

**175-225 THIRD STREET SITE
BROOKLYN, KINGS COUNTY, NEW YORK**

In-Situ Chemical Oxidation Design Document

NYSDEC BCP Site Number: C224209

Prepared for:

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Submitted to:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
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AUGUST 2025



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CERTIFICATIONS

I, Brad Summerville, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and Green Remediation (DER-31).

Brad Summerville
NYS Professional Engineer
#091879

August 19, 2025
Date


Signature





Tables of Contents

CERTIFICATIONS.....	i
1.0 INTRODUCTION.....	1
1.2 ISCO Injection Objectives	1
2.0 SITE OVERVIEW	2
3.0 In-Situ Chemical Oxidation Remedy Selection	6
3.1 Current Subsurface Conditions.....	6
4.0 ISCO INJECTION PLAN DESIGN AND IMPLEMENTATION	8
4.1 ISCO Activator.....	8
4.2 Injection Layout	8
4.3 Proposed Performance Monitoring Well Installation.....	10
4.4 Injection Implementation	11
4.5 Performance Monitoring.....	12
5.0 ISCO INJECTION PREPARATION ACTIVITIES	14
5.1 Permitting.....	14
5.2 Utility Location	14
6.0 SCHEDULE	16



LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Contour Map - May 2025
Figure 4	Monitoring Well Locations and Analytical Results Map
Figure 5	Injection Plan Layout
Figure 6	Proposed Performance Monitoring Well Locations

LIST OF TABLES

Table 1	Oxidant Demand Calculations and Dosages
Table 2	Performance Monitoring Well Construction Details
Table 3	Monitoring Parameters and Frequency for Post-Remedial Sampling
Table 4	Analytical Summary Table, May 2025 Pre-Design Groundwater Results

LIST OF APPENDICES

Appendix A	Klozur® SP Product Sheet
Appendix B	Klozur® SP and alkaline (NaOH) activator Quantity Calculations
Appendix C	Klozur® SP and alkaline (NaOH) activator Safety Data Sheets
Appendix D	Hydraulic Conductivity Test Results
Appendix E	Laboratory Results, May 2025 Pre-Design Groundwater Sampling



1.0 INTRODUCTION

Impact Environmental Engineering & Geology, PLLC (IEEG) has prepared this In-Situ Chemical Oxidation Design Document as an element of the remedial program at 175-225 Third Street Site in the Gowanus neighborhood of Brooklyn, New York (the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C224209. In accordance with the approved June 2025 Remedial Action Work Plan (RAWP) prepared by IEEG and the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, the proposed remedy includes full-scale use of in-situ chemical oxidation (ISCO) technology to address contaminated groundwater. Chemical oxidant injection is intended to significantly reduce chlorinated-and petroleum-related volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), predominantly polycyclic aromatic hydrocarbons (PAHs) in the high concentration areas and thereby accelerate improvements in groundwater quality.

1.2 ISCO Injection Objectives

The primary purpose of the proposed ISCO injection program is to remediate residual VOC and SVOC impacts in soil and groundwater at the Site and to prevent off-site migration. The objectives of the program include:

- Distribution of injection amendments within the targeted injection intervals,
- Design of an ISCO injection layout (e.g., oxidant loading rates, injection spacing, and injection rates) as a potential site-wide remedial action,
- Evaluate the effectiveness of ISCO at reducing VOCs and SVOCs at the targeted areas, and
- Reduce VOCs and SVOCs at the Site boundaries to limit downgradient migration of impacted groundwater.



2.0 SITE OVERVIEW

The Site is approximately 140,000 square-feet in area and is located at 175-225 3rd Street in the Gowanus neighborhood of Brooklyn, New York (Block 972, Lot 58 [formerly Lots 1, 43, and 58]). Refer to **Figure 1** for a Site Location Map. The rectangular-shaped site is vacant and was previously occupied by a Verizon service center and an approximately 13,000-square-foot bulkhead cutoff wall work area that comprises former Lot 1 and the western portion of former Lot 58. As discussed in the Interim Remedial Measures (IRM) Construction Completion Report (CCR) prepared by Langan dated June 9, 2021, the bulkhead cutoff wall construction was completed in December 2020 and the area is capped with a gravel cover, does not contain above-grade structures, and is fenced off at two landward boundaries to restrict access to pedestrians and vehicles. Fencing at the eastern property boundary has been recently removed. The remaining portion of former Lot 58 contains asphalt-paved parking areas and about an 8,300-square-foot single-story brick building. Former Lot 43 was the easternmost lot, which contains asphalt-paved parking areas and an about 7,100-square-foot, single-story, prefabricated building with sheet metal walls. Both buildings were recently used for offices and storage to support Verizon's operations but are currently vacant. Former Lots 1 and 43 were merged into new Lot 58 as of April 13, 2022, to support the proposed redevelopment. The site is bound to the north by a closed section of 2nd Street, to the east by 3rd Avenue, to the south by 3rd Street, and to the west by the Gowanus Canal. An easement exists along the northern site boundary (as depicted in **Figure 2**) for the closed section of 2nd Street, which will be reconstructed as part of redevelopment.

According to a March 7, 2022 survey by Gallas Surveying Group, site grade ranges from about elevation¹ (el) 16.8 in the southeast to el 4.3 on the western side of the site. The surrounding local topography generally slopes west toward the Gowanus Canal. Properties southeast of the site are generally at a higher elevation (upgradient).

The waterfront consists of an approximately 220-foot-long vertical cutoff wall constructed of steel sheet piles advanced along the Gowanus Canal during implementation of the NYSDEC-approved, October 29, 2019 Interim Remedial Measures Work Plan (IRMWP) and documented in the IRM CCR dated June 9, 2021

¹ Elevations presented herein are in feet and referenced to the North American Vertical Datum of 1988 (NAVD88)



The site and surrounding area have been developed for commercial and industrial uses since at least 1886. Historical site uses include a coal and stone yard with wagon painting as early as 1886, a blacksmith as early as 1904, a transit facility with coal yard from as early as 1915 until 1938, an automobile wrecking facility from as early as 1934 until 1950, a filling station with gasoline tanks from as early as 1950 until 1977, and automobile repair facilities with hydraulic lifts from as early as 1950 to present. Two open spill incidents (Spill Nos. 98-08009 and 02-03307) are associated with the up-gradient eastern adjoining Consolidated Edison facility. According to the listing information, several underground storage tanks (UST) and petroleum-impacted soil have been removed. However, both spills remain open pending further remediation. During the 2014 Phase II Environmental Site Investigation (ESI), petroleum impacts were detected in groundwater and soil vapor within the western half of the site. Based on these findings, the NYSDEC spill hotline was called, and Spill No. 1405008 was assigned.

2.1 Geologic Conditions

Based on the Remedial Investigation Report (Langan, 2019) the geology beneath the Site consists of urban landfill material (historic fill) underlain by silty sand and organic clay. The historic fill is predominately brown, medium-grained sand with varying amounts gravel and silt from 8 to 15.25 feet bgs and includes construction material, wood, concrete and brick fragments. The historic fill material is underlain by either an organic layer consisting of soft silt and clay or by stratified clay and unconsolidated fine-to coarse-grained sand with shell fragments and varying amounts of silt and gravel. Bedrock was not encountered to the total depths investigated.

