.41	11.96	1.45	0.76	-16	11.0		
1145		16.28	10.00	11.87	1.09	6.66	-31	7.4		
1150		16.78	10.58	11.71	0.954	0.80	-38	0.0		
1155		17.20	10.61	11.78	0.930	0.90	-45	0.7		
1200		17.56	10.99	11.84	0.954	0.72	-63	0.4		
1205		17.92	11.26	11.93	1.02	0.47	-94	0.3		
1210		18.27	11.28	12.02	1.12	0.25	-115	0.1		
1215		16.60	11.15	12.07	1.33	0.05	-133	0.3		
1220		18.76	10.70	12.16	1.76	0.00	-149	0.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CU58-PZMW01	1445

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C058-PZM004	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C) ± 0.1	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		19.09	10.18	12.25	1.85	0.16	-156	6.2		
1230		1'	9.90	12.32	2.02	9.46	-152	2.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM01	1445

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments: 1230 ran dry

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C034-PZM048	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.27	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 63.65	Length of time Purged (min)

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		15.57	12.38	7.64	0.354	11.47	147	42.9	
1010		15.58	12.30	8.09	0.331	10.44	131	38.9	
1015		15.58	12.31	8.27	0.329	10.48	122	31.6	
1020		15.58	12.11	8.35	0.323	10.26	119	31.1	
1025		15.58	11.98	8.36	0.324	10.33	120	31.5	
1030			11.81	8.42	0.325	10.09	123	29.2	
~~1035~~									

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C034-PZM048	1035

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZS

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO02 - PZM041	Project Name: CPA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/2025
Depth to Water (ft): 14.60	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 28.85	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1050		14.60	12.24	9.93	0.367	9.4	-200	5.4		
1055		14.15	12.25	9.95	0.366	0.6	-208	4.1		
1100		14.10	12.25	9.96	0.362	0.0	-213	3.8		
1105		14.10	12.18	9.97	0.358	0.0	-215	3.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO02 - PZM041	1110

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO24-PZMW07	Project Name: CPABMS
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/25
Depth to Water (ft): 15.88	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.21	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1050		15.85	11.93	11.18	0.865	0.00	-81	111		
1055		15.89	11.85	11.14	~~1.00~~	0.00	-139	74.7		
1100		15.94	11.69	10.96	1.34	0.00	-169	73.9		
1105		15.97	11.50	10.71	1.96	0.00	-191	60.8		
1110		15.94	11.90	10.59	2.09	0.00	-200	455.9		
1115		15.97	11.64	10.51	2.13	0.00	-208	32.2		
1120		16.00	11.72	~~10.43~~	2.23	0.00	-213	94.7		
1125		16.03	11.93	10.37	2.27	0.00	-217	~~46.9~~		
1130		16.04	12.27	10.35	2.28	0.00	-223	34.4		
1135		16.05	11.93	10.34	2.30	0.00	-224	35.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO24-PZMW07	~~1135~~ 1140

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO		BTEX and naphthalene	
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZJ

Comments: BTEX + NAPL sample @1215

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0189-MWS	Project Name: CPA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/2025
Depth to Water (ft): 14.10	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.73	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1210		14.10	8.05	8.75	0.864	10.0	-326	23.1		
1215		14.10	9.22	9.02	0.843	0.0	-342	14.2		
1220		14.10	9.96	9.19	0.830	0.0	-350	12.0		
1225		14.10	10.26	9.21	0.819	0.0	-351	9.0		
1230		14.10	10.57	9.28	0.813	0.0	-354	8.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0189-MWS	1235

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO 65A - PZM	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/25
Depth to Water (ft): 14.64	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 21.26	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235		14.70	11.76	8.28	1.73	3.06	-230	6.9		
1240		14.72	11.49	8.18	2.21	3.26	-287	5.4		
1245		14.71	12.01	9.44	2.33	3.19	-310	4.3		
1250		14.70	11.62	9.47	2.39	3.95	-325	3.7		
1255		14.73	12.14	9.56	2.35	2.06	-327	3.3		
1300		14.73	12.89	9.55	2.35	1.79	-329	3.3		
1305		14.73	13.27	9.56	2.40	1.52	-336	1.9		
1310										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO 65A+PZM	1310

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZS

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO04-PZM048	Project Name: CPA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/25
Depth to Water (ft): 12.74	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) low
Depth to Bottom (ft): 60	Length of time Purged (min)

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	
1335		12.76	13.90	10.94	0.169	5.44	-100	34.3		
1340		12.78	14.08	10.90	0.163	4.90	-88	30.0		
1345		12.77	14.30	10.96	0.163	4.56	-81	27.7		
1350		12.78	14.34	10.97	0.160	4.63	-73	27.5		
1355		12.78	14.34	10.98	0.160	4.39	-71	23.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO04-PZM048	1400

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZS

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO36-PZM043	Project Name: CPA UMS + COA Q1
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/25
Depth to Water (ft): 13.80	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 58.75	Length of time Purged (min)

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	
1330		14.20	11.97	11.63	4.80	13.0	-259	274		
1335		14.20	12.72	11.65	4.83	0.0	-274	196		
1340		14.20	13.16	11.65	4.87	0.0	-276	147		
1345		14.20	13.59	11.64	4.92	0.0	-281	109		
1350		14.20	13.95	11.63	4.97	0.0	-282	79.0		
1355		14.20	14.16	11.62	4.98	0.0	-283	68.0		
1400		14.20	14.48	11.59	5.01	0.0	-285	48.8		
1405		14.20	14.74	11.60	5.00	0.0	-286	38.3		
1410		14.20	14.90	11.59	4.95	0.0	-288	35.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO36-PZM	1415

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM008	Project Name: CPA CMS
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/2025
Depth to Water (ft): 13.20	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 20.72	Length of time Purged (min)

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	
1425		13.60	14.55	12.03	1.85	3.8	-156	14.8		
1430		13.68	14.61	11.97	1.76	5.1	-140	12.2		
1435		13.68	14.57	12.01	1.75	3.4	-137	12.0		
1440		13.68	14.49	12.01	1.74	3.2	-136	11.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1445

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO 159-PZM	Project Name: CPA cms Additional Sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/13/25
Depth to Water (ft): 7.74	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 200
Depth to Bottom (ft): 16.36	Length of time Purged (min)

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	
1415		8.22	13.61	~~9.05~~	0.559	0.02	-110	25.1		
1420		8.11	12.61	8.45	0.555	0.00	-165	27.3		
1425		8.15	12.92	8.28	0.547	0.00	-215	16.7		
1430		8.14	12.72	8.23	0.565	0.00	-266	15.0		
1435		8.15	12.30	8.23	0.576	0.00	-279	13.7		
1440		8.15	12.22	8.24	0.580	0.00	-292	18.0		
1445		8.15	12.13	8.24	0.585	0.00	-299	15.9		
1450		8.16	12.07	8.25	0.591	0.00	-300	16.7		
~~1455~~										
~~1500~~										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO 159-PZM	1455

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: AZ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: COA-MW-001	Project Name: CPA cms Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft): 14.73	Date: 2/14/2025
Depth to Water (ft): 17.25	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.75	Length of time Purged (min)

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	
0930		17.25	13.13	6.31	0.777	2.01	5	61.5		
0935		17.25	12.64	6.86	0.768	0.14	-4	44.1		
0940		17.25	12.45	6.83	0.773	0.04	-14	28.4		
0945		17.33	12.33	6.92	0.753	0.00	-25	24.3		
0950		17.33	12.15	6.94	0.743	0.00	-36	18.7		
0955		17.34	11.96	6.97	0.725	0.00	-47	17.0		
1000		17.34	11.77	6.99	0.715	0.00	-54	18.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
COA-MW-001	1005

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments: NAPL present

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C037-PZM003	Project Name: CPACMS Addl. sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/25
Depth to Water (ft): 14.75	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 19.09	Length of time Purged (min)

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	
1125		14.75	8.61	10.16	8.54	3.69	-119	11.7		
1130		15.40	8.99	10.44	8.70	3.05	-120	6.8		
1135		15.70	9.19	10.73	8.51	2.80	-139	3.9		
1140		15.70	9.32	11.12	8.43	2.59	-162	8.7		
1145		15.70	9.39	11.34	8.37	1.77	-175	5.9		
1150		15.70	9.46	11.44	8.51	1.60	-185	4.8		
1155			9.50	11.46	8.52	1.35	-188	5.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM003	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM042	Project Name: CPA CMS Additional Sampling
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/25
Depth to Water (ft): 15.94	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 52.26	Length of time Purged (min)

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		16.00	9.44	10.37	0.356	1.20	-256	48.0		
1230		16.00	9.54	10.34	0.347	0.0	-263	42.3		
1235		16.00	9.62	10.33	0.837	-0.0	-266	39.7		
~~1240~~										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM042	1240

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO16-PZA 006	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 7/19/25
Depth to Water (ft): 12.69	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 300
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C) ± 0.1	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	
1330			12.95	11.63	0.689	0.38	-206	42.5		
1335			13.76	11.81	0.680	0.00	-235	30.0		
1340			12.45	11.99	0.716	0.00	-238	23.7		
1345			12.43	12.04	0.727	—	-246	22.6		
1350			11.34	12.05	0.734	—	-249	22.0		
1355			12.17	12.08	0.731	—	-255	19.5		
						0				

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
	1400

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: HH

Comments: No DTW - lock in Concrete Vault - SAFETY

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM007	Project Name: DPA CMS Addl. sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/25
Depth to Water (ft): 14.40	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 24.7 ft	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1340		14.40	8.40	10.21	2.90	2.02	-252	94.1		
1345		14.40	8.74	10.22	2.93	0.0	-271	74.1		
1350		14.40	8.98	10.22	2.92	0.0	-283	60.0		
1355		14.40	9.10	10.21	2.93	0.0	-232	54.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	1400

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: ~~COA-004~~ COA-MW5-004	Project Name:
Well Diameter (in): 2	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/25
Depth to Water (ft): 16.14	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min): 300
Depth to Bottom (ft): 23.01	Length of time Purged (min)

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	
1420			12.41	11.11	2.01	2.93	-273	53.6		
1425		16.23	11.53	12.73	2.06	0.39	-293	40.9		
1430			11.90	12.77	2.26	0.00	-326	12.4		
1435		16.25	11.99	12.78	2.29		-353	9.0		
1440			12.01	12.78	2.27		-361	4.8		
1445			12.07	12.78	2.28		-370	3.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
	1450

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: COA-MW1-004	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/25
Depth to Water (ft): See Below	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min) 300
Depth to Bottom (ft):	Length of time Purged (min)

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	
1455			11.82	12.72	2.07	0	-302	6.9		
1500			11.80	12.75	2.08	0	-310	6.0		
1505			11.95	12.73	2.11	0	-323	1.5	✓	
1510			11.94	12.73	2.11	0	-325	0.9		
1515			11.94	12.73	2.12	0	-326	0.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
	1520

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: RS

Comments: Water Meter Dead

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C018-P2M006	Project Name: CPA CMS Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/14/2025
Depth to Water (ft): 13.20	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 20.05	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
~~1505~~		13.20	10.75	7.72	2.14	7.2	-146	125		
1510		13.20	11.56	7.45	2.18	0.0	-131	130		
1515		15.43	11.79	7.28	2.19	0.0	-120	123		
1520		16.15	11.62	7.19	2.15	0.0	-109	~~144~~ 131		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C018-P2M006	1525

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**	X		
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: CAJ

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: SW-085-MWS	Project Name: CPA-cms Additional Sampling
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft): 13.65	Date: 2/17/25
Depth to Water (ft): 6.30	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 14.56	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU) ± 10% or < 5	Comments	
1225			8.21	7.28	0.534	13.27	236	134		
1230			7.73	7.32	0.526	9.13	168	129		
1235			8.16	7.35	0.515	7.52	[illegible]89	135		
1240			8.32	7.36	0.507	6.76	60	139		
1245			8.43	7.37	0.501	6.03	-41	146		
1250			8.65	7.39	0.491	5.33	26	141		
1255			8.73	7.42	0.483	4.40	14	144		
1300			8.80	7.44	0.452	3.90	0	141		
1305			8.70	7.49	0.437	3.26	-15	139		
1310			8.69	7.55	0.416	2.66	-42	132		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
SW-085-MWS	1220 & 1325

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO		BTEX and naphthalene	
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)	X		
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: metals sample taken immediately b/c ran dry on 2/14 very low pump speed (<20)

1220 sample was disposed of, only calibrated sample was saved.

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: SW-085-MWS	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/17/25
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1315			8.69	7.63	0.408	2.29	-49	130		
1320			8.64	7.72	0.380	1.89	-60	125		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
SW-085-MWS	1325

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)	X		
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: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C037-PZM003	Project Name: COA Q1 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/21/2025
Depth to Water (ft): 14.29	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 19.20	Length of time Purged (min)

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	
1000			10.76	13.14	7.61	1.03	-86	8.1		
1005			10.18	13.13	7.79	0.98	-102	7.5		
1010			9.71	13.20	7.93	1.19	-113	7.7		
1015			9.33	13.22	8.07	1.23	-125	7.5		
1020			9.05	13.25	8.17	1.33	-134	7.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM003	1025

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: had to attach tubing to DTW probe, so no interval DTW measurements

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM007	Project Name: COA Q1 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/21/2025
Depth to Water (ft): 14.35	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 24.73	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1100		14.85	6.35	11.94	3.11	1.33	-223	165		
1105		14.72	6.03	11.83	3.08	0.0	-219	104		
1110		14.72	5.78	11.85	3.06	0.0	-221	58.3		
1115		14.73	5.53	11.79	3.06	0.0	-223	45.3		
1120		14.73	5.32	11.78	3.06	0.0	-228	31.7		
1125		14.73	5.18	11.78	3.06	0.0	-221	29.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	1130

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: Assume human error for 1100 DTW measurement

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO39-PZM042	Project Name: COA Q1 GW 2025
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/21/2025
Depth to Water (ft): 16.50	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 52.68	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1150			5.23	11.21	0.908	0.0	-229	29.8		
1155			5.34	11.30	0.902	0.0	-239	23.7		
1200			5.57	11.29	0.890	0.0	-245	20.6		
1205			5.65	11.27	0.878	0.0	-247	17.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO39-PZM042	1210

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: had to attach tubing to DTW probe, so unable to track DTW over time

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZM043	Project Name: COA Q1 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/21/25
Depth to Water (ft): 12.28	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 53.51	Length of time Purged (min)

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		13.40	9.07	7.92	1.69	0.0	-26	9.4		
1300		13.40	9.27	7.83	1.68	0.0	-27	10.1		
1305		13.40	9.57	7.74	1.68	0.0	-28	6.0		
1310		~~13.40~~	9.85	7.67	1.67	0.0	-31	6.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1315

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: oil/water interface meter died halfway through

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO38-PZM006	Project Name: COA OU GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/24/25
Depth to Water (ft): 14.00	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (ml./min)
Depth to Bottom (ft): 20.57	Length of time Purged (min)

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		14.00	14.50	10.58	1.81	0.1	-259	158		
1100		14.08	13.76	10.53	1.84	0.0	-252	90.0		
1105		14.08	13.32	10.51	1.83	0.0	-266	56.0		
1110		14.09	12.98	10.53	1.83	0.0	-271	43.2		
1115		14.09	12.67	10.52	1.84	0.0	-271	34.8		
1120		14.09	12.44	10.52	1.87	0.0	-272	30.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO38-PZM006	1125