Depth to groundwater was measured between about 3.5 to 8.75 feet below top of well casing equating to groundwater elevations from about el 2 to el 8.5. The groundwater elevation is lowest in the eastern part of the Site and appears to flow west toward the Gowanus Canal. According to the Langan2019 RIR, the flatness of the hydraulic contours generally demonstrates a horizontal flow pattern across the site, with slight downward vertical gradient at the edge of the Canal and slight upward vertical gradient on the eastern boundary of the site, indicating possible localized confining conditions. Groundwater flow is throughout the fill and lower sandy soils which form a continuous aquifer unit at the top of the stratified clay and sand layers. The primary contaminant zone is in the fill, with the exception of apparent DNAPL globules detected at depth in the northwestern corner of the Site as discussed later in this document.



2.2 Site Assessment and Remediation Summary

Historic fill was identified below surface cover to depths of up to about 15.25 feet bgs. Contaminants related to historic fill include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) detected at concentrations above Unrestricted Use (UU), Restricted-Residential Use (RRU) and/or Commercial Use (CU) Soil Cleanup Objectives (SCO). Volatile organic compounds (VOC) identified within the historic fill are associated with historical gasoline and petroleum fuel related releases. SVOCs were detected in groundwater at concentrations above the applicable NYSDEC Standard Guidance Values (SGVs)².

Petroleum impacts, as evidenced by odors, staining, and/or photoionization detector (PID) readings above background levels, were apparent in 16 of 33 soil borings completed to depths of up to 20 feet bgs. Petroleum-related VOCs were detected in 12 samples collected from 0 to 14 feet bgs at concentrations exceeding the applicable UU and/or RRU SCOs. Field indications of petroleum impacts, including elevated PID readings, odors, and/or oily sheen, were observed in two wells. Analytical results for samples collected from six (6) wells exhibited concentrations of petroleum-related VOCs exceeding their respective NYSDEC SGVs. Petroleum-related VOCs were identified in all soil vapor samples collected. Petroleum-impacted soil and groundwater was typically encountered in areas of historical petroleum use and potential release in the northwestern and southeastern corners of the site. Chlorinated Volatile Organic Compound (CVOC)-Impacted Soil Vapor were recognized: Tetrachloroethene (PCE) was detected in all soil vapor and sub-slab vapor samples collected, except in SSV-10_032718, and trichloroethylene (TCE) was detected in six samples. Total VOCs in soil vapor samples ranged from 89.6 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in SSV-2 to 3,943.74 $\mu\text{g}/\text{m}^3$ in SSV-10_052018, as compared to a range of 43.87 $\mu\text{g}/\text{m}^3$ to 822.07 $\mu\text{g}/\text{m}^3$ in the ambient air samples. The detected concentrations of PCE and TCE in the indoor air and sub-slab soil vapor samples collected in the former Lot 58 building are categorized by the NYSDOH Decision Matrices as requiring actions ranging from “identification of source(s) and resampling or mitigation” to mitigation. The PCE and TCE concentrations in indoor air samples were below the NYSDOH Air Guidance Values (AGV) during the indoor air sampling event in March 2018 within the former Lot 43 building and the May 2018 indoor air sampling event within the former Lot 58 building. Coal Tar impacts are indicated

² NYSDEC SGVs promulgated in the NYSDEC 6 NYCRR Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water.



by degraded coal tar blebs identified in a groundwater sample collected from the recovery well installed in the northwest corner of the site (MW-16). Coal tar-related impacts appear to be attributed to off-site sources, as documented in the United States Environmental Protection Agency (USEPA)'s Gowanus Canal Superfund Site, Record of Decision (ROD) dated September 2013.



3.0 IN-SITU CHEMICAL OXIDATION REMEDY SELECTION

The following sections provide a basis for utilizing ISCO as remedy to address in-situ soil and groundwater contamination at the Site.

3.1 Current Subsurface Conditions

Soil and groundwater data from the Remedial Investigation Report (Langan, 2019), along with an aquifer permeability test and a pre-design baseline groundwater sampling event performed by IEEG in April and May 2025, respectively, were used to support the ISCO design.

Chlorinated-VOCs were detected in soil vapor but were not detected in soil or groundwater samples at levels above regulatory standards, with the exception of one well (MW-30) near the northern property boundary which contained cis-1,2-dichloroethene and vinyl chloride, considered to be potential daughter products of PCE and TCE degradation by reductive dechlorination. Reducing conditions are indicated by metals analysis results from the shallow aquifer, although areas of increased oxidation are probable in the more permeable soil and groundwater zones in the fill and some of the underlying sands outside of the primary contaminant zone. Tidal influence is indicated in the western portion of the Site related to the Gowanus Canal, including brackish water intrusion which appears to extend across the Site based on sodium concentrations in the groundwater.

On October 13, 2016 and November 26, 2024 well MW-28 was sampled for total and dissolved metals. Comparison of the results indicate a notable decrease in manganese and iron from the November 2024 result. Notable is the fact that dissolved concentrations were higher than total metals concentrations for both metals in groundwater in the October 2016 sample results indicating reducing conditions approaching anoxic. The November 2024 sample results indicated a nearly 50% decrease in these metals concentrations and an increase in total iron vs. dissolved iron supporting an increased oxidation state for the iron. Monitoring well MW-28 is positioned upgradient at the eastern property boundary (easternmost lot) where petroleum VOCs and metals concentrations were initially detected at levels orders of magnitude greater than the respective NYSDEC AWQS and may provide preliminary evidence of natural attenuation of the impacted groundwater from the Site. Petroleum VOCs were not analyzed in November 2024 and could not be compared.



On May 21 and 22, 2025 wells MW-06S (shallow), MW-09R, MW-22, MW-24R, MW-25, MW-28, MW-29 and MW-30 were sampled and analyzed for full list SVOC and VOC compounds to provide a current baseline for remedial activities. MW-06S and MW-09R are positioned down hydraulic gradient nearest the western property boundary and MW-06S is generally in the vicinity down gradient/side-gradient of MW-16 where MGP blebs were identified, MW-22 and MW-24R are positioned mid-Site and nearest the southern property boundary and MW-25 and MW-28 are positioned in the areas within and downgradient of former petroleum USTs. MW-29 is positioned at the upgradient property boundary in the southeastern corner of the property. Evidence of downgradient migration of the VOC compounds may be indicated by the 2025 results at MW-25. Concentrations of petroleum VOCs remain above the NYSDEC AWQS in MW-25 and MW-28 and indicate additional remedial action is necessary to achieve the remedial goals. CVOCs in groundwater have decreased to below regulatory criteria and SVOCs, primarily PAHs, have increased slightly in concentration at wells MW-09R, MW-24R, MW-25, MW-28 and MW-29. Remedial action of CVOCs is indicated to address potential rebound due to seasonal fluctuation and spot remediation of SVOCs is needed to control migration of the more mobile fraction and remediate persistent hot spots at MW-25 and MW-30. Refer to **Table 4** for a comparison of results to the applicable groundwater standard,

Figure 3 is a groundwater contour map constructed from current gauging data collected in May 2025 showing potential direction of groundwater and contaminant flow. **Figure 4** includes tabulated concentration data at existing groundwater monitoring wells, respectively, from the current sampling event conducted in May 2025.



4.0 ISCO INJECTION PLAN DESIGN AND IMPLEMENTATION

The following sections detail the design components and implementation steps for the ISCO injection Plan.

4.1 ISCO Activator

The proposed ISCO injections will utilize Klozur[®] SP with an alkaline (high pH) activator to meet the soil and contaminant oxidant demand. Klozur[®] SP alkaline activator is the most commonly used activation method to energize persulfate oxidation processes and neutralize the H₂SO₄ generated from persulfate decomposition. The alkaline demand is a calculated function of the alkalinity needed to neutralize the H₂SO₄ plus the amount needed to raise groundwater/soil to a pH > 10. It is a highly soluble activator which will primarily account for the high natural soil oxidant demand (SOD) and the rapid activation required to effectively oxidize the contaminants. A 25% solution of sodium hydroxide (NaOH) will be used based on contaminant Site information from Langan 2019, a current (May 2025) sampling event and calculations provided by Evonik. The proposed ISCO injection Plan quantities are included in **Table 1**. Selection of the ISCO activator and calculated quantities were determined by Evonik in coordination with IEEG. ISCO calculations and assumptions used to determine caustic and persulfate injection quantities are included in **Appendix A**. Based on discussions between Evonik and IEEG, injection material quantities were decreased proportionally from the initial estimate to account for a refined proposed target injection volume. Safety data sheets for the proposed ISCO amendments are included in **Appendix B**.

4.2 Injection Layout

The ISCO treatment plan will target injection intervals of 3 to 15 feet bgs to address residual VOC and SVOC concentrations identified in monitoring wells in the northwest, eastern and northeastern portion of the westernmost lot of the Site and from 6 to 15 feet bgs to address VOC and SVOC concentrations identified at the central, northeastern and southeastern portion of the easternmost lot. Based on historic boring logs and analytical results from the RIR (Langan, 2019), the proposed injection interval will cross two distinguishable unconsolidated soil deposits: 1: Historic fill identified from the surface to between 8 and approximately 15 feet bgs. across the Site and 2: unconsolidated native sands with intermittent silts and gravel identified below the fill to approximately 15 – 16 feet bgs. Based on aquifer tests conducted by IEEG, permeability as measured by hydraulic conductivity is variable but generally high in the historic fill and consistently low in the stratified finer grained sediments and clay. Intermittent sand and gravel layers identified in the native materials below the top of the clays/silt had little or no volatility, as



measured with the PID, indicating volatile contamination to the soil below the native clay and fines is minimal to absent. Based on the RIR (Langan, 2019), non-volatile contamination in the soil from SVOCs (mostly PAHs) appears inert and is associated primarily with the historic fill. The ISCO treatment plan injections will target the saturated historic fill to the top of the confining clay/silt or the upper native sands to address residual VOC and SVOC mass and evaluate injection performance and activator distribution.

The Site will be subdivided into six (6) treatment zones. Soil boring logs, groundwater depth and analytical data were used to identify criteria for each zone. As an example, petroleum VOCs were targeted in two main areas near former UST sources at the easternmost lot and in identified downgradient locations in the westernmost lot. Sample results show that intermediate locations were not impacted by petroleum VOCs, and groundwater depth consistently varied between the two zones. Current analytical results indicated that possible petroleum VOC migration in a downgradient direction has occurred in the western portion of the easternmost lot, however, beyond that, petroleum VOCs have not been identified. The areas were therefore considered isolated, requiring different treatment intervals, areal extent and injectant concentrations. Similarly, CVOC impact was noted from Langan, 2019 in an area near the northern property boundary. This area contained degraded CVOC compounds in decreasing concentrations which were relatively isolated, and which were confirmed to be continually decreasing based on current analytical results. The area was included in a separate zone combined with the petroleum impacted area on the westernmost lot where injection material quantities will address a broader areal extent in the downgradient and longitudinal direction and the higher probability of enhancement of natural degradation is considered to exist. In reference to SVOCs, analytical results show that PAHs predominate and have both first appeared at levels exceeding regulatory criteria and increased in locations across the site. These compounds are relatively low in concentration and can be viewed as most likely being related to former MGP waste which has infiltrated the Site through groundwater migration at the westernmost lot, degradation of asphalt cover materials site wide and historic fill. The asphalt will be remediated on a Site-wide basis by removal and with the exception of persistent “hot spots” which have been confirmed by analytical results, the PAH compounds are planned on being indirectly treated by groundwater flux and natural attenuation. The entire Site will be covered by the planned new development and human exposure from these compounds is not considered a concern. The Injection Plan layout is included as **Figure 5**.



Injection points will be grouped in evenly spaced grid pattern configuration with injection points spaced approximately 17-ft apart to accommodate the 10-foot design radius of influence determined by Evonik and IEEG with approximately 17% overlap. Each injection point will be advanced from the groundwater table to about 15 feet or the top of the clay intercepting VOC and SVOC-impacted groundwater. Injection point locations may be adjusted to avoid identified subsurface or overhead features or prevent injection material resurfacing (daylighting) at the injection point. One hundred sixty-eight injection points will be installed upgradient and/or within the primary source areas and in identified downgradient plume areas. The targeted areas of the proposed injection points are included in **Figure 5**.

4.3 Proposed Performance Monitoring Well Installation

To monitor ISCO effectiveness and amendment distribution, existing monitoring wells will be sampled and two new monitoring wells (MW-31R and MW-32) are proposed within the Site boundaries. The proposed performance monitoring wells will be installed and developed in accordance with the already-approved Remedial Investigation Work Plan (Langan, 2019) at the property boundary north of former well TW-7 and at the western edge of the westernmost lot and downgradient of existing wells MW-29 and MW-30 to add monitoring locations across the proposed ISCO treatment areas. Proposed monitoring well locations are presented on **Figure 6**. Final well locations will be determined in the field and are contingent upon approval by the NYSDEC.

Performance monitoring wells will be constructed of 2-inch diameter PVC well casing with a 10-foot long screen. The screened intervals of each well were selected to evaluate fill depths with limited screen coverage from existing monitoring wells. The well screen will have a 0.010-inch slot size and the annular space between the well screen and the borehole will be backfilled with an appropriately sized silica sand filter pack. The filter pack will be followed by a 2-foot thick bentonite seal. The balance of the annular space will then be backfilled with grout and completed at the surface with a locking compression-style cap and an 8-inch bolt down manhole cover. Performance monitoring well construction details are summarized in **Table 2**.



4.4 Injection Implementation

Injection materials will be shipped by freight directly to the Site. Klozur® SP will be shipped in 50- and 55-pound (lb.) bags staged on pallets and the NaOH solution will be delivered in 2,500 lb totes. All injection materials must be stored in accordance with best practices provided by Evonik, inside a temporary storage container or other protective structure throughout the entire period of injection activities in order to remain dry. Potable water for batching and injection will be delivered by tanker truck or by other means as appropriate. Prior to commencing injections, the potable water source will be identified and laboratory analysis performed for VOCs and metals. Electricity to power remediation equipment will be provided by a gasoline-powered generator or by other means as appropriate. IEEG will set up a materials and equipment storage/staging area on the Treatment Area property as coordinated with the property owner. Slurry batches will be prepared using a ChemGrout (or equivalent mixing unit) and adding appropriate quantities of Klozur® SP and water to achieve the selected dilution concentration. Due to the rapid reaction between persulfate and NaOH, the NaOH solution cannot be mixed before injection. The 25% NaOH solution will be delivered in pre-mixed totes for direct injection. Hoses and pumps will be used to convey the slurry and NaOH solution directly to injection points. The slurry and NaOH solution will be injected at pre-determined volumes (refer to **Table 1**) into the subsurface using a DPT drill rig. Temporary injection points will be advanced to the deepest injection interval (13-foot bgs on the westernmost lot and 15-foot bgs on the easternmost lot) then pulled up in one foot injection intervals (bottom-up). Top-down injection methods may be utilized if bottom-up techniques do not achieve satisfactory distribution. The slurry will be injected between doses of the NaOH solution at each one-foot injection interval in discrete layers to ensure the persulfate is well mixed with the highly soluble caustic solution for rapid alkaline activation. This process is repeated across the entire injection interval to evenly and systematically distribute injection material. A manifold with flow totalizers, pressure gauges, and flow control valves will be used to regulate injection flow rates and pressure while injecting in multiple points. All injection equipment, including hoses, pumps, instrumentation, valves, and DPT accessories will be compatible with persulfate. To minimize mounding and improve amendment delivery, injections will generally not be performed at adjacent points at the same time.