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments: high turbidity

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C026-PZM007	Project Name: COA Q1 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 2/24/25
Depth to Water (ft): 15.42	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 22.68	Length of time Purged (min)

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	
1205		15.42	11.98	12.62	2.98	0.0	-223	21.9		
1210		20.14	12.24	12.63	2.91	0.0	-234	15.6		
1215		20.15	12.50	12.60	2.73	0.0	-220	12.3		
1220		20.65	12.68	12.57	2.57	0.0	-193	11.3		
1225		20.65	12.87	12.38	2.22	0.0	-171	33.7		
1230		20.70	12.38	12.41	2.08	0.0	-163	37.0		
1235		20.70	12.77	12.32	2.00	0.0	-155	30.1		
1240		20.79	12.97	12.25	1.98	0.0	-152	28.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C026-PZM006	1245

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CW

Comments: pumped at rate of <20

Low Flow Sampling Purge Log p. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093 - PZM	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/26/25
Depth to Water (ft): 11.47	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		11.47	13.33	6.31	0.770	0.46	1	8.6		
1010		11.53	13.11	6.54	0.773	0.41	-50	17.1		
1015		11.53	13.14	6.64	0.768	0.59	-112	16.0		
1020		11.53	13.20	6.79	0.771	0.99	-214	8.1		
1025		11.53	13.39	7.07	0.770	8.03	-253	5.7		
1030		11.53	13.39	7.43	0.773	7.69	-272	3.9		
1035		11.54	13.35	7.97	0.774	7.43	-292	2.1		
1040		11.54	13.26	8.28	0.777	7.32	-299	2.0		
1045		11.54	13.36	8.66	0.775	7.09	-309	1.9		
1050		11.55	13.06	8.97	0.782	7.04	-322	1.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093-PZM	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		11.55	12.78	9.25	0.778	6.86	-325	1.7		
1100		11.56	12.97	9.56	0.780	6.58	-330	1.8		
1105		11.56	13.12	9.82	0.783	6.44	-327	1.7		
1110		11.59	13.16	10.09	0.788	6.14	-332	2.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	1115

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CW

Comments: pH not stabilized after 1hr 5 min, sample collected anyway

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0190-MW5	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.30	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1140		15.38	14.96	7.40	3.10	0.00	-151	1 10		
1145		15.38	15.00	7.30	3.01	0.00	-163	113		
1150		15.38	15.06	7.23	2.89	0.00	-160	26.1		
1155		15.38	14.64	7.20	2.88	0.00	-151	25.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0190-MW5	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By CN

Comments: DNAPL present

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041 - ~~MW~~ PZM036	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/26/25
Depth to Water (ft): 16.52	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		16.70	12.31	9.68	0.884	0.14	-338	68.5		
1230		16.70	11.91	10.55	0.872	0.00	-361	33.5		
1235		16.70	12.05	10.94	0.864	0.00	-353	15.5		
1240		16.73	12.26	11.12	0.863	0.00	-340	9.1		
1245		16.78	12.19	11.27	0.868	0.00	-339	6.5		
1250		16.81	12.26	11.38	0.866	0.00	-339	4.5		
1255		16.81	12.41	11.45	0.870	0.00	-329	3.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM036	1300

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041-PZM001	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 4/3/2025
Depth to Water (ft): ~~16.21~~ 16.21	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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
1315		16.21	13.15	10.39	0.000	9.35	-258	148	tubing not fully in water
1320		16.21	13.28	10.06	0.000	9.33	-239	152	
1325		16.22	13.43	9.83	0.000	9.32	-210	155	
1330		16.25	13.73	9.45	0.000	9.27	-159	154	
1335		16.26	11.55	8.98	1.13	0.95	-284	~~47.6~~ 21.8	
1340		16.26	10.60	8.61	1.23	0.00	-215	16.8	
1345		16.27	10.42	8.36	1.28	0.00	-328	11.7	
1350		16.27	10.29	8.13	1.32	0.00	-324	10.2	
1355		16.27	10.46	7.95	1.32	0.00	-314	9.4	
1400		16.27	9.97	7.85	1.34	0.00	-310	8.0	

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1405

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO27-PZM012	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/27/25
Depth to Water (ft): 5.18	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
0940		5.21	10.98	10.28	1.26	0.04	-353	38.8		
0945		5.22	10.91	10.74	1.27	0.00	-379	34.7		
0950		5.22	10.72	11.11	1.30	0.00	-399	34.2		
0955		5.22	10.62	11.31	1.32	0.00	-419	33.5		
1000		5.22	10.72	11.45	1.31	0.00	-425	33.7		
1005		5.22	10.75	11.54	1.33	0.00	-418	31.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO27-PZM012	1010

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	X
Well permit is present	

Advised procedure

Sampled By: CW

Comments: Initial clogged tubing from sediment, cut off blocked portion and continued w/ no issues

Low Flow Sampling Purge Log

p. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027-PZM046	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/27/25
Depth to Water (ft): 7.60	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1020		7.60	11.25	10.81	2.41	0.00	-352	27.4		
1025		7.60	11.50	11.24	2.98	0.00	-394	29.4		
1030		7.60	11.67	11.49	3.41	0.00	-411	26.5		
1035		7.60	11.73	11.67	3.67	0.00	-411	24.4		
1040		7.62	11.79	11.80	3.88	0.00	-425	24.5		
1045		7.62	11.93	11.88	4.07	0.00	-422	24.6		
1050		7.62	12.25	11.91	4.25	0.00	-408	24.9		
1055		7.68	12.35	11.93	4.70	0.00	-433	24.5		
1100		7.68	12.50	11.94	6.26	0.00	-462	23.1		
1105		7.70	12.56	11.96	7.11	0.00	-411	22.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	N/A

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

p. 2 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1110		7.72	12.69	11.97	7.38	0.00	-433	23.7		
1115		7.74	12.80	11.97	7.47	0.00	-423	23.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C021-P2M046	1120

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0182 - MWI	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/27/25
Depth to Water (ft): 15.10	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1150		15.10	12.27	10.74	0.521	0.30	-243	6.6		
1155		15.13	12.29	10.59	0.407	0.19	-223	6.5		
1200		15.13	12.40	10.51	0.364	0.12	-209	6.1		
1205		15.22	12.40	10.50	0.351	0.12	-199	6.1		
1210		15.31	12.32	10.45	0.347	0.25	-186	5.9		
1215		15.40	12.20	10.37	0.346	0.40	-176	6.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0182-MWI	1220

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C040-PZM008	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 3/27/25
Depth to Water (ft): ~~14.91~~ 14.91	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1300		14.91	13.18	10.75	2.16	0.00	-357	—		
1305		14.92	13.27	10.89	2.18	0.00	-337	667		
1310		15.01	13.09	10.98	2.19	0.00	-334	293		
1315		15.01	12.87	11.08	2.19	0.00	-330	165		
1320		15.01	12.84	11.10	2.19	0.00	-328	108		
1325			12.84	11.20	2.18	0.00	-338	108		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-PZM008	1330

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: turbidity meter is acting up again

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO195-MWS	Project Name: COA GW 2025 Q1
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 14.50	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1435		14.50	15.99	12.54	2.36	0.64	-280	58.8		
1440		14.50	16.37	12.62	2.41	0.02	-271	22.6		
1445		14.50	16.47	12.67	2.44	0.00	-273	9.9		
1450		14.50	16.52	12.68	2.41	0.00	-269	5.6		
1455		14.52	16.72	12.68	2.42	0.00	-266	5.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO195-MWS	1500

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C056-PZP001	Project Name: COA GW 2025 Q1
Well Diameter (in): 2	Project Number: 21010210
Depth to Product (ft): NA	Date: 3/27/25
Depth to Water (ft): 15.66	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 18.11	Length of time Purged (min)

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	
0955		15.66	13.53	11.50	1.79	1.01	20	4.9		
1000		15.66	13.20	11.91	1.80	0.34	5	4.8		
1005		15.66	12.58	12.27	1.79	0.00	-16	4.3		
1010		15.66	12.34	12.54	1.79	0.00	-23	4.2		
1015		15.66	12.21	12.43	1.79	0.00	-33	3.6		
1020			12.17	12.49	1.78	0.00	-39	3.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C056-PZP001	1030

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	N/A
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	X
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	X
Well permit is present	

Sampled By: SHL

Comments:

pH > 10

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C057-PZP001	Project Name: COA GW 2025 Q1
Well Diameter (in): 2	Project Number: 21010210
Depth to Product (ft): —	Date: 3/27
Depth to Water (ft): 16.36	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 18.02	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1130		17.03	11.22	12.10	0.879	5.91	8	46.3		
1135		17.09	11.07	11.88	0.809	4.98	6	29.8		
1140		17.26	~~11.30~~ 10.46	11.80	0.910	4.03	11	42.2		
1145		17.91	11.45	11.56	0.898	3.86	16	52.9		
1150		17.95	11.29	11.54	0.869	4.22	10	93.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057-PZP001	

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: DJL

Comments: Well Ran Dry

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C055-PZ4000	Project Name: COA GW 2025 Q1
Well Diameter (in): 2	Project Number: 21010210
Depth to Product (ft): —	Date:
Depth to Water (ft): 14.89	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 17.84	Length of time Purged (min)

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		17.01	12.10	13.13	3.37	4.46	-45	58.9		
1050		17.04	11.95	13.24	3.30	4.74	-48	41.3		
1055		17.04	11.94	13.27	3.29	5.09	-49	36.6		
1100		17.05	11.90	13.31	3.29	5.34	-50	35.1		
1105		17.05	11.86	13.32	3.29	5.56	-50	33.6		
1110		17.08	11.47	13.36	3.26	5.75	-50	33.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZ4000	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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: BKL

Comments: Well Ran Dry

pH x10

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C025-PZM008	Project Name: COA GW 2025 Q1
Well Diameter (in): 2	Project Number: 21010210
Depth to Product (ft): —	Date: 3/27/25
Depth to Water (ft): 15.82	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 23.56	Length of time Purged (min)

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		15.82	11.03	11.35	3.66	4.66	-114	475		
1300		15.82	11.17	11.60	3.22	0.03	-149	170		
1305		15.83	11.28	11.93	2.99	0.00	-177	58.9		
1310		15.83	11.30	12.13	2.87	0.00	-190	28.0		
1315		↓	11.33	12.21	2.83	0.00	-199	16.4		
1320			11.30	12.24	2.81	0.00	-203	14.0		
1325			11.36	12.27	2.79	0.00	-209	9.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C025-PZM008	1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	X
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	X
Well permit is present	

Sampled By: SBL

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C023-PZM008	Project Name: COA GW 2025 Q1
Well Diameter (in): 2	Project Number: 21010210
Depth to Product (ft): —	Date: 3/27
Depth to Water (ft): 15.42	One Well Volume (gal):
Product Thickness (ft): —	Flow Rate (mL/min)
Depth to Bottom (ft): 22.12	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C) ± 0.1	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	
			10.85							
1350		15.42	~~11.68~~	11.62	4.11	6.15	-109	36.2		
1355		15.42	10.99	11.51	3.22	0.00	-202	21.6		
1400			11.09	11.45	2.40	0.00	-220	15.0		
1405		15.43	11.23	11.06	1.76	0.00	-240	9.0		
1410			11.34	10.97	1.64	0.00	-247	9.1		
1415		15.43	11.40	10.89	1.60	0.00	-252	8.0		
1420			11.49	10.80	1.54	0.00	-258	8.1		
1425		15.43	11.52	10.76	1.52	0.00	-261	9.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C023-PZM008	1430

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	Yes No
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	X
Well permit is present	

Sampled By: JKL

Comments:

PH 2.0

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO191-MW5	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 12.88	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0925		12.88	17.63	11.89	0.766	3.66	-252	18.4		
0930		12.88	17.18	12.65	0.768	3.24	-255	2.2		
0935		12.89	17.06	12.86	0.763	3.17	-249	0.0		
0940		12.89	17.00	12.89	0.757	3.13	-247	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO191-MW5	0945

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

p. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 10.83	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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			17.22	9.22	0.739	3.81	-150	4.6		
1015			16.81	8.84	0.750	3.15	-212	5.9		
1020			16.70	8.72	0.754	3.06	-235	6.9		
1025			16.66	8.78	0.756	3.04	-258	7.3		
1030			16.59	9.04	0.759	2.95	-279	7.7		
1035			16.57	9.58	0.760	3.02	-304	0.3		
1040			16.57	10.10	0.758	2.89	-318	0.0		
1045			16.59	10.44	0.757	2.89	-326	0.0		
1050			16.63	10.77	0.755	2.87	-332	0.0		
1055			16.69	11.06	0.752	2.86	-336	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-MWS	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments: attached tubing to ow meter

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1100			16.68	11.31	0.750	2.80	-337	0.7		
1105			16.72	11.57	0.749	2.82	-339	3.9		
1110			16.72	11.86	0.757	2.74	-341	4.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-MWS	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CW

Comments: pH still going up after one hour, sample collected regardless

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM042	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 14.65	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1140		14.70	16.76	10.69	0.730	3.25	-221	9.1		
1145		14.70	16.84	10.89	0.731	3.22	-245	10.6		
1150		14.72	16.81	10.97	0.733	2.91	-255	7.7		
1155		14.72	16.80	11.01	0.733	2.82	-262	5.9		
1200		14.74	16.77	11.03	0.733	2.78	-264	3.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM042	1205

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM007	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 13.70	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1215		14.04	17.21	12.04	3.40	3.09	-265	1.4		
1220		14.09	17.35	12.87	3.93	2.74	-282	1.6		
1225		14.12	17.42	12.96	4.02	2.68	-279	0.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	1230

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C037-PZM003	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 13.94	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1300			18.30	14.00	7.90	4.37	-210	16.6		
1305			17.66	14.00	8.25	3.68	-198	13.3		
1310			17.59	14.00	8.47	3.64	-188	8.5		
1315			17.56	14.00	8.55	3.51	-184	4.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM003	1320

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By _____

Comments: temporarily removed sock to purge, attached tubing to o/w probe

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C040-PZM008	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 14.37	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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~~ 1350		14.40	17.62	13.37	2.25	2.86	-292	—		
1355		14.40	17.39	13.08	2.11	2.68	-315	279		
1400		14.40	17.27	12.97	2.05	2.69	-323	138		
1405		14.40	17.13	12.94	2.02	2.68	-320	85.7		
1410		14.40	17.03	12.96	2.00	2.68	-320	72.2		
1415		14.42	17.00	13.01	2.00	2.67	-325	60.9		
1420		14.42	16.99	13.04	2.00	2.78	-325	54.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-PZM008	1425

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: initially struggled to get flow due to sediment buildup

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041-PZM036	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/14/25
Depth to Water (ft): 16.13	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1440		16.13	17.01	12.75	0.880	3.25	-299	51.7		
1445		16.13 16.13	16.74	12.78	0.829	2.86	-312	13.0		
1450		16.13	16.70	12.78	0.817	2.82	-316	6.5		
1455		16.13	16.71	12.76	0.813	2.73	-320	4.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM036	1500

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

r: C041-PZM001	Project Name: COA Q2 GW 2025
eter (in):	Project Number: 21010210
Product (ft):	Date: 5/15/25
to Water (ft): 5.63	One Well Volume (gal):
uct Thickness (ft):	Flow Rate (mL/min)
pth to Bottom (ft):	Length of time Purged (min)