Based on hydraulic conductivity from aquifer tests and identification of soil types from the well/boring logs, NaOH solution injections are anticipated to require lower pressure (5 to 10 pounds per square inch [psi]) and achieve flow rates of approximately one gallon per minute (gpm). Slurry injections will require a higher injection pressure of approximately 100 psi with a resulting flow rate of approximately 5 gpm.



Although higher flow rates are likely achievable, flow and pressure will be regulated throughout the injections to prevent daylighting and/or mounding from injecting into lower permeable zones of the fill. During injections, IEEG will maintain field logs to record the solution composition, the volume of solution delivered into each injection point, the length of time required for injection, and the injection pressure. Additionally, IEEG will continuously monitoring water level elevations at 30-minute intervals at select monitoring wells to monitor changes in groundwater level and composition during injection activities. During remedial activities, community air monitoring will be in place including dust and odor control, as needed, and daily reports will be submitted to the NYSDEC and NYSDOH to document remedial activities.

Following ISCO injections, remediation derived waste (empty bags, pallets, PPE, and miscellaneous trash) will be disposed of as municipal trash, as none of this waste is anticipated to come in contact with contaminated materials in the subsurface. Empty NaOH totes will be disposed of offsite by a disposal contractor. All injection points and performance monitoring wells will be surveyed by a licensed surveyor.

4.5 Performance Monitoring

Performance monitoring will be conducted to evaluate the distribution of ISCO amendments and the change in VOC concentrations over time. Groundwater samples will be collected from eight existing monitoring wells (MW-06S, MW-09R, MW-22, MW-24, MW-25, MW-28, MW-29 and MW-30) and two new monitoring wells (MW-31 and MW-32) using United States Environmental Protection Agency's (USPEA) low-flow groundwater sampling procedure methods³, and all sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the site. Water quality field parameters including temperature, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and pH will be recorded at the time of sampling. All samples will be collected in laboratory-supplied bottleware and shipped to the New York State ELAP-certified laboratory for analysis. IEEG will collect initial post-remedial groundwater samples from the nine existing monitoring wells indicated above and from the two new monitoring wells following well development.

³ Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, dated July 30, 1996 (revised September 19, 2017)



Due to the rapid nature of ISCO reactions, the performance monitoring period is expected to last only six months. Three performance monitoring events are proposed to be performed by IEEG. Following the end of the performance monitoring period, IEEG will evaluate groundwater conditions and determine if additional analyses should be added. If indicated, post-remedial groundwater monitoring will be completed in accordance with a Site Management Plan (SMP) for long term management of residual contamination. It is anticipated that groundwater samples will be collected quarterly for two years (i.e., eight quarters) following the initial post-ISCO monitoring. **Table 3** presents the monitoring parameters and frequency for the ISCO performance monitoring program. Sample locations are included on **Figure 4** and **Figure 6**.



5.0 ISCO INJECTION PREPARATION ACTIVITIES

The following sections detail the preparation activities required before ISCO injection activities can commence.

5.1 Permitting

The application of chemical injection is considered a Class V well under the Environmental Protection Agency (EPA) Underground Injection Control (UIC) Program. Class V wells are “used to inject non-hazardous fluids underground”. EPA must be notified of the construction, operation and decommissioning of a Class V injection well. The notification will be made using the inventory form referenced in 40 CFR 144.26. Proof of notification to the EPA at least 30 days in advance of the injection activities will be provided to the NYSDEC.

5.2 Utility Location

Utilities will be located within the treatment area prior to any drilling activities. Utility clearance procedures will involve utility location and marking by notifying UDig New York as well as a private utility locator, which will be procured by IEEG. Injection points will be relocated as necessary to maintain five feet of clearance from any identified underground utilities. All utilities will be located prior to beginning DPT borings. If hand-clearing is required, the cleared boring will be backfilled with bentonite prior to being advanced with DPT for the injections, to prevent shallow daylighting.

5.3 Deviations from the Workplan

Monitoring well MW-18 will be included in the post-remediation sampling plan and MW-32 will be relocated north/northwest of its’ original proposed location. The NYSDEC will be notified in advance of any additional deviations to the workplan regarding delays in work, relocation of proposed monitoring wells due to underground obstructions and/or changes in the sampling program due to well damage or destruction.

5.4 Contingency Plan

If the existing monitoring well network is destroyed or damaged during the remedial excavation, work will be stopped and the condition of the well(s) assessed. If reparable onsite, the well(s) will be immediately



repaired or flagged and repaired as soon as is practical. If the well(s) is permanently damaged beyond repair or destroyed, the well will be properly abandoned and the NYSDEC notified. Upon approval by the NYSDEC, the well(s) will either be relocated and reinstalled or omitted from the sampling program.



6.0 SCHEDULE

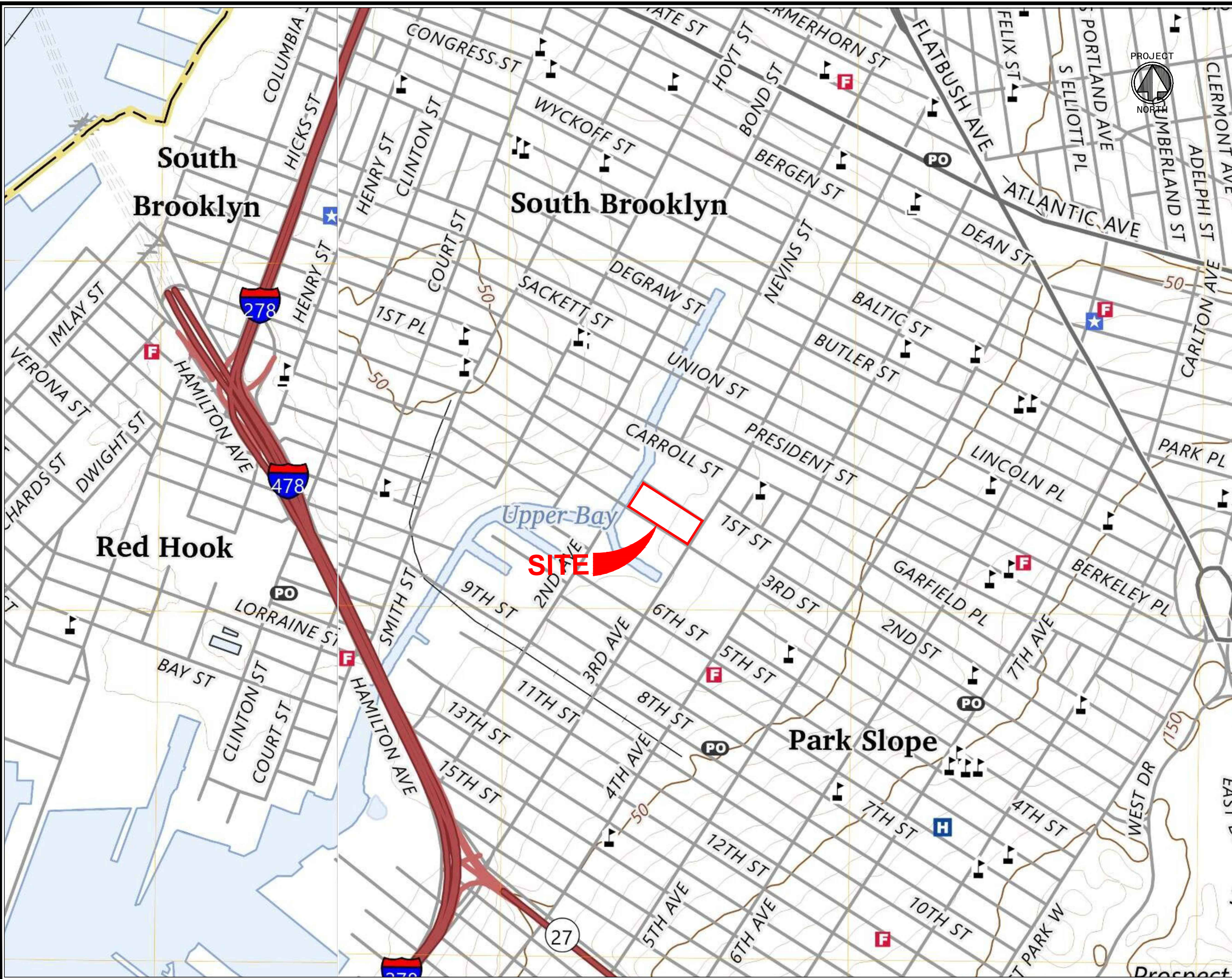
The current milestone and daily schedules for the ISCO implementation are included below, along with the responsible party or parties. The full program is expected to take approximately one year to complete. IEEG will keep NYSDEC apprised via e-mail correspondence and/or telephone calls of schedule changes as they develop. The anticipated schedule of milestone events is as follows:

Activity or Milestone	Estimated Date
IEEG - Procure Persulfate (Evonik) and Caustic (Evonik)	August 2025
Contractor and IEEG - Mobilize and Begin ISCO Field Injections	September 15, 2025
Contractor and IEEG - Complete ISCO Field Injections	December 30, 2025
Contractor and IEEG - Install Performance Monitoring Wells	October 10, 2025
IEEG - Collect initial Post-Injection Performance Groundwater Samples	January 2025
IEEG - Collect 3-Month Post-Injection Performance Groundwater Samples	March 2026
IEEG - Collect 6-Month Post-Injection Groundwater Samples	June 2026

175-225 THIRD STREET SITE
BROOKLYN, KINGS COUNTY, NEW YORK

In-Situ Chemical Oxidation Design Document
NYSDEC Site Number: C-224209

FIGURES



NOTES:

**FIGURE 1:
SITE LOCATION**

175-225 3rd Street
Brooklyn, New York

Figure No: 01

PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	11/21/2024
SCALE:	N.T.S.
REVISIONS	

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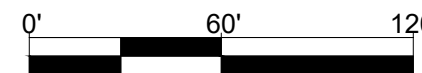
LEGEND

 PROPERTY LINE

PROJECT



NORTH



NOTES:

FIGURE 2: SITE PLAN

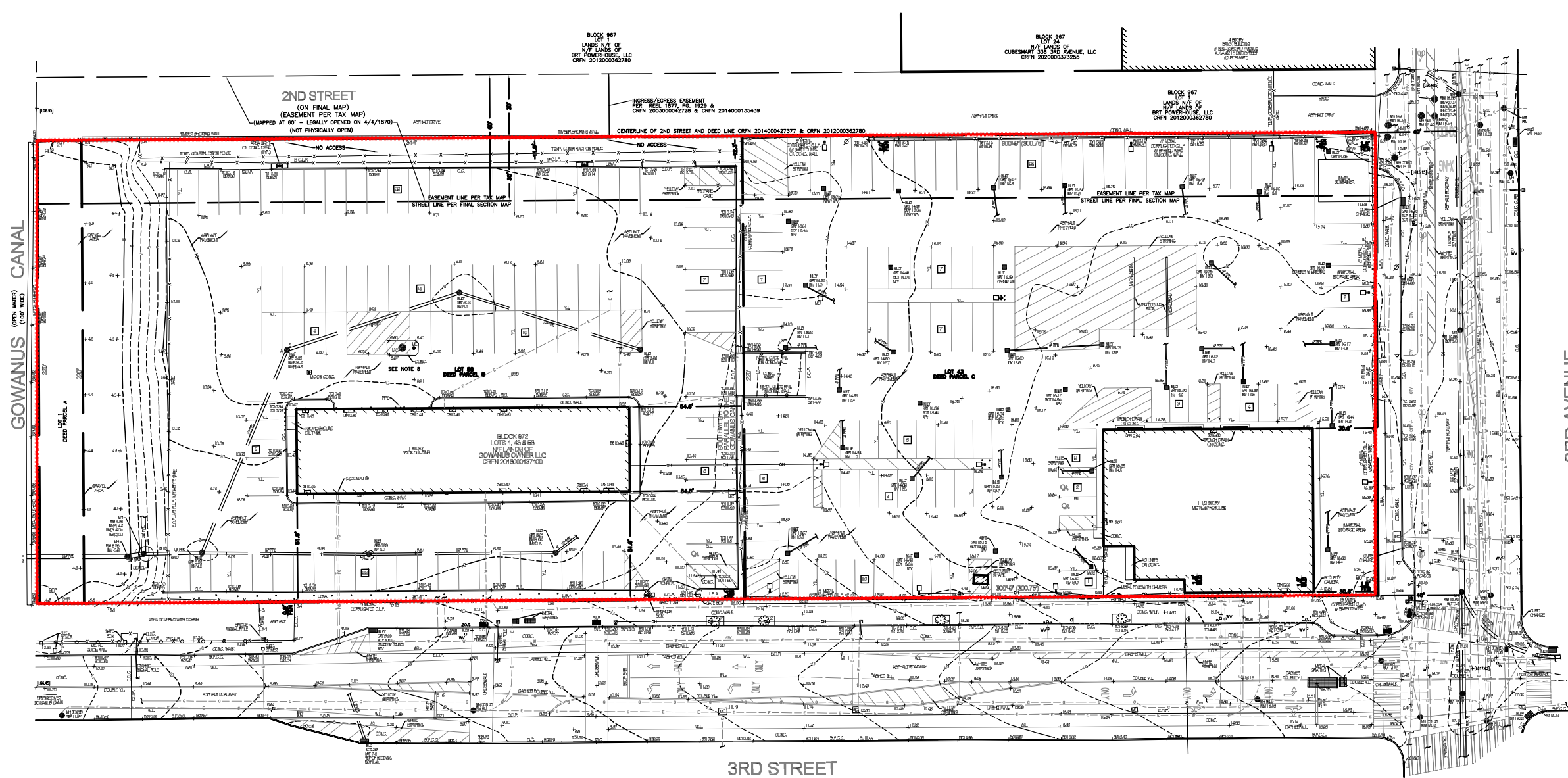
175-225 3rd Street
Brooklyn, New York

Figure No: 02

PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	11/21/2024
SCALE:	1" = 60'
REVISIONS	






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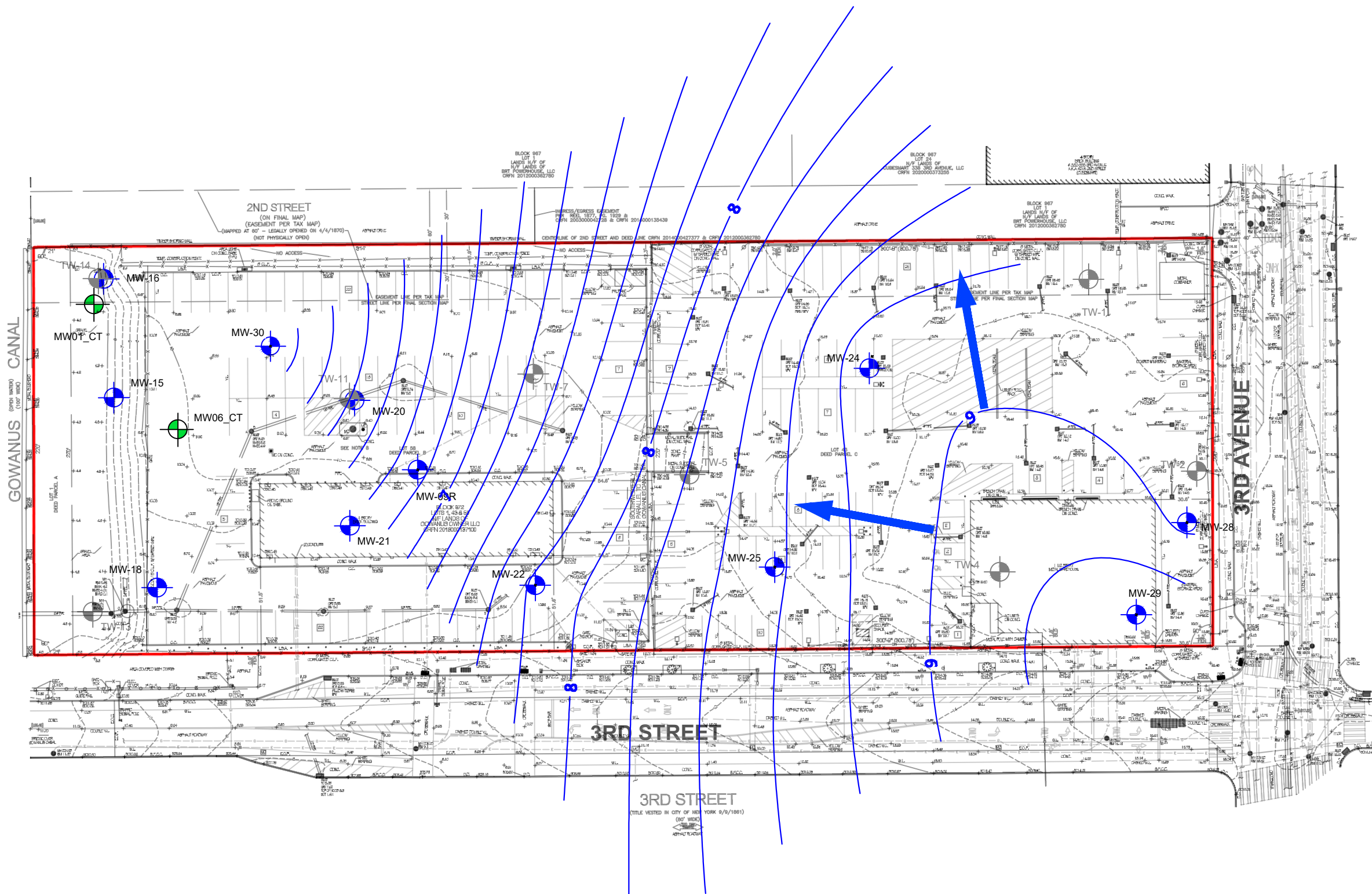
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LEGEND:

-  SITE BOUNDARY
-  MW-24 MONITORING WELL LOCATION
-  TW-1 TEMPORARY MONITORING WELL LOCATION
-  MW01 MULTI-LEVEL NESTED WELL LOCATION
-  GROUNDWATER CONTOUR



**GROUNDWATER CONTOUR
MAP:
MAY 21, 2025**

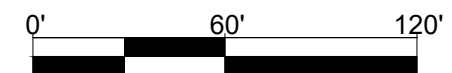
175-225 3rd Street
Brooklyn, New York

Figure No: 03

PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	5/30/2025
SCALE:	1" = 60'
REVISIONS	

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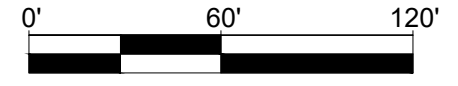
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LEGEND

— PROPERTY LINE
+ MONITORING WELL LOCATION
+ MULTI-LEVEL NESTED WELL LOCATION

NOTES:
 NE= NO EXCEEDANCE OF REGULATORY CRITERIA
 NS = NOT SAMPLED



GROUNDWATER SAMPLE RESULTS

*175-225 3rd Street
 Brooklyn, New York*

Figure No: 04

PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	7/21/2025
SCALE:	1" = 100'
REVISIONS	

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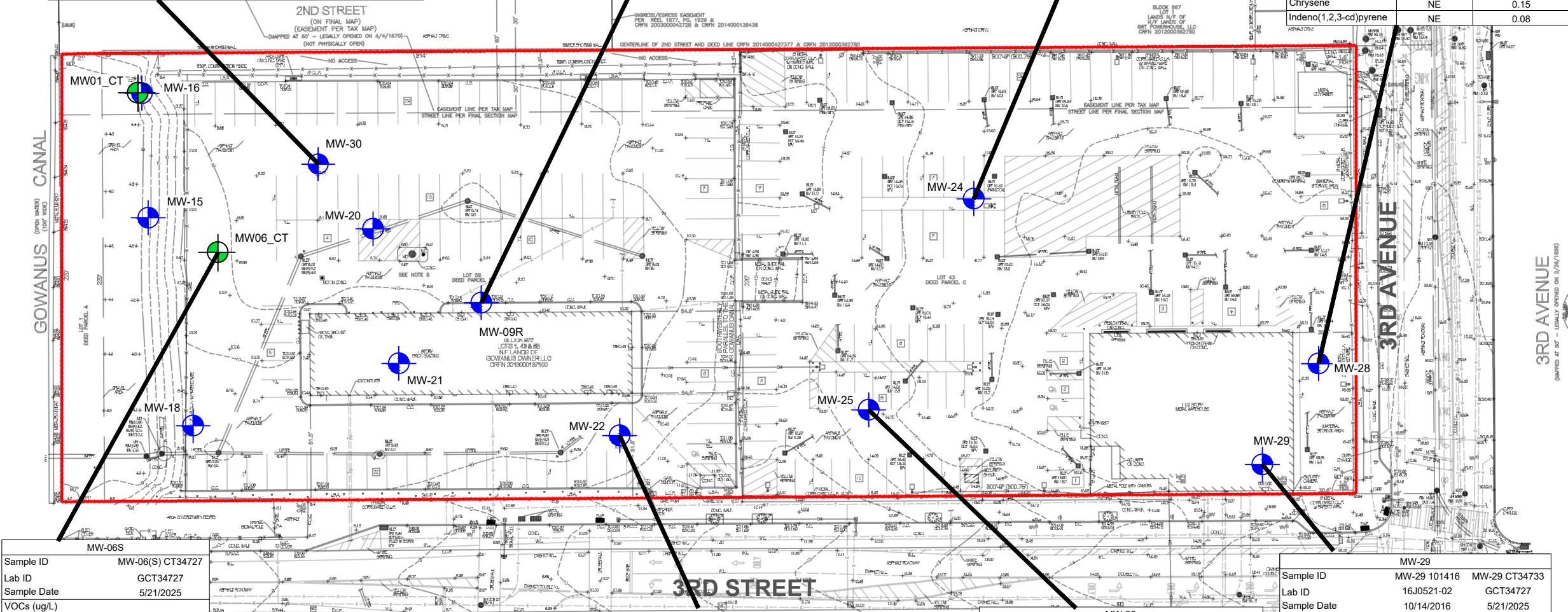