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	
[illegible] 1000		15.71	18.05	7.98	1.70	2.78	-311	0.0		
1005		15.72	18.11	8.27	1.60	2.73	-321	0.0		
1010		15.78	18.19	8.31	1.39	2.68	-316	0.6		
1015		15.78	18.39	8.39	1.30	2.60	-318	0.1		
1020		15.78	18.50	8.41	1.28	2.55	-317	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1025

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0186-MWS	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft): 14.09	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.11	18.43	9.29	1.77	2.69	-322	0.0		
1050		14.12	18.28	8.93	1.82	2.62	-337	0.0		
1055		14.12	18.17	8.79	1.81	2.64	-338	0.0		
1100		14.14	18.11	8.64	1.77	2.60	-338	0.0		
1105		14.14	18.12	8.60	1.71	2.61	-342	0.0		
1110		14.15	18.19	8.51	1.59	2.57	-334	0.0		
1115		14.15	18.35	8.53	0.864	2.88	-311	1.1		
1120		14.15	18.62	8.74	0.600	3.60	-267	0.0		
1125		14.15	19.18	8.88	0.504	3.58	-227	0.0		
1130		14.15	19.21	8.88	0.499	3.70	-218	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0186-MWS	~~1130~~ 1135

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO182-MWI	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft): 14.53	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.72	20.23	8.34	0.802	2.52	-206	0.0		
1205		14.84	20.02	8.29	0.839	2.44	-206	0.0		
1210		14.85	20.06	8.22	0.841	2.38	-206	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO182-MWI	1215

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZM043	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft): 10.32	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235		10.96	20.76	8.16	1.70	3.03	-140	0.0		
1240		11.02	20.62	8.12	1.70	2.63	-134	0.0		
1245		11.02	20.32	8.11	1.71	2.50	-133	0.0		
1250		11.10	20.47	8.08	1.71	2.38	-132	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1255

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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 O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1305			21.04	11.29	2.05	2.16	-361	0.0		
1310			20.52	11.55	2.08	2.18	-385	32		
1315			20.56	11.70	2.07	2.16	-387	84.8		
1320			20.65	11.75	2.06	2.14	-392	84.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM006	1325

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: Attached tubing to probe, unable to track DTW

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO36-PZM043	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft): 11.43	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C) ± 0.1	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~~ 1350			21.44	12.69	1.35	5.47	-153	1.9		
1355			21.35	12.64	1.34	4.08	-135	~~2.4~~ 2.1		
1400			21.37	12.66	1.34	4.07	-127	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO36-PZM043	1405

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: tubing attached to o/w probe

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM008	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/15/25
Depth to Water (ft): 15.60	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1420			20.52	13.27	2.02	2.93	-172	11.1		
1425			20.39	13.36	2.12	2.64	-178	9.3		
1430			20.21	13.32	2.16	2.62	-173	12.0		
1435			20.01	13.29	2.18	2.66	-164	11.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1440

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

p. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0190-MWS	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft): 14.50	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
0940		14.53	20.90	7.28	2.96	2.53	-153	98.3		
0945		14.55	20.70	7.42	3.20	2.66	-175	94.4		
0950		14.55	20.59	7.66	3.06	2.61	-185	95.9		
0955		14.57	20.61	7.77	3.05	2.51	-184	96.7		
1000		14.57	20.49	7.80	2.95	2.43	-182	97.6		
1005		14.58	20.34	7.84	2.61	2.37	-171	36.3		
1010		14.58	20.15	7.90	2.04	2.40	-160	15.6		
1015		14.58	19.95	8.00	1.57	2.42	-152	2.2		
1020		14.59	19.86	8.04	1.36	2.44	-143	0.0		
1025		15.00	19.80	8.07	1.28	2.46	-135	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0190-MWS	

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

p. 2 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0190-MWS	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		15.00	19.69	8.08	1.27	2.49	-133	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0190-MWS	1035

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0209-MWI	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft): 9.40	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		9.41	22.72	11.19	2.55	2.39	48	12.3		
1205		9.41	22.15	11.18	2.61	2.11	42	11.1		
1210		9.43	21.75	11.22	2.61	2.11	15	12.9		
1215		9.43	21.55	13.17	2.80	2.09	-481	11.5		
1220		9.46	21.47	13.39	3.05	2.08	-481	11.0		
1225		9.47	21.57	13.51	3.14	2.06	-372	10.5		
1230		9.47	21.73	13.54	3.16	2.01	-266	8.2		
1235			21.76	13.57	3.21	2.03	-231	7.0		
1240			21.98	13.59	3.21	2.00	-223	4.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0209-MWI	1245

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO209-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft): 9.68	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1300										
~~1305~~		9.68	25.38	13.79	5.14	2.25	-96	22.0		
1305		9.68	25.56	13.99	6.68	1.91	-157	392		
1310		9.68	23.30	14.00	5.92	2.52	-145	21.7		
1315		9.68	22.88	14.00	5.54	2.77	-144	0.0		
1320		9.69	22.81	14.00	5.48	2.65	-146	0.0		
1325		9.69	22.79	14.00	5.48	2.79	-147	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO209-MWS	~~1325~~ 1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C028-PZM048	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft): 11.82	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1350		11.93	23.36	11.27	0.690	2.53	-217	38.6		
1355		11.95	23.22	11.04	0.646	2.35	-209	13.9		
1400		11.96	23.06	11.02	0.638	2.31	-210	8.6		
1405		11.96	22.76	10.94	0.633	2.33	-206	2.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C028-PZM048	1410

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C028-PZM010	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/16/25
Depth to Water (ft): 11.35	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1420		11.35	23.14	10.29	6.77	4.59	-103	16.8		
1425		11.35	23.49	10.19	7.23	4.47	-31	13.8		
1430		11.35	22.91	10.17	7.53	4.64	8	1.6		
1435		11.36	22.79	10.16	7.52	4.58	23	4.9		
1440		11.36	22.74	10.14	7.54	4.43	31	5.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C028-PZM010	1445

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027-PZM012	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 4.65	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1035		4.65	18.69	12.96	1.77	3.20	-343	1.7		
1040		4.65	18.36	13.17	1.78	2.93	-361	3.2		
1045		4.65	18.25	13.25	1.82	2.90	-358	5.3		
1050		4.65	18.19	13.30	1.85	2.87	-366	4.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM	1055

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027-PZM046	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 7.11	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1110		7.25	18.43	13.17	6.20	2.65	-361	0.0		
1115		7.28	18.53	13.18	6.32	2.61	-368	0.0		
1120		7.28	18.60	13.18	6.35	2.58	-375	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	1125

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0180-MWI	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 11.48	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1145		11.48	21.25	14.00	12.1	3.14	-238	0.0		
1150		11.48	21.20	14.00	12.1	2.48	-251	0.0		
1155		11.48	21.19	14.00	12.1	2.38	-249	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0180-MWI	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0180-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 11.52	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1210		11.52	20.21	13.88	4.45	2.83	-209	0.8		
1215		11.53	20.29	13.86	3.19	3.00	-201	0.2		
1220		11.53	20.43	13.82	2.82	2.96	-192	0.0		
1225		11.53	20.49	13.81	2.71	2.96	-188	0.0		
1230		11.53	20.56	13.76	2.70	2.94	-186	0.00		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0180-MWS	1235

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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 _____

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0181-MWI	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 12.13	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1250		12.13	19.20	14.00	4.57	4.01	-209	2.2		
1255		12.13	19.09	14.00	5.33	3.02	-212	2.4		
1300		12.18	19.12	14.00	5.62	3.13	-211	2.5		
1305		12.18	19.17	14.00	5.91	3.06	-213	2.0		
1310		12.20	19.39	14.00	5.94	2.93	-217	1.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0181-MWI	1315

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0181-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 12.25	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1325		12.27	18.48	13.79	2.87	2.97	-198	21.9		
1330		12.27	18.37	13.51	1.89	3.00	-172	9.5		
1335		12.29	18.32	13.35	1.32	3.04	-158	4.0		
1340		12.29	18.31	13.27	1.11	3.17	-149	2.0		
1345		12.30	18.24	13.30	1.09	3.16	-148	1.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0181-MWS	1350

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0201-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/19/25
Depth to Water (ft): 12.77	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1410		13.00	22.21	13.13	2.76	2.93	-107	24.2		
1415		13.00	22.41	13.15	2.81	2.68	-112	19.0		
1420		13.00	22.56	13.18	2.85	2.67	-114	17.2		
1425		13.00	22.67	13.29	2.95	2.53	-146	14.7		
1430		13.00	22.89	13.26	3.07	2.42	-189	13.9		
1435		13.00	22.71	13.19	3.11	2.38	-193	12.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0201-MWS	1440

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C058-PZM001	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/20/25
Depth to Water (ft): 13.56	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1420		13.91	20.07	13.60	1.66	3.49	-40	0.0		
1425		14.06	19.56	13.14	1.24	3.38	-47	0.0		
1430		14.22	19.45	12.15	0.701	3.67	-23	0.0		
1435		14.30	19.43	12.01	0.637	3.69	-5	0.8		
1440		14.34	19.87	12.12	0.625	3.58	-1	2.7		
1445		14.37	20.28	12.20	0.630	3.51	-4	5.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM001	1450

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO23-PZM008	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/20/25
Depth to Water (ft): 14.88	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
[illegible] 0940		14.88	16.63	13.06	3.65	3.30	-220	0.0		
0945		14.88	16.54	13.22	2.23	3.24	-220	0.0		
0950		14.88	16.58	13.31	1.86	3.33	-225	0.0		
0955		14.88	16.61	13.34	1.74	3.27	-214	0.0		
1000		14.88	16.71	13.35	1.69	3.19	-223	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO23-PZM008	1005

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO24-PZM007	Project Name: COA O2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/20/25
Depth to Water (ft): 14.51	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.68	17.68	11.21	0.671	3.32	-85	2.5		
1035		14.74	17.74	11.27	0.676	3.24	-82	3.0		
1040		14.78	17.68	11.43	0.834	3.07	-98	3.5		
1045		14.78	17.73	11.55	1.07	3.15	-118	1.5		
1050		14.80	17.83	11.59	1.53	3.12	-128	0.3		
1055		14.80	17.87	11.57	1.69	3.09	-131	0.0		
1100		14.82	18.01	11.56	1.86	3.01	-137	0.0		
1105		14.82	18.13	11.52	1.99	3.09	-140	0.0		
1110		14.82	18.16	11.50	2.02	3.06	-140	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO24-PZM007	1115

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C025-PZM008	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/20/25
Depth to Water (ft): 15.28	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1130		15.28	18.78	11.73	4.68	2.99	-179	54.0		
1135		15.28	18.30	12.03	3.46	2.96	-194	9.1		
1140		15.28	18.20	12.39	3.12	2.91	-195	0.4		
1145		15.28	18.09	12.55	3.03	3.02	-197	0.0		
1150		15.28	18.00	12.68	2.95	2.94	-198	0.0		
1155		15.28	18.01	12.74	2.88	2.97	-196	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C025-PZM008	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.27	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1335		15.70	21.81	13.57	2.20	3.88	-88	12.5		
1340		15.89	20.87	13.66	2.21	3.36	-93	5.4		
1345		16.02	20.71	13.76	2.23	3.26	-105	22.5		
1350		16.38	20.43	13.82	2.24	3.26	-118	21.8		
1355		16.63	20.56	13.89	2.25	3.01	-125	21.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
COA-2026-PZM007	1400

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: GD02-MWI	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/22/25
Depth to Water (ft): 18.63	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0945		18.65	15.54	6.77	0.674	6.19	-61	18.5		
0950		18.67	14.76	7.42	0.647	4.75	-128	17.0		
0955		18.67	14.46	7.86	0.633	4.72	-146	19.0		
1000		18.67	14.21	8.11	0.631	4.85	-151	19.7		
1005		18.70	14.16	8.22	0.631	4.98	-151	19.0		
1010		18.70	14.19	8.25	0.632	4.91	-150	17.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD02-MWI	1015

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	X
O&G			
Total Cyanide	X	VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: GD01-MW1	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/22/25
Depth to Water (ft): 34.22	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1050										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD01-MW1	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	X
O&G			
Total Cyanide	X	VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	X
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	

Well Condition

Casing Volume: 1" ID = 0.041 gal/ft - 2" ID = 0.163 gal/ft - 4" ID = 0.653 gal/ft - 6" ID = 1.47 gal/ft

_____ ft x _____ gal/ft = _____ (gal)

Well is structurally sound: not bent, broken, and no blockage identified	X
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	X
Well permit is present	X

Sampled By: CW

Comments: unable to get steady flow despite DTW detected, replaced tubing twice w/ no success

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0194 - MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/22/25
Depth to Water (ft): 13.10	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1155		13.10	15.09	14.00	8.54	3.78	-163	2.6		
1200		13.10	15.09	14.00	8.83	3.81	-162	2.8		
1205			15.29	14.00	9.05	3.93	-171	2.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0194-MWS	1210

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0195-MW5	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/22/25
Depth to Water (ft): 13.25	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1230		13.25	16.76	14.00	2.88	3.19	-215	4.6		
1235		13.25	16.97	14.00	2.56	2.89	-225	2.2		
1240		13.25	17.10	14.00	2.46	2.81	-226	1.6		
1245		13.26	17.31	14.00	2.42	2.73	-230	1.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0195-MW5	1250

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0196-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 12.59	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1310		12.60	18.86	14.00	2.55	2.86	-141	2.5		
1315		12.60	19.20	13.97	2.54	2.55	-128	1.9		
1320		12.60	19.54	13.94	2.53	2.42	-125	1.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0196-MWS	1325

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0198-MWS	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/22/25
Depth to Water (ft): 13.13	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1350		13.13	18.00	14.00	10.0	2.64	-162	2.9		
1355		13.13	17.65	14.00	10.6	2.57	-188	4.3		
1400		13.14	17.44	14.00	11.8	2.53	-215	5.4		
1405		13.15	17.24	14.00	12.7	2.53	-215	4.6		
1410		13.15	17.11	14.00	13.1	2.55	-232	4.0		
1415			16.90	14.00	13.4	2.55	-232	3.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0198-MWS	1420

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM060	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 13.07	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0935			17.47	14.00	6.23	4.15	-128	0.8		
0940			17.30	14.00	6.49	3.52	-179	2.1		
0945			17.02	14.00	6.84	3.57	-191	2.3		
0950			16.71	14.00	6.91	3.55	-193	2.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM060	0955

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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: CN

Comments: well disconnected at top, used tubing attached to probe to feed down, no DTW throughout purging record

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM015	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 11.11	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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			16.66	14.00	3.00	3.45	-196	1.6		
1015			16.48	14.00	2.94	3.46	-196	1.0		
1020			16.44	14.00	2.94	3.51	-195	1.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM060	1025

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log C056-PZP001

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C056-PZP001	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 14.90	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
~~1000~~ 1105			16.19	13.84	2.17	4.35	-98	0.7		
1110			15.60	13.88	2.15	3.70	-129	1.1		
1115			15.47	13.86	2.12	3.70	-118	1.6		
1120			15.45	13.82	2.08	3.74	-112	1.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
~~C056-PZP0001~~ C056-PZP001	1125

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C055-PZM000	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 14.17	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1140		14.47	15.77	14.00	4.11	4.62	-92	15.7		
1145		14.58	15.83	14.00	3.72	4.62	-88	27.0		
1150		14.69	16.08	14.00	2.80	5.46	-74	28.5		
1155			16.26	14.00	2.30	5.33	-63	22.5		
1200										
			DRY							

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZM000	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

Well Condition

Casing Volume 1" ID = 0.041 gal/ft - 2" ID = 0.163 gal/ft - 4" ID = 0.653 gal/ft - 6" ID = 1.47 gal/ft

_____ ft x _____ gal/ft = _____ (gal)

Well is structurally sound: not bent, broken, and no blockage identified	X
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	X
Well permit is present	

Sampled By: CN

Comments: well on dry

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO206R-MW5	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 13.60	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1215		13.60	17.04	13.35	2.77	3.15	-216	19.1		
1220		13.60	16.85	13.32	2.79	3.19	-219	15.1		
1225		13.62	16.89	13.35	2.75	3.15	-219	12.0		
1230		13.62	17.19	13.34	2.74	3.12	-218	10.0		
1235		13.62	17.27	13.34	2.74	3.06	-218	6.7		
1240		13.63	17.34	13.34	2.73	3.07	-217	6.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO206R-MW5	1245

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C057-PZP002	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 15.55	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1325		16.17	19.73	11.67	0.981	3.85	-68	2.4		
1330		16.20	19.13	11.37	0.817	3.96	-35	3.2		
1335			18.27	11.22	0.790	4.23	-8	3.8		
1340			18.37	11.17	0.783	4.29	-9	2.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057-PZP002	1345

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
TPH-GRO		BTEX and naphthalene	X
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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	X
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" ID 0.041 gal/ft - 2" ID 0.163 gal/ft - 4" ID 0.653 gal/ft - 6" ID 1.47 gal/ft

ft x gal/ft (gal)

Well is structurally sound: not bent, broken, and no blockage identified	X
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C059-PZP002	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/23/25
Depth to Water (ft): 15.63	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1405		15.63	17.18	10.11	2.03	3.46	45	0.0		
1410		15.83	16.84	10.14	2.00	3.31	47	0.0		
1415		15.63	17.00	10.07	1.87	3.63	60	0.0		
1420		15.63	16.81	10.11	1.80	3.91	68	0.0		
1425			16.43	10.16	1.76	4.05	70	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C059-PZP002	1430

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

Well Condition

Casing Volume: 1" ID = 0.041 gal/ft - 2" ID = 0.163 gal/ft - 4" ID = 0.653 gal/ft - 6" ID = 1.47 gal/ft

_____ ft x _____ gal/ft = _____ (gal)

Well is structurally sound; not bent, broken, and no blockage identified	X
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	X
Well permit is present	

Sampled By _____

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C055-PZM000	Project Name: COA Q2 GW 2025
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 5/27/25
Depth to Water (ft): 14.26	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft): 17.2	Length of time Purged (min)

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	
1025		15.67	18.57	14.00	2.09	5.63	-47	126		
1030		15.85	19.83	14.00	1.92	5.21	-53	67.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZM000	1035

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments: previously ran dry, took sample today before stabilized due to rapidly increasing DTW

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: GD01-MWI	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 5/29/25
Depth to Water (ft): 34.20	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1215			17.27	9.69	17.6	3.23	-146	2.4		
1220			17.39	9.59	17.7	2.92	-165	0.0		
1225			17.53	9.53	17.8	2.78	-180	0.0		
1230			17.47	9.49	17.8	2.69	-190	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD01-MWI	1235

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	[illegible]	Dissolved Zn and Cd	
TPH-GRO			
TPH-DRO		BTEX and naphthalene	X
O&G			
Total Cyanide	X	VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	X
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	X
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	X
Well permit is present	X

Sampled By: ON

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093-PZM	Project Name: COA Q3 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/12/25
Depth to Water (ft): 10.70	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
~~0930~~ 0940		11.46	22.66	7.50	0.632	2.28	-333	2.1		
0945		11.52	22.80	7.85	0.616	2.14	-351	3.0		
0950		11.52	23.34	8.29	0.625	2.05	-374	2.0		
0955		11.54	23.61	8.63	0.623	2.01	-389	0.0		
1000		11.56	23.81	8.86	0.638	1.97	-397	0.0		
1005		11.56	24.05	9.65	0.651	1.94	-435	0.0		
1010		11.56	24.23	10.73	0.678	1.91	-484	0.0		
1015		11.56	24.29	11.23	0.773	1.90	-500	0.0		
1020		11.57	24.37	11.33	0.803	1.88	-502	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	1025

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO190-MWS	Project Name: CoA Q3 2025
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/12/25
Depth to Water (ft): 14.33	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.80	26.77	7.52	3.24	1.98	-249	8.1		
1100		14.55	27.16	7.33	3.28	1.73	-238	5.6		
1105		14.55	27.72	7.20	3.32	1.64	-233	2.3		
1110		14.55	23.06	7.17	3.32	1.58	-233	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO190-MWS	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027-PZM012	Project Name: COA Q3 2025
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/12/25
Depth to Water (ft): 4.10	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1155		4.17	26.68	11.60	3.45	2.42	-477	148		
1200		4.17	25.80	11.66	3.46	1.89	-466	59.7		
1205		4.18	25.76	11.66	2.95	1.80	-463	6.2		
1210		4.18	25.93	11.61	2.35	1.74	-454	0.0		
1215		4.18	25.86	11.61	1.95	1.72	-450	0.0		
1220		4.19	25.90	11.60	1.75	1.70	-452	0.0		
1225		4.19	26.01	11.60	1.69	1.69	-456	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM012	1230

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	X
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	X
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 broken	
Well permit is present	

Sampled By: ON

Comments: lots of overgrown vegetation

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027 - PZM046	Project Name: COA Q3 2025
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/12/25
Depth to Water (ft): 7.15	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s u) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1240		7.10	26.39	11.42	5.38	1.61	-403	0.0		
1245		7.18	25.84	11.50	5.81	1.64	-378	7.0		
1250		7.18	25.80	11.51	5.93	1.64	-372	8.8		
1255		7.18	25.83	11.51	5.96	1.64	-372	7.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	1300

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	

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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM043	Project Name: COA Q3 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/13/25
Depth to Water (ft): 13.17	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1303			25.03	11.43	4.43	2.69	-217	58.6		
1308			25.40	11.49	4.53	2.26	-225	46.8		
1313			25.53	11.27	6.64	2.04	-254	34.1		
1318			25.58	11.22	7.34	1.96	-259	29.6		
1323			25.58	11.19	7.91	1.88	-261	26.3		
1328			25.92	11.15	8.99	1.81	-264	23.1		
1333			25.90	11.13	9.59	1.77	-265	22.7		
1338			25.77	11.11	10.1	1.74	-266	21.8		
1343			25.70	11.10	10.3	1.72	-268	20.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM043	1345

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM008	Project Name: COA Q3 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/13/25
Depth to Water (ft): 12.70	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1400		12.92	25.57	11.73	5.43	1.81	-255	349		
1405		12.96	25.47	11.81	3.72	1.76	-257	85.3		
1410		13.03	25.41	11.83	3.20	1.76	-259	26.0		
1415		13.05	25.34	11.82	2.95	1.73	-262	13.0		
1420		13.09	25.34	11.79	2.75	1.70	-261	5.1		
1425		13.09	25.63	11.74	2.57	1.69	-252	2.7		
1430		13.13	25.59	11.67	2.40	1.69	-240	0.8		
1435		13.13	25.53	11.49	2.03	1.73	-207	0.0		
1440			25.66	11.39	1.92	1.83	-198	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1445

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C037-~~PZM003~~ PZM003	Project Name: COA Q3 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/14/25
Depth to Water (ft): 14.34	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.48	23.59	14.00	9.95	3.16	-162	1.6		
1010		14.48	24.13	14.00	9.86	2.36	-177	0.0		
1015		14.48	24.48	14.00	9.86	2.22	-182	0.0		
1020		14.48	24.66	14.00	9.82	2.03	-178	0.0		
1025		14.49	24.95	14.00	9.73	2.00	-175	0.0		
1030		14.49	24.88	14.00	9.70	1.94	-178	0.0		
1035		14.49	25.09	14.00	9.65	1.92	-184	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-~~PZM003~~ PZM003	

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO38-PZM043	Project Name: CoA Q3 2025
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/14/25
Depth to Water (ft): 10.50	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1110		11.03	23.90	12.10	1.84	1.91	-144	121		
1115		11.03	23.83	10.61	1.62	1.80	-277	154		
1120		11.03	23.91	9.95	[illegible]	1.78	-282	151		
1125		11.03	24.23	9.47	1.63 1.61	1.76	-251	104		
1130		11.04	24.22	9.13	1.62	1.76	-228	71.9		
1135		11.04	24.27	8.89	1.63	1.75	-217	53.9		
1140		11.05	24.43	8.73	1.64	1.72	-209	37.1		
1145		11.05	24.38	8.64	1.66	1.71	-203	21.3		
1150		11.06	24.44	8.56	1.67	1.70	-200	20.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO38-PZM043	1155

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/14/25
Depth to Water (ft): 12.74	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1240		12.74	26.69	11.85	2.09	1.89	-271	11.6		
1245		12.74	26.30	11.90	2.10	1.80	-278	18.6		
1250		12.74	25.98	11.94	2.11	1.71	-277	24.8		
1255		12.76	25.67	11.93	2.10	1.68	-278	26.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM006	1300

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM042	Project Name: COA Q3 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/18/25
Depth to Water (ft): 14.79	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0950		14.81	22.46	8.15	0.759	3.52	-81	16.2		
0955		14.82	20.92	11.86	0.778	3.16	-241	13.0		
1000		14.82	20.67	12.63	0.779	3.03	-266	18.8		
1005		14.83	20.55	12.97	0.776	2.94	-272	19.4		
1010		14.83	20.42	13.06	0.782	2.89	-277	17.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM042	1015

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM007	Project Name: COA Q3 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/18/25
Depth to Water (ft): 13.84	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1025		13.84	20.40	13.67	4.18	3.01	-263	10.5		
1030		13.84	20.13	13.94	4.55	2.86	-298	11.3		
1035		13.94	20.03	13.96	4.61	2.83	-307	11.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	1040

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C040-PZM008	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/18/25
Depth to Water (ft): 14.17	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1120		14.18	19.55	13.21	2.60	3.03	-289	—		
1125		14.19	18.99	13.29	2.43	2.90	-297	533		
1130		14.19	18.86	13.31	2.40	2.86	-304	254		
1135		14.19	18.63	13.35	2.39	2.89	-309	202		
1140		14.19	18.51	13.39	2.38	2.90	-308	179		
1145		14.20	18.47	13.41	2.38	2.91	-311	137		
1150		14.20	18.34	13.48	2.37	2.91	-312	113		
1155		14.22	18.27	13.54	2.37	2.91	-316	103		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-PZM008	1200

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041-PZM036	Project Name: COA Q3 2025 GW
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date: 8/18/25
Depth to Water (ft): 16.17	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		16.17	19.82	13.62	0.841	5.75	-318	134		
1250		16.17	19.73	13.71	0.806	3.21	-332	39.5		
1255		16.17	19.71	13.77	0.796	3.00	-341	23.5		
1300		16.18	19.71	13.81	0.785	2.93	-345	19.1		
1305		16.18	19.62	13.78	0.785	2.91	-348	20.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM036	1310

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041-PZM001	Project Name:
Well Diameter (in):	Project Number: 20010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.62	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1320		15.62	20.29	10.31	0.800	2.86	-297	17.7		
1325		15.64	20.69	9.65	0.860	2.68	-305	49.1		
1330		15.64	21.01	9.39	0.848	2.61	-305	45.1		
1335		15.64	21.14	9.25	0.845	2.57	-305	31.4		
1340		15.64	21.01	9.15	0.853	2.58	-306	36.5		
1345		15.64	20.89	9.10	0.856	2.58	-309	22.0		
1350		15.64	20.81	9.04	0.860	2.57	-310	29.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1355

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0182-MWI	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/20/25
Depth to Water (ft): 14.43	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1105		15.45	20.39	7.88	0.835	4.30	-161	21.0		
1110		15.48	20.68	8.29	0.831	3.87	-178	14.1		
1115		15.49	20.76	8.31	0.834	3.78	-181	14.6		
1120		15.49	20.87	8.38	0.834	3.50	-185	14.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0182-MWI	1125

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments: *needs new well cap* (broke when I removed it)

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM015	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/20/25
Depth to Water (ft): 11.43	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1210		11.45	21.16	14.00	2.72	8.09	-239	403		
1215		11.45	20.71	14.00	2.90	2.99	-248	423		
1220		11.46	20.54	14.00	2.93	3.00	-251	443		
1225		11.46	20.49	14.00	2.94	2.96	-254	433		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM015	1230

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0195-MWS	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/20/25
Depth to Water (ft): 13.52	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		13.52	21.37	14.00	2.43	3.59	-227	10.4		
1300		13.52	21.20	14.00	2.43	3.11	-246	8.0		
1305		13.52	21.22	14.00	2.43	2.98	-254	7.3		
1310		13.52	21.24	14.00	2.43	2.92	-255	5.3		
1315		13.52	21.22	14.00	2.43	2.83	-256	4.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0195-MWS	1320

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C023-PZM008	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/20/25
Depth to Water (ft): 14.78	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1350		14.78	22.14	13.84	2.33	2.74	-270	2.5		
1355		14.78	22.38	13.85	1.90	2.66	-282	1.7		
1400		14.78	22.35	13.87	1.77	2.60	-288	1.5		
1405		14.78	22.33	13.90	1.72	2.60	-293	1.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C023-PZM008	1410

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO206R-MWS	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/21/25
Depth to Water (ft): 13.70	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0950			18.98	13.54	2.44	3.34	-282	4.5		
0955			18.83	13.76	2.50	3.07	-278	5.7		
1000			18.87	13.80	2.52	3.01	-285	6.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO206R-MWS	1005

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C025-PZM008	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.15	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1040		15.15	18.96	13.21	2.97	4.29	-245	25.9		
1045		15.16	18.68	13.31	2.99	3.02	-259	24.1		
1050		15.16	18.59	13.37	2.92	2.90	-261	24.2		
1055		15.16	18.58	13.41	2.86	2.86	-271	9.9		
1100			18.55	13.44	2.83	2.82	-268	2.5		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C025-PZM008	1105

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C026-PZM007	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 15.14	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1120		15.31	19.03	14.00	2.51	3.43	-175	23.6		
1125		15.33	18.99	14.00	2.52	3.01	-184	15.0		
1130		15.33	18.98	14.00	2.53	2.92	-190	12.2		
1135		15.41	19.00	14.00	2.53	2.85	-195	8.8		
1140		15.47	19.12	14.00	2.52	2.79	-197	7.8		
1145		15.52	19.21	14.00	2.51	2.70	-203	7.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C026-PZM007	1150

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C055 – PZM000	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/21/25
Depth to Water (ft): 14.25	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1210		15.50	19.88	14.00	1.81	3.83	-128	5.2		
1215		15.62	20.21	14.00	1.62	4.32	-114	7.1		
1220		15.63	20.30	14.00	1.62	4.44	-113	5.2		
1225		1	20.37	14.00	1.62	4.53	-111	3.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZM000	1230