MW-28		
Sample ID	MW-28 101316	MW-28 CT34732
Lab ID	16J0481-04	GCT34727
Sample Date	10/13/2016	5/21/2025
VOCs (ug/L)		
1,2,4 Trimethylbenzene	14	NE
Benzene	42	19
Isopropylbenzene	22	NE
n-Propylbenzene	13	NS
o-xylene	14	NE
p/m xylenes	26	NE
Toluene	5.7	NE
Total xylenes	40	8.6
1,2 Dichlorobenzene	NE	5.6
SVOCs (ug/L)		
Benzo(a)anthracene	NE	0.12
Benzo(a)pyrene	NE	0.15
Benzo(b)fluorethene	NE	0.09
Benzo(k)fluorethene	NE	0.06
Chrysene	NE	0.15
Indeno(1,2,3-cd)pyrene	NE	0.08

MW-24		
Sample ID	MW-24 101316	MW-24R CT38695
Lab ID	16J0481-01	GCT34727
Sample Date	10/13/2016	5/29/2025
VOCs (ug/L)		
VOCs (ug/L)	NE	NE
Benzo(a)anthracene	NE	0.12
Benzo(a)pyrene	NE	0.07
Benzo(b)fluorethene	NE	0.08
Benzo(k)fluorethene	NE	0.08
Chrysene	NE	0.12
Indeno(1,2,3-cd)pyrene	NE	0.06
Phenol	NE	NE

MW-09R		
Sample ID	MW-09R 101316	MW-09R CT34728
Lab ID	16J0481-05	GCT34727
Sample Date	10/12/2016	5/22/2025
VOCs (ug/L)		
VOCs (ug/L)	NE	NE
SVOCs (ug/L)	NE	NE
Benzo(a)anthracene	NE	0.03
Benzo(a)pyrene	NE	0.03
Chrysene	NE	0.02
Indeno(1,2,3-cd)pyrene	NE	0.02

MW-30			
Sample ID	MW-30 101216	GWDUP01-101216	MW-30 CT34734
Lab ID	16J0442-03	16J0442-04	GCT34727
Sample Date	10/12/2016	10/12/2016	5/22/2025
VOCs (ug/L)			
Cis-1,2-Dichloroethene	14	15	NE
Vinyl Chloride	7.4	7.4	NE
SVOCs (ug/L)			
Acenaphthene	38.9	38.4	NE
Benzo(a)anthracene	0.34	0.23	0.24
Benzo(a)pyrene	0.24	0.12	0.11
Benzo(b)fluorethene	0.11	0.089	0.12
Benzo(k)fluorethene	0.16	0.083	0.11
Chrysene	0.3	0.21	0.22
Indeno(1,2,3-cd)pyrene	<0.0556	0.069	0.07



MW-06S	
Sample ID	MW-06(S) CT34727
Lab ID	GCT34727
Sample Date	5/21/2025
VOCs (ug/L)	
Benzene	2.2
Ethylbenzene	16
Total Xylenes	5.3
1,2,4 Trimethylbenzene	14
Isopropylbenzene	7.6
SVOCs (ug/L)	
Acenaphthene	170
Benzo(a)anthracene	0.14
Benzo(a)pyrene	0.03
Chrysene	0.1
1,1-Biphenyl	53

MW-22		
Sample ID	MW-22 101316	MW-22 CT34729
Lab ID	16J0481-02	GCT34727
Sample Date	10/13/2016	5/21/2025
VOCs (ug/L)		
VOCs (ug/L)	NE	NE
SVOCs (ug/L)	NE	NE
Benzo(a)anthracene	NE	0.03
Benzo(a)pyrene	NE	0.03
Benzo(b)fluorethene	NE	0.02
Benzo(k)fluorethene	NE	0.02
Chrysene	NE	0.02

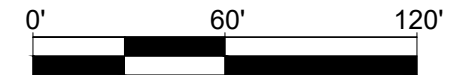
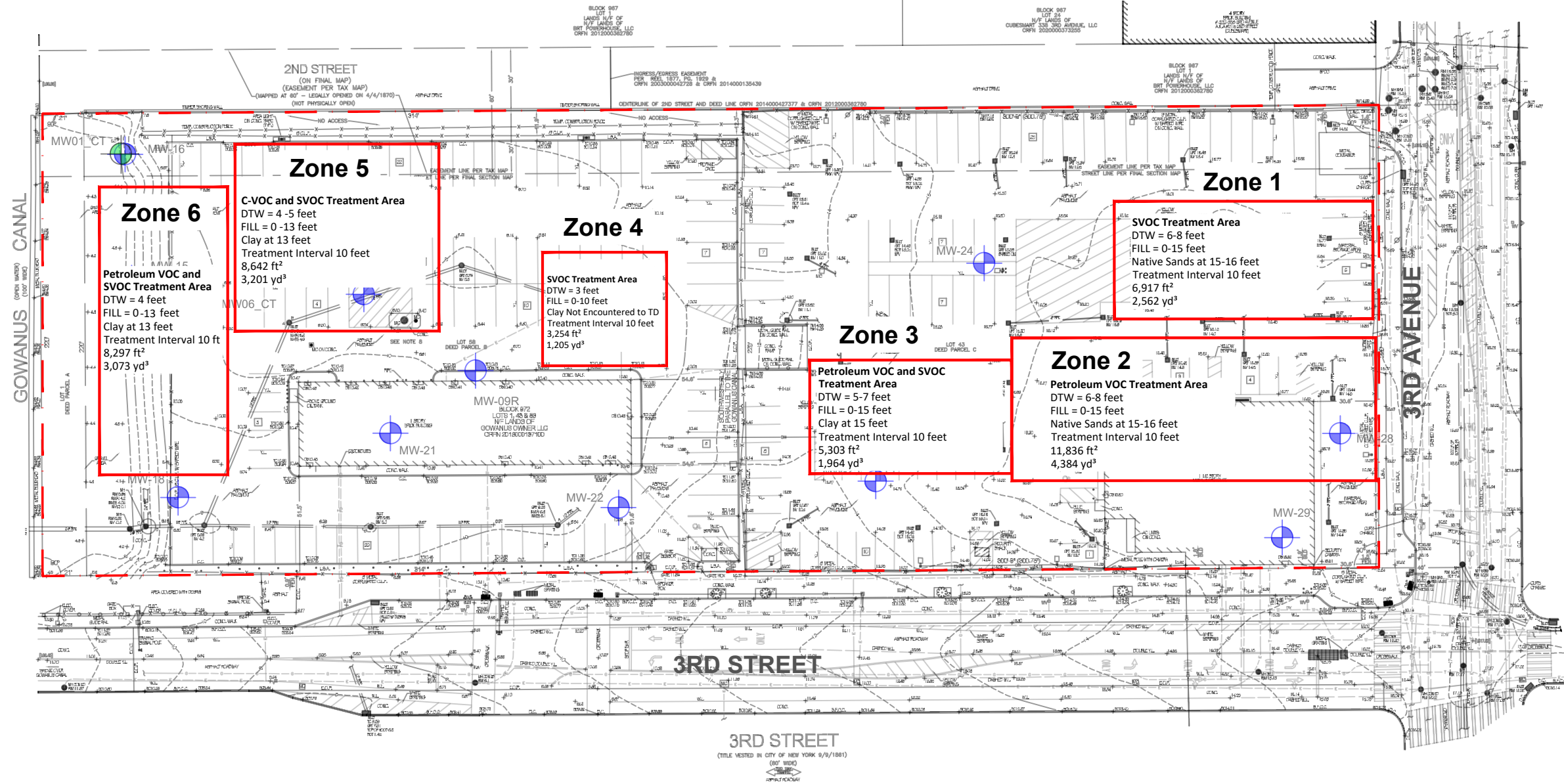
MW-25		
Sample ID	MW-25 101316	MW-25 CT34731
Lab ID	16J0481-03	GCT34727
Sample Date	10/13/2016	5/21/2025
VOCs (ug/L)		
Benzene	2.9	5.2
Total xylenes	5.7	7.5
1,2,4 Trimethylbenzene	NE	6.8
Isopropylbenzene	NE	13
SVOCs (ug/L)		
Acenaphthene	131	190
Naphthalene	NE	8.4
Benzo(a)anthracene	NE	0.06
Chrysene	NE	0.05