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: Only able to fill 2 vials before well ran dry

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C056-PZP001	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/21/25
Depth to Water (ft): 14.98	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1315		14.98	20.28	14.00	2.05	4.56	-112	5.3		
1320		14.98	19.62	14.00	2.12	3.08	-160	5.3		
1325		14.98	19.57	14.00	2.11	2.95	-152	6.5		
1330		14.98	19.54	14.00	2.08	2.84	-155	1.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C056-PZP001	1335

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C057 - PZP002	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/21/25
Depth to Water (ft): 15.71	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		16.08	19.50	12.53	1.15	2.95	-47	36.6		
1400		16.24	19.27	12.07	0.748	2.84	-45	7.3		
1405		16.31	19.25	11.92	0.640	2.92	-32	5.8		
1410		16.37	19.33	11.93	0.584	2.81	-60	2.2		
1415		16.39	19.43	11.94	0.572	2.76	-90	0.0		
1420			19.52	11.91	0.569	2.74	-100	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057-PZP002	1425

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C058-PZM001	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/22/25
Depth to Water (ft): 13.32	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		13.52	21.11	13.50	1.92	4.86	-125	14.2		
1015		13.61	21.32	13.70	1.94	2.97	-149	3.7		
1020		13.70	21.59	13.66	1.75	2.78	-143	0.0		
1025		13.77	21.71	13.43	1.51	2.61	-141	0.0		
1030		13.89	22.00	12.85	0.997	2.51	-130	0.0		
1035		13.92	22.35	12.81	0.753	2.42	-121	0.0		
1040		13.96	22.85	12.88	0.745	2.32	-125	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM001	1045

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C059 - PZP002	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 6/22/25
Depth to Water (ft): 15.69	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1105		15.69	20.86	12.72	1.84	2.49	-54	0.0		
1110		15.69	20.74	12.54	1.79	2.46	-63	0.0		
1115		15.69	20.53	12.39	1.74	2.45	-61	0.0		
1120		15.69	20.70	12.40	1.70	2.42	-61	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C059-PZP002	1125

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO24-PZM007	Project Name: COA GW 2025 Q3
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 8/22/25
Depth to Water (ft): 14.55	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1205		14.64	22.81	11.87	0.844	2.23	-31	0.0		
1210		14.72	22.63	11.76	0.843	2.16	-62	3.5		
1215		14.72	22.87	11.48	1.47	2.05	-154	8.3		
1220		14.72	23.21	11.38	1.75	2.00	-169	6.7		
1225		14.72	23.37	11.36	1.88	1.98	-183	2.2		
1230		14.72	23.57	11.33	1.94	1.95	-187	0.2		
~~1235~~										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO24-PZM007	1235

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C058-PZM001	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 10.68	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0925		14.12	15.58	12.31	1.66	5.05	-31	28.0		
0930		14.15	15.30	12.30	1.53	4.20	-74	13.9		
0935		14.15	15.19	11.98	1.13	3.98	-87	6.6		
0940		14.18	15.30	11.80	0.879	3.90	-91	7.6		
0945		14.25	15.59	11.88	0.803	3.80	-98	5.5		
0950		~~14.27~~	15.72	12.02	0.815	3.84	-108	2.9		
0955		14.27	15.67	12.07	0.825	3.78	-115	2.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM001	1000

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO26-PZM007	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 15.30	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C) 16.66	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	
1035		15.55	[illegible]	12.44	2.27	7.56	-83	13.8		
1040		15.62	16.40	12.73	2.75	4.32	-178	13.1		
1045		15.69	16.39	12.81	2.82	3.80	-198	14.2		
1050		15.74	16.40	12.87	2.88	3.48	-221	13.1		
1055		15.76	16.54	12.91	2.89	3.41	-232	14.2		
1100		15.78	16.63	12.91	2.89	3.36	-235	12.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO26-PZM007	1105

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C060-PZP001	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	

Dry

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C060-PZP001	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C025-PZM008	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 15.25	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1130			17.43	10.91	5.60	3.62	-147	511		
1135			17.36	10.98	4.43	3.17	-177	— maxed out *		
1140			17.44	11.05	3.69	3.63	-179	379		
1145			17.45	11.30	3.21	3.14	-204	112		
1150			17.50	11.50	3.05	3.09	-222	130		
1155			17.59	11.59	2.98	3.05	-231	40		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C025-PZM008	1200

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: *Cleared out horiba to remove sediment

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO206R-MWS	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 13.85	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1220		13.85	17.25	12.04	2.33	3.76	-219	6.7		
1225		13.85	17.24	12.08	2.30	3.24	-235	1.2		
1230		13.85	17.39	12.09	2.26	3.08	-248	0.0		
1235		13.85	17.44	12.10	2.24	3.05	-257	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO206R-MWS	1240

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C057-PZP002	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 15.86	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1300		15.86	18.11	10.92	1.77	5.93	-119	9.0		
1305		15.86	17.57	10.26	1.45	3.52	-98	3.7		
1310		15.86	17.59	10.13	1.27	3.42	-94	1.7		
1315		15.89	17.61	10.03	1.17	3.33	-90	0.8		
1320		15.89	17.71	9.96	1.12	3.28	-90	0.0		
1325		15.89	17.70	9.94	1.12	3.22	-94	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057-PZP002	1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C059 - ~~PZM~~ PZP002	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/7/25
Depth to Water (ft): 15.92	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1400		15.92	17.31	9.61	2.14	3.55	-47	23.5		
1405		15.92	17.07	9.49	2.13	3.58	-43	25.7		
1410		15.92	17.01	9.42	1.83	3.74	-37	24.3		
1415		16.10	16.99	9.39	1.72	3.75	-34	22.0		
1420		16.28	16.96	9.38	1.66	3.80	-32	19.5		
1425		16.28	16.97	9.39	1.62	3.77	-32	17.1		
1430		16.31	16.92	9.40	1.60	3.69	-33	16.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C059-PZP002	1435

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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.~~	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: [redacted]	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/11/25
Depth to Water (ft): 14.49	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1145		15.47	12.09	12.28	2.81	5.81	97	127		
1150		15.98	11.13	12.84	2.70	5.45	39	117		
1155		16.36	10.32	12.96	2.39	5.38	6	93.5		
1200		16.94	9.95	12.96	2.13	5.53	-6	104		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
[redacted] CO55-P2M000	* 1205

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	

Sampled By: CN

Comments: Cannot turn pump any lower *opted to collect sample even though not stabilized

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: ~~[illegible]~~ C056-P28001	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/11/25
Depth to Water (ft): 15.23	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1235		15.23	10.00	12.54	2.03	7.36	-12	22.1		
1240		15.23	10.16	12.45	2.05	5.17	-67	20.0		
1245		15.25	10.21	12.48	2.08	4.85	-92	19.1		
1250		15.26	10.22	12.51	2.08	4.81	-105	18.6		
1255		15.27	10.47	12.52	2.09	4.71	-116	17.5		
1300		15.27	10.47	12.54	2.09	4.68	-120	16.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C056-P28001 ~~[illegible]~~	1305

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO23-PZM008	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/11/25
Depth to Water (ft): 14.98	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1335		14.98	11.16	11.87	1.86	10.69	-37	6.4		
1340		14.98	11.07	11.85	6.08	4.36	-198	66.0		
1345		14.98	11.11	12.02	4.070	3.77	-224	20.7		
1350		14.98	11.05	12.12	3.53	3.70	-235	8.3		
1355		14.98	11.02	12.18	2.72	3.71	-242	4.4		
1400		14.98	11.01	12.27	2.12	3.71	-248	3.6		
1405		14.99	11.24	12.30	1.85	3.67	-252	3.1		
1410		14.99	11.23	12.29	1.76	3.73	-247	4.1		
1415			11.04	12.31	1.71	3.85	-243	3.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO23-PZM008	1420

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C024-PZM007	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/11/25
Depth to Water (ft): 14.68	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1455		14.72	12.89	10.46	0.941	4.93	-73	9.5		
1500		14.85	13.00	10.43	0.943	3.95	-80	10.6		
1505		14.86	12.98	10.53	1.02	3.57	-95	6.1		
1510			12.86	10.54	1.14	3.44	-104	8.7		
1515			12.68	10.57	1.24	3.39	-116	8.1		
1520			12.82	10.57	1.58	3.33	-126	8.6		
1525			12.82	10.58	1.68	3.34	-133	7.1		
1530			12.35	10.59	1.81	3.38	-139	8.7		
1535			12.29	10.59	1.85	3.40	-144	7.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C024-PZM007	1540

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0201-MWS	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 13.56	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0955		13.60	16.13	5.82	8.82	21.27	123	0.8		
1000		13.64	15.84	8.73	10.3	15.83	56	0.9		
1005		13.68	15.72	9.53	10.8	39.33	39	0.8		
1010		13.70	15.66	9.70	11.0	19.78	30	0.5		
1015		13.72	15.71	9.79	11.2	27.31	22	0.3		
1020		13.72	15.74	9.84	11.2	11.01	13	0.4		
1025		13.75	15.82	9.85	11.2	11.30	7	0.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0201-MWS	1030

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	

Sampled By: CN

Comments: DO sensor maybe acting up?

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C030-PZM015	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 12.47	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1050		12.49	16.61	11.82	3.60	11.30	-205	0.9		
1055		12.49	16.89	11.79	3.31	7.27	-268	0.4		
1100		12.50	17.17	11.80	3.11	5.92	-269	0.0		
1105		12.50	17.52	11.69	3.04	5.58	-222	0.0		
1110		12.51	17.78	11.63	2.98	5.28	-260	0.0		
1115		12.51	17.91	11.69	2.97	4.82	-263	0.0		
1120		12.51	17.96	11.62	2.96	4.69	-260	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM015	1125

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0198-MWS	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 14.75	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1220		14.75	21.34	11.95	7.85	17.03	-162	2.6		
1225		14.76	19.81	12.11	10.5	6.27	-290	3.0		
1230		14.76	19.12	12.16	10.9	4.92	-236	2.8		
1235		14.76	18.91	12.18	11.1	4.30	-293	1.7		
1240		14.76	18.81	12.19	11.1	3.96	-255	1.9		
1245		14.77	18.53	12.21	11.2	3.89	-294	1.5		
1250		14.77	18.36	12.19	12.0	3.89	-294	1.5		
1255		14.77	18.36	12.22	11.5	3.93	-295	1.4		
1300			18.35	12.22	11.6	3.96	-285	1.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0198-MWS	1305

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO194-MW5	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 14.53	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1315		14.53	18.70	12.34	8.14	5.93	-201	0.0		
1320		14.53	18.22	12.35	8.20	3.76	-304	0.0		
1325		14.53	18.23	12.38	8.21	4.94	-251	0.0		
1330		14.53	18.41	12.38	8.24	4.77	-270	0.0		
1335		14.53	18.37	12.39	8.36	5.00	-305	0.0		
1340		14.53	18.20	12.40	8.43	4.24	-289	0.0		
1345		14.55	18.20	12.39	8.40	4.19	-289	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO194-MW5	1350

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0195-MWS	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 14.55	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1400		14.55	18.50	11.89	3.05	7.22	-211	1.4		
1405		14.55	17.97	11.76	2.71	5.17	-222	0.5		
1410		14.55	17.77	11.71	2.59	5.65	-231	0.0		
1415		14.55	17.62	11.71	2.50	6.18	-241	0.2		
1420		14.55	17.67	11.67	2.46	6.13	-242	0.1		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0195-MWS	1425

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0196-MWS	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/12/25
Depth to Water (ft): 13.88	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
~~MWS~~ 1440		13.89	18.03	13.50	2.49	8.58	-331	25.3		
1445		13.89	18.15	13.28	2.52	7.54	-328	20.2		
1450		13.89	18.23	13.24	2.55	6.18	-329	17.2		
1455		13.89	18.33	13.23	2.56	5.67	-336	15.4		
1500		13.89	18.42	13.16	2.56	5.40	-334	14.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0196-MWS	1505

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X

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	X
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	X
Well permit is present	X

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C041-PZM036	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/13/25
Depth to Water (ft): 7.14	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		17.14	16.61	8.91	0.977	7.84	-258	2.7		
1010		17.15	15.91	10.54	0.977	10.46	-170	2.7		
1015		17.15	15.87	10.80	0.979	7.77	-313	2.3		
1020		17.15	15.97	11.11	0.963	5.53	-325	2.4		
1025		17.15	15.96	11.12	1.01	4.85	-285	2.2		
1030		17.16	15.97	11.14	1.03	3.96	-200	2.0		
1035		17.16	15.95	11.14	1.07	3.84	-202	2.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM036	1040

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: COA4-PZM001	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 10/13/25
Depth to Water (ft): 16.01	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
[illegible] 1050		16.03	16.15	10.34	0.967	3.86	-293	0.9		
1055		16.04	15.74	8.44	1.04	4.41	-274	1.4		
1100		16.04	15.73	8.04	1.07	6.63	-274	1.6		
1105			15.65	7.96	1.08	7.88	-276	1.9		
1110			15.70	7.92	1.08	7.71	-279	2.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027-PZM012	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/13/25
Depth to Water (ft): 5.44	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1140		5.44	16.15	11.25	1.79	4.42	-299	474		
1145		5.44	16.09	11.66	2.31	2.84	-345	109		
1150		5.44	16.19	11.71	2.40	2.57	-358	118		
1155		5.45	16.23	11.75	2.47	2.39	-358	106		
1200		5.45	16.27	11.78	2.38	2.44	-361	101		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM012	1205

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C027 - PZM046	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/13/25
Depth to Water (ft): 7.14	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1215		7.26	16.40	10.07	2.76	2.40	-318	3.2		
1220		7.42	16.27	9.28	2.67	2.86	-324	3.2		
1225		7.69	16.29	8.90	2.67	3.01	-328	3.3		
1230		7.73	16.35	9.04	2.95	3.15	-341	3.0		
1235		7.73	16.37	8.51	3.74	3.55	-308	0.9		
1240		7.73	16.23	11.55	4.27	2.44	-229	0.1		
1245		7.73	16.25	11.88	4.43	8.05	-440	0.1		
1250		7.73	16.20	11.87	4.49	2.01	-436	0.0		
1255		7.75	16.25	11.90	4.51	2.24	-437	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	1300

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM008	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/13/25
Depth to Water (ft): ~~14.68~~ 14.68	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1325		14.74	18.08	12.05	3.25	8.04	-256	19.2		
1330		14.79	17.38	12.13	3.23	6.41	-259	10.3		
1335		14.86	17.37	12.12	3.20	4.80	-267	8.0		
1340		15.08	17.36	12.11	3.16	4.05	-275	4.2		
1345		15.12	17.24	12.10	3.11	3.24	-254	3.7		
1350		15.18	17.10	12.09	3.07	3.74	-272	4.4		
1355		15.24	17.02	11.98	3.02	3.88	-272	4.2		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1400

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
Bolts in place	
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	N/A
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

p. 1 of 2

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: CO36-PZM043	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/13/25
Depth to Water (ft): 14.95	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1405		14.95	16.93	11.76	2.78	11.28	-181	3.1		
1410		14.95	16.78	11.59	2.22	4.45	-151	1.6		
1415		14.95	16.71	11.52	1.99	4.77	-131	1.1		
1420			16.57	13.20	1.88	5.46	-197	1.1		
1425			16.43	12.86	1.85	6.72	-168	1.2		
1430			16.46	12.65	1.80	6.40	-146	0.7		
1435			16.48	12.41	1.76	6.43	-123	0.7		
1440			16.47	12.27	1.76	6.59	-111	0.6		
1445			16.46	12.15	1.76	5.43	-98	0.7		
1450			16.36	13.63	1.75	5.28	-169	0.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO36-PZM043	

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

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ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C036-PZM043	Project Name: ~~Croyle Landfill 2nd Half 2025~~ COA-Q4
Well Diameter (in):	Project Number: ~~20250112~~
Depth to Product (ft):	Date: 11/3/25
Depth to Water (ft):	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1455		14.95	16.29	13.35	1.74	7.23	-150	0.5		
1500		14.95	16.20	12.99	1.74	6.85	-130	0.8		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM043	1505

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments: DO sensor acting up. Sample collected after one hour,

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM042	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/14/25
Depth to Water (ft): 15.95	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0830		15.95	15.97	5.27	0.494	3.10	320	0.0		
0835		15.95	14.37	11.82	0.817	4.35	-186	0.0		
0840		15.97	14.69	12.21	0.808	3.91	-196	0.0		
0845		15.97	14.94	12.35	0.812	3.67	-203	0.0		
0850		15.97	15.06	12.30	0.804	3.64	-202	0.0		
0855										

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM042	0900

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C039-PZM007	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/14/25
Depth to Water (ft): 14.44	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
0910		14.68	15.43	12.29	0.874	3.70	-193	0.0		
0915		14.68	15.43	13.29	4.24	3.34	-238	0.0		
0920		14.68	15.60	13.48	4.42	3.18	-265	0.0		
0925		14.72	15.62	13.54	4.45	3.15	-269	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	0930

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZM006	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/18/25
Depth to Water (ft): 13.92	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1000			13.94	9.20	2.08	6.90	-164	11.6		
1005			13.85	11.30	2.07	3.97	-249	8.8		
1010			14.05	11.52	2.10	3.69	-260	11.3		
1015			14.21	11.75	2.09	3.54	-261	12.5		
1020			14.23	11.84	2.08	3.48	-262	6.6		
1025			14.51	11.89	2.03	3.42	-264	4.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM006	1030

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C038-PZM043	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/18/25
Depth to Water (ft): 11.43	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1035			14.34	11.96	2.02	3.53	-270	2.6		
1040			14.33	11.96	2.04	3.64	-272	2.2		
—	—	—	—	—	—	—	—	—	—	—
1050		11.86	14.38	10.33	1.76	3.78	-212	0.0		
1055		12.10	14.83	9.34	1.66	3.33	-201	0.0		
1100		12.30	15.11	8.87	1.63	3.24	-182	0.0		
1105		12.32	15.11	8.67	1.63	3.23	-173	0.0		
1110			14.94	8.60	1.64	3.24	-168	0.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments: tubing leaking, disregard 1035 + 1040

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C0182-MWI	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/18/25
Depth to Water (ft): 15.43	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
~~1130~~ 1140		16.16	15.45	~~9.25~~ 8.21	0.849	4.38	-109	20.0		
1145		16.24	14.19	8.19	0.860	3.53	-123	13.3		
1150		16.26	14.19	8.26	0.856	3.40	-131	13.3		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0182-MWI	1155

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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: C040-PZM008	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/18/25
Depth to Water (ft): 15.05	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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
1215		15.14	14.12	11.75	2.17	3.25	-269	10.0 → too high	
1220		15.14	14.39	12.01	2.19	3.18	-276	610	
1225		15.14	14.47	12.18	2.20	3.20	-287	210	
1230		15.14	14.33	12.28	2.21	3.20	-293	186	

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-PZM008	1235

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C093 – PZM	Project Name: ~~Grey's Landfill 2nd Half 2025~~ C04 Q4
Well Diameter (in):	Project Number: 20010212 21010210
Depth to Product (ft):	Date: 11/18/25
Depth to Water (ft): 11.28	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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	
1405		11.34	15.46	9.31	0.683	4.29	-146	472		
1410		11.65	15.36	9.05	0.669	3.19	-214	180		
1415		11.74	15.00	9.24	0.671	3.05	-258	188		
1420		11.79	15.02	9.52	0.679	2.98	-289	132		
1425		11.79	14.97	10.14	0.680	2.98	-321	87.4		
~~1425~~ 1430		11.84	14.73	10.61	0.688	3.02	-339	40.0		
1435		11.84	14.20	10.91	0.702	3.10	-352	9.3		
1440		11.86	13.78	11.08	0.701	3.16	-359	8.6		
1445		11.86	13.55	11.24	0.708	3.19	-367	8.5		
1450		11.86	12.70	11.31	0.715	3.35	-368	9.0		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	1455

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	X

Sampled By: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: ~~COA-MW5~~ COA190-MW5	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date: 11/19/25
Depth to Water (ft): 14.54	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

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		14.58	14.91	6.98	3.00	3.86	-164	3.5		
1015		14.61	14.93	7.09	2.99	3.71	-164	3.5		
1020		14.63	14.90	7.~~08~~20	2.98	3.63	-164	3.8		
1025		14.63	14.63	7.25	2.92	3.55	-165	4.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
COA190-MW5	1030

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	

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: CN

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number: C037-PZM003	Project Name: COA Q4
Well Diameter (in):	Project Number: 21010210
Depth to Product (ft):	Date:
Depth to Water (ft): 14.73	One Well Volume (gal):
Product Thickness (ft):	Flow Rate (mL/min)
Depth to Bottom (ft):	Length of time Purged (min)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments	
1050			13.87	10.95	8.59	6.56	-377	26.9		
1055			12.18	14.00	9.65	4.23	-430	31.3		
1100			12.14	14.00	9.84	4.16	-435	48.6		
1105			12.14	14.00	9.96	4.39	-434	38.6		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM003	1110

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	
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	
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	X
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	X
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	X
Well permit is present	

Sampled By: CN

Comments: Unable to track DTW b/c presence of NAPL disrupting probe

APPENDIX C

Coke Oven Historical Data - Cell 1 Groundwater Analytical Results

2025

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Location ID:	*CO02-PZM006*			*ug/L*															
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location ID:	*CO02-PZM041*			*ug/L*															
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location ID:	*CO18-PZM006*			*ug/L*															
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location ID:	*CO190-MWS*			*ug/L*															
Benzene	427,000	763,000	299,000	645,000	107,000	2,200	90,000	24,000	98,000	35,000	160,000	270,000	550,000	96,000	290,000	280,000	33,000	670,000	670,000
Ethylbenzene	40.6	68.6	21.1	38.9	7.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Naphthalene	74.4	315	98.1	173	25.5	0.5	0.5	0.5	0.5	0.5	330	0.5	0.5	320	0.5	0.5	0.5	0.5	0.5
Toluene	28,300	54,400	15,900	35,200	6,950	21	5,100	420	4,600	1,600	10,000	16,000	35,000	5,300	14,000	8,300	740	27,000	18,000
Xylenes	988	1,540	503	1,040	186	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location ID:	*CO191-MWS*			*ug/L*															
Benzene	107,000	NS	NS	NS	104,000	NS	NS	NS	67,000	NS	NS	NS	34,000	NS	NS	NS	26,000	NS	NS
Ethylbenzene	243	NS	NS	NS	235	NS	NS	NS	220	NS	NS	NS	110	NS	NS	NS	120	NS	NS
Naphthalene	377	NS	NS	NS	285	NS	NS	NS	290	NS	NS	NS	190	NS	NS	NS	220	NS	NS
Toluene	19,600	NS	NS	NS	12,400	NS	NS	NS	6,700	NS	NS	NS	2,700	NS	NS	NS	4,000	NS	NS
Xylenes	2,730	NS	NS	NS	2,480	NS	NS	NS	2,200	NS	NS	NS	900	NS	NS	NS	1,200	NS	NS
Location ID:	*CO93-PZM*			*ug/L*															
Benzene	181,000	159,000	182,000	156,000	173,000	180,000	180,000	150,000	160,000	170,000	180,000	140,000	200,000	170,000	130,000	120,000	140,000	160,000	94,000
Ethylbenzene	1,050	1,290	1,410	1,060	1,250	810	1,500	1,400	1,500	1,500	1,400	1000	1,400	1,200	1,200	920	860	910	680
Naphthalene	1,840	6,040	7,200	1,660	1,870	2,000	2,200	2,200	5,400	1,900	2,100	1,700	1,900	1,700	1,700	1,100	1,200	1,200	1,100

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Toluene	48,200	57,300	59,800	44,200	54,100	31,000	55,000	46,000	50,000	58,000	57,000	50,000	65,000	59,000	40,000	38,000	40,000	50,000	26,000
Xylenes	10,500	16,800	15,100	10,700	14,200	8,800	17,000	14,000	15,000	16,000	17,000	12,000	17,000	15,000	13,000	9,200	10,000	10,000	7,100

U: Non-Detect, NS: Not Sampled

Coke Oven Historical Data - Cell 2 Groundwater Analytical Results

2025

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Location ID:	*CO179-MWS*			*ug/L*															
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	4,700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	230	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1,200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	2,800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	2,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location ID:	*CO180-MWI*			*ug/L*															
Benzene	39,700	NS	NS	NS	31,000	NS	NS	NS	18,000	NS	NS	NS	NS	NS	NS	NS	9,200	NS	NS
Ethylbenzene	159	NS	NS	NS	140	NS	NS	NS	78	NS	NS	NS	NS	NS	NS	NS	44	NS	NS
Naphthalene	2,540	NS	NS	NS	1,200	NS	NS	NS	880	NS	NS	NS	NS	NS	NS	NS	580	NS	NS
Toluene	8,700	NS	NS	NS	7,100	NS	NS	NS	3,900	NS	NS	NS	NS	NS	NS	NS	2,100	NS	NS
Xylenes	2,690	NS	NS	NS	2,100	NS	NS	NS	1,200	NS	NS	NS	NS	NS	NS	NS	630	NS	NS
Location ID:	*CO180-MWS*			*ug/L*															
Benzene	786	NS	NS	NS	24,000	NS	NS	NS	17,000	NS	NS	NS	NS	NS	NS	NS	7,400	NS	NS
Ethylbenzene	3.7	NS	NS	NS	110	NS	NS	NS	86	NS	NS	NS	NS	NS	NS	NS	35	NS	NS
Naphthalene	62.7	NS	NS	NS	930	NS	NS	NS	1,200	NS	NS	NS	NS	NS	NS	NS	390	NS	NS
Toluene	180	NS	NS	NS	6,500	NS	NS	NS	4,700	NS	NS	NS	NS	NS	NS	NS	1,300	NS	NS
Xylenes	54.5	NS	NS	NS	1,700	NS	NS	NS	1,500	NS	NS	NS	NS	NS	NS	NS	560	NS	NS
Location ID:	*CO181-MWI*			*ug/L*															
Benzene	9,870	NS	NS	NS	39,000	NS	NS	NS	23,000	NS	NS	NS	NS	NS	NS	NS	22,000	NS	NS
Ethylbenzene	71.5	NS	NS	NS	210	NS	NS	NS	120	NS	NS	NS	NS	NS	NS	NS	99	NS	NS
Naphthalene	1,320	NS	NS	NS	2,000	NS	NS	NS	1,800	NS	NS	NS	NS	NS	NS	NS	2,100	NS	NS
Toluene	2,920	NS	NS	NS	11,000	NS	NS	NS	5,500	NS	NS	NS	NS	NS	NS	NS	5,600	NS	NS
Xylenes	1,180	NS	NS	NS	2,900	NS	NS	NS	1,800	NS	NS	NS	NS	NS	NS	NS	1,500	NS	NS
Location ID:	*CO181-MWS*			*ug/L*															
Benzene	28,400	NS	NS	NS	29,000	NS	NS	NS	21,000	NS	NS	NS	NS	NS	NS	NS	6,700	NS	NS
Ethylbenzene	145	NS	NS	NS	130	NS	NS	NS	130	NS	NS	NS	NS	NS	NS	NS	31	NS	NS
Naphthalene	3,710	NS	NS	NS	1,700	NS	NS	NS	1,700	NS	NS	NS	NS	NS	NS	NS	400	NS	NS
Toluene	5,810	NS	NS	NS	6,900	NS	NS	NS	6,300	NS	NS	NS	NS	NS	NS	NS	1,600	NS	NS
Xylenes	1,920	NS	NS	NS	2,000	NS	NS	NS	2,000	NS	NS	NS	NS	NS	NS	NS	470	NS	NS
Location ID:	*CO182-MWI*			*ug/L*															
Benzene	362,000	317,000	336,000	344,000	278,000	210,000	100,000	230,000	220,000	250,000	NS	NS	NS	NS	22,000	18,000	290,000	250,000	280,000
Ethylbenzene	1,020	911	1,010	666	1,040	800	400	980	1000	1,100	NS	NS	NS	NS	100	89	710	710	780
Naphthalene	153	320	218	260	222	250	500	380	0.5	220	NS	NS	NS	NS	73	56	0.5	700	0.5

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Toluene	60,400	44,000	40,000	69,400	26,100	17,000	7,000	18,000	16,000	17,000	NS	NS	NS	NS	2,500	2,000	32,000	28,000	27,000
Xylenes	12,600	12,100	12,900	17,600	8,980	6,300	3,600	9,200	8,900	9,500	NS	NS	NS	NS	1,300	860	7,100	6,000	6,700
Location ID:	*CO186-MWS*			*ug/L*															
Benzene	47,100	NS	NS	NS	31,600	NS	NS	NS	9,500	NS	NS	NS	NS	NS	140,000	NS	1,800	NS	NS
Ethylbenzene	119	NS	NS	NS	59.7	NS	NS	NS	22	NS	NS	NS	NS	NS	240	NS	7.8	NS	NS
Naphthalene	31.7	NS	NS	NS	8	NS	NS	NS	0.5	NS	NS	NS	NS	NS	0.5	NS	0.5	NS	NS
Toluene	14,600	NS	NS	NS	6,090	NS	NS	NS	460	NS	NS	NS	NS	NS	37,000	NS	270	NS	NS
Xylenes	2,140	NS	NS	NS	976	NS	NS	NS	150	NS	NS	NS	NS	NS	4,200	NS	57	NS	NS
Location ID:	*CO209-MWI*			*ug/L*															
Benzene	1,120	NS	NS	NS	1,910	NS	NS	NS	2,300	NS	NS	NS	NS	NS	2,000	NS	2,100	NS	NS
Ethylbenzene	45.2	NS	NS	NS	82	NS	NS	NS	71	NS	NS	NS	NS	NS	75	NS	68	NS	NS
Naphthalene	11,100	NS	NS	NS	18,500	NS	NS	NS	13,000	NS	NS	NS	NS	NS	18,000	NS	13,000	NS	NS
Toluene	2.6	NS	NS	NS	5.1	NS	NS	NS	340	NS	NS	NS	NS	NS	5.1	NS	34	NS	NS
Xylenes	32.3	NS	NS	NS	56.5	NS	NS	NS	140	NS	NS	NS	NS	NS	55	NS	0.5	NS	NS
Location ID:	*CO209-MWS*			*ug/L*															
Benzene	12.7	NS	NS	NS	12.8	NS	NS	NS	180	NS	NS	NS	NS	NS	13	NS	280	NS	NS
Ethylbenzene	2.1	NS	NS	NS	0.5	NS	NS	NS	5.7	NS	NS	NS	NS	NS	2.2	NS	0.5	NS	NS
Naphthalene	3,940	NS	NS	NS	1,730	NS	NS	NS	2,400	NS	NS	NS	NS	NS	3,300	NS	2,600	NS	NS
Toluene	5.2	NS	NS	NS	3.8	NS	NS	NS	170	NS	NS	NS	NS	NS	7	NS	20	NS	NS
Xylenes	18.8	NS	NS	NS	11.9	NS	NS	NS	82	NS	NS	NS	NS	NS	38	NS	14	NS	NS
Location ID:	*CO27-PZM012*			*ug/L*															
Benzene	9,230	8,490	8,340	11,000	13,000	8,700	12,000	14,000	15,000	5,500	13,000	10,000	NS	10,000	7,900	13,000	9,300	15,000	16,000
Ethylbenzene	64.5	101	98.9	116	180	100	160	170	180	64	170	110	NS	120	84	130	100	120	140
Naphthalene	383	793	661	645	870	820	1,100	1,100	1,200	470	1,100	760	NS	570	450	630	640	700	620
Toluene	2,680	2,750	2,430	3,080	5,200	3,200	4,600	4,500	5,200	1,100	4,900	3,500	NS	2,700	2,600	4,200	2,900	4,400	5,600
Xylenes	777	843	795	1000	1,400	880	1,400	1,500	1,600	480	1,400	940	NS	920	700	1,100	780	920	1,400
Location ID:	*CO27-PZM046*			*ug/L*															
Benzene	15,600	8,620	18,700	19,800	17,000	13,000	12,000	34,000	16,000	19,000	50,000	52,000	NS	14,000	11,000	12,000	26,000	12,000	9,900
Ethylbenzene	202	107	247	263	240	190	160	260	180	180	260	280	NS	140	140	160	170	100	97
Naphthalene	847	3,680	1,450	4,460	950	1,200	930	1,100	1000	910	1000	750	NS	700	840	920	830	620	650
Toluene	5,560	2,650	6,180	7,000	6,800	5,600	4,400	5,800	4,600	4,200	5,000	6,600	NS	4,600	4,000	4,600	4,700	3,800	3,500
Xylenes	1,460	1,060	2,070	1,810	1,800	1,600	1,400	2,000	1,400	1,400	1,600	1,800	NS	1,200	1,200	1,400	1,200	840	900
Location ID:	*CO28-PZM010*			*ug/L*															
Benzene	1	NS	NS	NS	15	NS	NS	NS	0.19	NS	NS	NS	NS	NS	NS	NS	710	NS	NS
Ethylbenzene	0.5	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	NS	NS	NS	NS	7.5	NS	NS
Naphthalene	0.5	NS	NS	NS	0.36	NS	NS	NS	0.5	NS	NS	NS	NS	NS	NS	NS	240	NS	NS
Toluene	0.5	NS	NS	NS	0.58	NS	NS	NS	0.5	NS	NS	NS	NS	NS	NS	NS	24	NS	NS
Xylenes	0.5	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	NS	NS	NS	NS	120	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Location ID:	*CO28-PZM048*			*ug/L*															
Benzene	128,000	NS	NS	NS	150,000	NS	NS	NS	93,000	NS	NS	NS	NS	NS	NS	NS	100,000	NS	NS
Ethylbenzene	290	NS	NS	NS	450	NS	NS	NS	260	NS	NS	NS	NS	NS	NS	NS	230	NS	NS
Naphthalene	2,750	NS	NS	NS	4,100	NS	NS	NS	1,600	NS	NS	NS	NS	NS	NS	NS	3,100	NS	NS
Toluene	5,670	NS	NS	NS	3,800	NS	NS	NS	1,900	NS	NS	NS	NS	NS	NS	NS	950	NS	NS
Xylenes	5,850	NS	NS	NS	7,500	NS	NS	NS	4,800	NS	NS	NS	NS	NS	NS	NS	3,900	NS	NS
Location ID:	*CO36-PZM008*			*ug/L*															
Benzene	38,700	17,700	20,400	19,000	5,360	9,900	9,100	14,000	11,000	15,000	NS	NS	NS	NS	NS	2,900	2,900	4,000	18,000
Ethylbenzene	61	61	89.5	17.1	17.9	53	36	66	48	60	NS	NS	NS	NS	NS	6.1	7.5	17	72
Naphthalene	540	769	943	233	226	560	420	700	410	530	NS	NS	NS	NS	NS	120	61	170	510
Toluene	8,940	4,160	4,460	1,510	1,350	2,700	2,000	3,300	2,300	3,200	NS	NS	NS	NS	NS	470	400	780	4,300
Xylenes	1,250	988	1,510	672	398	890	740	1,300	780	970	NS	NS	NS	NS	NS	260	260	300	1,300
Location ID:	*CO36-PZM043*			*ug/L*															
Benzene	14,100	22,800	26,700	55,700	15,100	20,000	16,000	17,000	12,000	16,000	NS	NS	NS	NS	NS	9,800	390	6,800	220
Ethylbenzene	5.3	42.9	56.2	58.2	40.7	51	46	58	39	46	NS	NS	NS	NS	NS	27	6.9	24	5.6
Naphthalene	187	835	667	433	530	720	560	640	630	550	NS	NS	NS	NS	NS	370	5.3	190	25
Toluene	841	3,160	3,710	8,150	2,050	2,800	2,200	2,200	1,900	2,100	NS	NS	NS	NS	NS	1,100	140	1,200	210
Xylenes	287	711	855	838	612	740	640	810	580	660	NS	NS	NS	NS	NS	370	77	340	110
Location ID:	*CO37-PZM003*			*ug/L*															
Benzene	7,120	NS	NS	NS	7,050	NS	NS	NS	7,600	24	4,200	66	NS	NS	NS	4,500	4,600	4,300	9,600
Ethylbenzene	133	NS	NS	NS	125	NS	NS	NS	110	2.9	25	5.3	NS	NS	NS	25	31	38	39
Naphthalene	1,270	NS	NS	NS	1,050	NS	NS	NS	730	9.1	200	75	NS	NS	NS	190	190	210	200
Toluene	3,000	NS	NS	NS	2,840	NS	NS	NS	3,100	42	1,200	52	NS	NS	NS	1,100	1,400	1,600	1,800
Xylenes	1,310	NS	NS	NS	1,410	NS	NS	NS	1,300	30	340	77	NS	NS	NS	290	400	460	390
Location ID:	*CO37-PZM038*			*ug/L*															
Benzene	16,000	16,000	17,800	33,700	19,100	16,000	11,000	12,000	14,000	12,000	12,000	17,000	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	268	281	279	257	249	240	220	220	220	210	180	230	NS	NS	NS	NS	NS	NS	NS
Naphthalene	1,850	15,600	1,590	1,560	954	1,300	1,300	1,400	1,100	1,500	1,100	1,300	NS	NS	NS	NS	NS	NS	NS
Toluene	8,240	8,350	10,300	17,600	9,480	7,800	6,500	6,800	7,000	6,300	6,000	7,800	NS	NS	NS	NS	NS	NS	NS
Xylenes	2,320	2,420	2,370	2,130	1,970	2,000	1,900	1,900	2,000	1,800	1,500	2,000	NS	NS	NS	NS	NS	NS	NS
Location ID:	*CO38-PZM006*			*ug/L*															
Benzene	4,110	4,500	5,070	5,230	9,100	3,400	3,300	4,600	2,900	2,800	NS	NS	NS	NS	NS	2,800	3,000	2,300	3,200
Ethylbenzene	46.1	59.3	58.7	56.4	52.4	38	44	56	34	29	NS	NS	NS	NS	NS	26	28	25	34
Naphthalene	981	1,620	1,660	1,180	1,570	890	800	1,200	730	590	NS	NS	NS	NS	NS	560	290	510	790
Toluene	800	871	1,130	1,210	936	400	630	920	390	470	NS	NS	NS	NS	NS	480	590	310	450
Xylenes	373	446	462	464	409	260	320	450	240	200	NS	NS	NS	NS	NS	170	240	170	210
Location ID:	*CO38-PZM043*			*ug/L*															

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Benzene	1.8	0.76	0.5	0.5	1	2	0.5	0.19	1.3	0.71	NS	NS	NS	NS	NS	30	1,600	18	8.9
Ethylbenzene	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	NS	NS	NS	NS	NS	1.2	18	0.65	0.38
Naphthalene	9.4	0.5	0.5	0.5	0.5	0.5	0.68	0.28	0.5	0.5	NS	NS	NS	NS	NS	6.5	2.5	4.3	10
Toluene	0.35	0.5	0.5	0.5	0.5	0.89	0.5	0.5	0.5	0.5	NS	NS	NS	NS	NS	23	490	17	3.2
Xylenes	0.5	0.5	0.5	2.1	0.5	0.82	0.6	0.73	0.96	0.7	NS	NS	NS	NS	NS	9.9	200	8.6	2.7
Location ID:	*CO39-PZM007*			*ug/L*															
Benzene	3,120	7,320	NS	891	486	1000	1,300	500	530	NS	NS	NS	NS	NS	NS	240	380	460	840
Ethylbenzene	6.9	21.8	39.5	3.8	0.5	4.6	7	3.3	2.7	NS	NS	NS	NS	NS	NS	1.6	7.4	2.6	4.2
Naphthalene	353	1,020	1,340	177	125	460	420	280	190	NS	NS	NS	NS	NS	NS	63	36	44	46
Toluene	487	1,080	1,640	123	36.8	140	160	66	65	NS	NS	NS	NS	NS	NS	32	190	62	120
Xylenes	58	195	374	35	8.7	35	52	30	18	NS	NS	NS	NS	NS	NS	11	75	19	33
Location ID:	*CO39-PZM042*			*ug/L*															
Benzene	12,000	8,640	9,520	3,690	6,810	6,300	5,900	3,400	5,800	4,200	NS	NS	NS	NS	NS	12,000	10,000	13,000	8,900
Ethylbenzene	68	59	70.4	21.6	21.3	70	38	25	62	49	NS	NS	NS	NS	NS	170	140	130	100
Naphthalene	1,270	1,590	1,420	666	1,870	1,600	1,200	790	1000	870	NS	NS	NS	NS	NS	1,200	630	560	510
Toluene	3,150	1,920	2,150	563	846	2,300	1,200	810	1,900	1,400	NS	NS	NS	NS	NS	4,400	3,800	2,900	2,100
Xylenes	624	503	595	174	196	580	320	210	500	390	NS	NS	NS	NS	NS	1,500	1,200	1000	790
Location ID:	*CO40-PZM008*			*ug/L*															
Benzene	5,050	664	NS	2,360	3,740	8,300	5,400	5,600	9,400	740	NS	NS	NS	NS	NS	6,200	14,000	7,600	5,900
Ethylbenzene	61.3	3.5	20.8	18	21.3	80	53	55	110	5.6	NS	NS	NS	NS	NS	57	110	66	62
Naphthalene	2,260	336	1,570	3,720	1,600	1,100	1,900	1,400	1,100	150	NS	NS	NS	NS	NS	1,400	1,500	1,100	970
Toluene	712	75.7	291	337	546	1,900	1,100	1,700	3,100	110	NS	NS	NS	NS	NS	1,200	3,700	1,700	1,300
Xylenes	367	25.1	153	154	186	490	410	400	700	44	NS	NS	NS	NS	NS	370	860	400	470
Location ID:	*CO41-PZM001*			*ug/L*															
Benzene	1,740	124	17,400	2,130	1,880	18,000	29,000	21,000	14,000	690	11,000	56	550	2,000	280,000	18,000	7,300	2,000	3,200
Ethylbenzene	85.8	3.6	564	63.2	53.3	660	640	710	360	14	130	1.7	3	27	830	210	93	21	32
Naphthalene	29.3	3.4	332	23.2	22.5	440	340	320	130	11	49	0.29	3.1	10	0.5	110	28	18	17
Toluene	1,200	44.5	11,200	1,230	1,110	11,000	13,000	14,000	8,100	180	3,200	7.5	29	590	90,000	1,800	630	900	1,400
Xylenes	760	25.2	5,190	524	421	6,800	6,600	7,000	3,400	110	1,300	3.6	13	240	17,000	720	300	300	530
Location ID:	*CO41-PZM036*			*ug/L*															
Benzene	283,000	272,000	351,000	447,000	230,000	200,000	190,000	220,000	250,000	290,000	180,000	290,000	290,000	320,000	35,000	300,000	300,000	270,000	300,000
Ethylbenzene	6.2	774	880	732	1,020	870	930	800	800	990	520	970	740	1,100	760	1000	920	730	830
Naphthalene	195	418	290	298	336	0.5	680	0.5	0.5	770	390	260	580	0.5	330	0.5	1,500	580	0.5
Toluene	893	90,700	118,000	614,000	99,600	82,000	76,000	78,000	87,000	94,000	57,000	100,000	84,000	100,000	18,000	100,000	96,000	84,000	94,000
Xylenes	308	16,700	27,300	129,000	20,600	17,000	19,000	15,000	14,000	18,000	10,000	19,000	13,000	21,000	8,600	18,000	18,000	14,000	17,000
Location ID:	*CO42-PZM004*			*ug/L*															
Benzene	15.9	59.4	169	3.4	30.7	160	90	1.7	140	NS	580	0.78	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	4.3	14.7	30.2	0.5	4	14	15	0.3	19	NS	56	0.5	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Naphthalene	9.3	66.7	109	0.5	14.6	73	70	0.7	65	NS	170	0.5	NS	NS	NS	NS	NS	NS	NS
Toluene	24.4	48.7	36	6.5	26.5	270	77	4.1	160	NS	190	0.69	NS	NS	NS	NS	NS	NS	NS
Xylenes	37.2	84.9	129	2.6	26.9	150	120	2.8	140	NS	290	0.5	NS	NS	NS	NS	NS	NS	NS
Location ID:	*GD01-MWI*			*ug/L*															
Benzene	10	10.3	16.9	NS	19	NS	11	NS	5.2	NS	3.4	NS	NS	NS	30	0.5	17	120	0.5
Ethylbenzene	0.5	0.5	0.5	NS	0.5	NS	0.5	NS	0.5	NS	0.5	NS	NS	NS	0.5	0.5	0.5	NS	0.5
Naphthalene	0.5	0.5	0.5	NS	0.5	NS	0.35	NS	0.39	NS	0.25	NS	NS	NS	0.5	0.5	1.7	NS	0.5
Toluene	0.5	0.5	0.41	NS	0.5	NS	0.42	NS	0.5	NS	2.9	NS	NS	NS	0.5	0.5	0.5	NS	0.5
Xylenes	0.5	0.5	0.5	NS	0.5	NS	0.5	NS	0.5	NS	1.3	NS	NS	NS	0.5	0.5	0.5	NS	0.5
Location ID:	*GD02-MWI*			*ug/L*															
Benzene	78,200	71,200	127,000	NS	87,000	NS	150,000	NS	29,000	NS	150,000	NS	NS	NS	210,000	240,000	12,000	170,000	170,000
Ethylbenzene	452	344	546	NS	460	NS	420	NS	60	NS	320	NS	NS	NS	460	430	29	NS	320
Naphthalene	1,840	3,530	1,910	NS	1,200	NS	680	NS	79	NS	660	NS	NS	NS	570	1,200	44	NS	320
Toluene	24	84.7	339	NS	0.5	NS	2,000	NS	890	NS	5,400	NS	NS	NS	3,600	3,100	0.5	NS	0.5
Xylenes	575	208	327	NS	0.5	NS	1,500	NS	320	NS	1,400	NS	NS	NS	1,400	1,400	44	NS	0.5

U: Non-Detect, NS: Not Sampled

Coke Oven Historical Data - Cell 3 Groundwater Analytical Results

2025

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Location ID:	*CO194-MWS*			*ug/L*															
Benzene	800	823	944	*NS*	617	*NS*	740	*NS*	600	*NS*	98	*NS*	320	*NS*	370	*NS*	300	*NS*	410
Ethylbenzene	4.5	5.2	5	*NS*	4.1	*NS*	4.1	*NS*	6.3	*NS*	0.79	*NS*	2.4	*NS*	3	*NS*	2.8	*NS*	2.9
Naphthalene	2,240	7,540	3,260	*NS*	2,960	*NS*	2,900	*NS*	1,900	*NS*	470	*NS*	760	*NS*	1,400	*NS*	1,500	*NS*	1,100
Toluene	108	119	144	*NS*	105	*NS*	120	*NS*	130	*NS*	19	*NS*	65	*NS*	75	*NS*	62	*NS*	77
Xylenes	60.4	65.9	73.9	*NS*	57.6	*NS*	65	*NS*	78	*NS*	9.6	*NS*	34	*NS*	39	*NS*	31	*NS*	34
Location ID:	*CO195-MWS*			*ug/L*															
Benzene	18,000	53,900	59,000	49,000	105,000	38,000	41,000	47,000	41,000	45,000	30,000	17,000	22,000	30,000	24,000	36,000	28,000	20,000	18,000
Ethylbenzene	21.8	76.2	82.3	76	66.3	0.5	0.5	96	0.5	73	55	34	43	58	43	60	54	43	0.5
Naphthalene	493	3,940	2,400	2,760	1,340	1,900	1,500	2,300	2,200	1,600	2,000	1,200	1,300	1,700	1,300	1,600	1,600	1,200	1,100
Toluene	1,220	3,350	4,340	3,860	7,600	3,100	3,000	3,800	3,400	3,100	2,700	1,400	1,900	2,400	1,900	3,000	2,300	1,800	1,500
Xylenes	305	980	1,160	1,160	855	860	780	1,100	1,100	830	700	400	550	720	520	770	620	480	470
Location ID:	*CO196-MWS*			*ug/L*															
Benzene	24,400	13,200	16,500	*NS*	20,300	*NS*	7,300	*NS*	6,000	*NS*	2,500	*NS*	3,900	*NS*	3,200	*NS*	260	*NS*	5,800
Ethylbenzene	26.7	20.9	21.8	*NS*	15.1	*NS*	15	*NS*	14	*NS*	6.1	*NS*	11	*NS*	7.6	*NS*	2.8	*NS*	10
Naphthalene	591	1,190	969	*NS*	541	*NS*	460	*NS*	600	*NS*	320	*NS*	550	*NS*	330	*NS*	170	*NS*	610
Toluene	1,370	836	1,080	*NS*	670	*NS*	500	*NS*	490	*NS*	200	*NS*	290	*NS*	220	*NS*	51	*NS*	420
Xylenes	329	239	240	*NS*	189	*NS*	160	*NS*	160	*NS*	74	*NS*	110	*NS*	82	*NS*	35	*NS*	100
Location ID:	*CO198-MWS*			*ug/L*															
Benzene	677	636	697	*NS*	282	*NS*	280	*NS*	190	*NS*	310	*NS*	280	*NS*	230	*NS*	230	*NS*	280
Ethylbenzene	5.4	4.7	5.7	*NS*	2.6	*NS*	2.3	*NS*	1.7	*NS*	0.5	*NS*	2.6	*NS*	1.8	*NS*	2	*NS*	2.7
Naphthalene	5,590	17,000	3,490	*NS*	1,320	*NS*	2,000	*NS*	1,300	*NS*	1,900	*NS*	1,700	*NS*	1,600	*NS*	1000	*NS*	890
Toluene	115	111	129	*NS*	65.1	*NS*	62	*NS*	42	*NS*	79	*NS*	72	*NS*	55	*NS*	59	*NS*	67
Xylenes	62.5	60.3	66.1	*NS*	37.4	*NS*	36	*NS*	22	*NS*	34	*NS*	34	*NS*	26	*NS*	27	*NS*	34
Location ID:	*CO201-MWS*			*ug/L*															
Benzene	2,420	3,880	13,900	*NS*	2,280	*NS*	1,800	*NS*	1,100	*NS*	330	*NS*	42	*NS*	600	*NS*	870	*NS*	21,000
Ethylbenzene	5.3	6.5	19.7	*NS*	6	*NS*	4.1	*NS*	3.9	*NS*	0.94	*NS*	0.21	*NS*	1.1	*NS*	6.1	*NS*	0.5
Naphthalene	276	692	702	*NS*	227	*NS*	240	*NS*	180	*NS*	44	*NS*	11	*NS*	74	*NS*	220	*NS*	1,600
Toluene	266	272	904	*NS*	189	*NS*	120	*NS*	79	*NS*	6.9	*NS*	2	*NS*	27	*NS*	140	*NS*	1,700
Xylenes	93.1	106	245	*NS*	89.8	*NS*	70	*NS*	56	*NS*	11	*NS*	3.1	*NS*	14	*NS*	74	*NS*	540
Location ID:	*CO30-PZM015*			*ug/L*															
Benzene	64,000	678	57,000	62,800	134,000	54,000	62,000	50,000	43,000	56,000	40,000	34,000	32,000	23,000	38,000	*NS*	24,000	30,000	73
Ethylbenzene	95.2	0.5	94.6	107	96.1	120	110	110	87	110	72	76	75	45	76	*NS*	52	75	0.25
Naphthalene	1,790	542	2,300	4,810	1,650	2,100	2,000	2,600	2,000	2,300	2,000	2,100	1,800	1,400	1,800	*NS*	1,600	2,000	6.7

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Toluene	16,300	49.1	4,650	5,720	9,830	4,300	4,400	3,900	3,200	4,000	3,000	2,700	2,600	1,900	3,200	NS	2,000	2,800	0.64
Xylenes	1,360	17.9	1,380	1,670	1,250	1,500	1,300	1,400	1,100	1,300	920	910	950	510	990	NS	650	950	1.7
Location ID:	CO30-PZM060			ug/L															
Benzene	9.2	NS	NS	NS	4.4	NS	NS	NS	7.5	NS	NS	NS	99	NS	NS	NS	4,900	NS	NS
Ethylbenzene	1.9	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	0.33	NS	NS	NS	0.5	NS	NS
Naphthalene	1.3	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	5.3	NS	NS	NS	40	NS	NS
Toluene	23.3	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	6.7	NS	NS	NS	110	NS	NS
Xylenes	11.2	NS	NS	NS	0.5	NS	NS	NS	0.5	NS	NS	NS	3.3	NS	NS	NS	0.5	NS	NS

U: Non-Detect, NS: Not Sampled

Coke Oven Historical Data - Cell 5 Groundwater Analytical Results

2025

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Location ID:	*CO206R-MWS*			*ug/L*															
Benzene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	140	230	260	260	750	640	690	530
Ethylbenzene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	7.9	8.5	10	8.2	17	15	14	13
Naphthalene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	2,900	2,300	1,800	1,800	6,200	4,900	4,100	5,000
Toluene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	51	87	110	120	520	440	430	320
Xylenes	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	200	190	210	170	410	380	330	310
Location ID:	*CO23-PZM008*			*ug/L*															
Benzene	567	377	606	533	510	450	580	580	410	320	320	410	840	390	380	370	430	890	380
Ethylbenzene	31.5	23.3	32.6	27.4	27	24	27	30	24	20	16	24	24	21	21	19	18	26	21
Naphthalene	2,770	4,450	4,120	2,900	3,100	3,500	4,500	4,100	4,000	2,900	2,600	3,200	3,800	3,200	3,200	4,700	3,000	2,400	2,800
Toluene	357	217	343	324	260	280	310	330	240	70	150	220	540	190	210	200	230	370	190
Xylenes	539	374	525	457	510	420	480	520	390	320	270	390	420	360	350	310	330	420	320
Location ID:	*CO24-PZM007*			*ug/L*															
Benzene	2.9	2.3	2.3	3.7	4.4	0.5	5.2	4.3	2.9	3.9	7.7	3.5	1,700	3.2	3.8	4.4	5.7	4.8	5.9
Ethylbenzene	1.9	3.6	2.1	2.9	3.1	0.5	0.5	3.3	2.7	4.2	7	2.5	14	3.2	2.9	2.5	2.4	2	2.2
Naphthalene	1,320	6,510	2,390	1,530	2,770	1,800	2,700	1,900	2,000	2,000	2,000	1,600	1,200	1,400	1,800	1,700	1,400	1,200	1,100
Toluene	1.9	1.4	1.4	1.9	2	0.5	0.5	0.5	2.2	0.5	5.6	2	940	0.5	2	2.3	3.9	2	3.2
Xylenes	3.5	4.3	3	4.5	4.4	0.5	0.5	0.5	0.5	0.5	14	0.5	250	3.4	0.5	0.5	4.6	0.5	3.8
Location ID:	*CO25-PZM008*			*ug/L*															
Benzene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	1,400	*NS*	1000	950	830	1,100	980	1,100	1,100	1,300	1,900
Ethylbenzene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	32	*NS*	25	28	24	36	32	34	30	32	42
Naphthalene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	15,000	*NS*	14,000	17,000	14,000	13,000	15,000	20,000	14,000	16,000	18,000
Toluene	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	1,100	*NS*	940	870	730	1000	940	910	1,100	1,100	1,600
Xylenes	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	830	*NS*	640	680	640	920	810	780	820	860	1,100
Location ID:	*CO26-PZM007*			*ug/L*															
Benzene	43.6	165	327	331	*NS*	120	210	260	4.7	120	240	39	210	160	210	88	33	86	180
Ethylbenzene	1.9	6	10.7	10.6	*NS*	4.1	6.1	9.5	0.18	1.8	4.4	1.6	7.9	3.7	5.7	3.6	1.8	3	4
Naphthalene	409	1,840	2,880	3,380	*NS*	960	1,400	2,500	30	400	660	400	2,600	800	1,200	1000	580	870	1,100
Toluene	16.8	87	179	175	*NS*	62	93	120	2.3	41	100	23	130	79	110	51	35	48	86
Xylenes	42.4	153	250	258	*NS*	94	140	210	3	38	93	36	190	79	120	76	43	68	85
Location ID:	*CO55-PZM000*			*ug/L*															
Benzene	0.5	0.63	1.6	74	0.5	0.39	0.17	170	2.4	2.8	48	0.5	6.6	1.4	65	42	9	6.1	0.86
Ethylbenzene	0.5	0.5	0.5	2.9	0.5	0.5	0.5	5.8	0.3	0.17	1.1	0.5	0.3	0.5	1.6	1.8	0.54	0.75	0.5
Naphthalene	11.8	2.8	5.4	245	0.5	3.8	0.49	650	7.7	12	130	0.5	24	1.2	130	110	11	220	2.2

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2021	9/1/2021	12/1/2021	2/1/2022	6/1/2022	8/1/2022	12/1/2022	2/1/2023	6/1/2023	8/1/2023	11/1/2023	3/1/2024	6/1/2024	8/1/2024	11/1/2024	3/1/2025	5/1/2025	8/1/2025	11/1/2025
Toluene	0.5	0.47	1.2	38	0.5	0.27	0.5	76	1.2	1.6	16	0.5	2	0.58	26	20	4.6	8.7	0.47
Xylenes	0.5	0.5	1.5	49.5	0.5	0.34	0.5	96	2.9	1.9	16	0.5	2.9	0.42	21	25	7.2	14	0.35
Location ID:	*CO56-PZP001*			*ug/L*															
Benzene	208	244	300	245	291	200	360	310	210	160	230	100	94	94	120	130	270	140	210
Ethylbenzene	8.5	7.5	10.4	9.2	10.3	7.2	11	8.9	8.4	8	7.5	6.8	5.4	4.8	5.4	5.6	6.1	4.5	7.4
Naphthalene	1,970	*NS*	*NS*	2,310	1,810	2,000	3,000	2,600	2,100	1,900	1,900	1,700	1,200	1,200	1,600	1,800	1,100	1,300	1,600
Toluene	108	73.1	91.6	87.9	173	53	75	72	70	73	76	22	9.2	28	21	68	84	24	63
Xylenes	176	150	244	183	216	160	260	220	190	170	170	150	110	110	110	120	120	90	150
Location ID:	*CO57-PZP002*			*ug/L*															
Benzene	*NS*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.16	0.32	0.5	270	0.26	1.8	0.26	21	2.1	4.5
Ethylbenzene	*NS*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	6.3	0.5	0.5	0.5	0.44	0.27	0.46
Naphthalene	*NS*	0.5	0.5	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	220	0.62	0.64	0.53	77	150	200
Toluene	*NS*	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.32	0.5	0.25	0.34	310	0.44	1.5	0.5	8.2	3.7	9
Xylenes	*NS*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	130	0.5	0.42	0.5	8.5	7.3	12
Location ID:	*CO58-PZM001*			*ug/L*															
Benzene	122	57.5	177	128	0.5	72	190	82	39	110	70	36	33	29	150	150	6.1	42	54
Ethylbenzene	6.3	3.2	9.1	5.4	0.5	3.4	8	4.2	1.6	5.4	2.8	3	1.5	1.2	8	6.4	0.68	2	2.2
Naphthalene	1,350	662	698	1,200	0.5	770	1,600	590	220	850	380	220	230	170	1,700	810	220	360	430
Toluene	27.8	10.4	55.4	43.2	0.5	26	69	21	10	36	21	4.1	2.6	3.4	59	63	10	10	14
Xylenes	101	41.6	142	91.1	0.5	64	140	65	25	84	44	27	21	23	140	120	15	33	34
Location ID:	*CO59-PZP002*			*ug/L*															
Benzene	0.5	2.2	231	0.5	0.5	13	13	150	0.27	2.5	5.9	0.5	300	0.19	14	59	8.5	0.59	2.6
Ethylbenzene	0.5	0.48	11	0.5	0.41	0.54	0.62	7.4	0.26	1.3	0.46	0.5	5.1	0.5	1	4.2	0.5	0.5	0.5
Naphthalene	0.5	2.8	852	1.2	0.5	53	58	680	1	5.7	24	0.5	130	0.9	77	560	32	7.8	120
Toluene	0.5	2.2	80.1	0.5	0.48	4.4	3.4	52	0.35	2.8	1.2	0.5	280	0.5	2.8	22	2.8	0.5	5.3
Xylenes	0.5	4.1	173	0.5	2.8	9.1	9.6	130	1.1	7.4	5.4	0.5	110	0.5	15	75	2.4	0.84	7.7
Location ID:	*CO60-PZP001*			*ug/L*															
Benzene	241	201	259	168	57.2	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethylbenzene	8.8	6.5	8	6.2	2.2	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Naphthalene	2,320	1,650	2,670	1,290	360	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Toluene	60.5	19.2	37.8	30.9	10.1	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Xylenes	225	164	184	133	40.1	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

U: Non-Detect, *NS: Not Sampled*