MW-29		
Sample ID	MW-29 101416	MW-29 CT34733
Lab ID	16J0521-02	GCT34727
Sample Date	10/14/2016	5/21/2025
VOCs (ug/L)		
VOCs (ug/L)	NE	NE
SVOCs (ug/L)	NE	NE
Benzo(a)anthracene	NE	0.46
Benzo(a)pyrene	NE	0.09
Benzo(b)fluorethene	NE	0.53
Benzo(k)fluorethene	NE	0.27
Chrysene	NE	0.6
Indeno(1,2,3-cd)pyrene	NE	0.14



NOTES:

1. BASE MAP ADAPTED FROM 27 OCTOBER 2015 BOUNDARY AND TOPOGRAPHIC SURVEY BY GALLAS SURVEYING GROUP.
2. ELEVATIONS ARE IN FEET AND REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. RECOVERY WELL MW-16 WAS INSTALLED DURING THE RI TO INVESTIGATE THE PRESENCE OF DENSE NON-AQUEOUS PHASE LIQUID (DNAPL). A GROUNDWATER SAMPLE WAS NOT COLLECTED FROM MW-16.



TREATMENT AREAS

175-225 3rd Street
 Brooklyn, New York

Figure No: 05




PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	5/30/2025
SCALE:	1" = 60'
REVISIONS	

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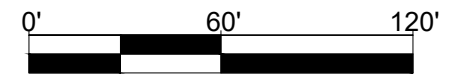
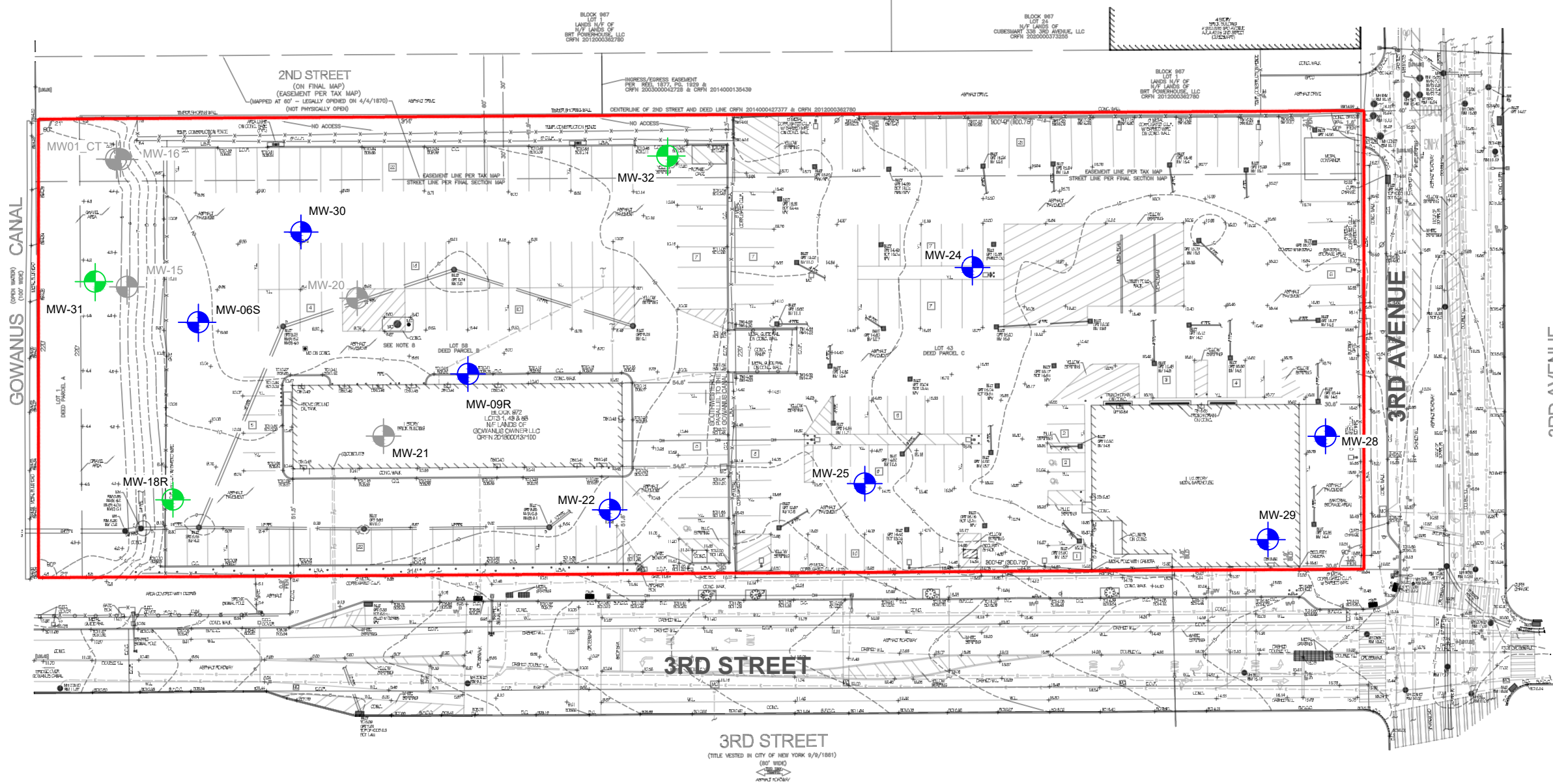
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LEGEND

-  PROPERTY LINE
-  WELL TO BE SAMPLED POS-REMEDATION
-  PROPOSED WELL LOCATION (TO BE SAMPLED POST-REMEDATION)

NOTE: MW-18R WILL BE REINSTALLED AND SAMPLED POST-REMEDATION



MONITORING WELLS TO BE SAMPLED POST-REMEDATION

175-225 3rd Street
Brooklyn, New York

Figure No: 02

PROJECT NO:	17831-01
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DF
DATE:	11/21/2024
SCALE:	1" = 60'
REVISIONS	

IMPACT ENVIRONMENTAL ENGINEERING AND GEOLOGY PLLC

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175-225 THIRD STREET SITE
BROOKLYN, KINGS COUNTY, NEW YORK

In-Situ Chemical Oxidation Design Document
NYSDEC Site Number: C-224209

TABLES

Table 1
Proposed Injection Material Quantities
Cumulative Average Estimated for Zones 1-6
ISCO Design Document
175 – 225 3rd St., Brooklyn, New York

Description		Volume (gal)	Mass (lbs)
Injection Quantities Per 1-ft Interval	Reagent Slurry	214	1,439
	NaOH Solution	24	259
	Total	238	1,942
Injection Quantities Per Point	Reagent Slurry	1,922	14,386
	NaOH Solution	244	1,922
	Total	2,166	16,308
Total Injection Event Quantities	Reagent Slurry	279,069	2,456,892
	NaOH Solution	41,025	435,480
	Total	320,094	2,892,373

Notes and Abbreviations:

1. Reagent slurry to include a mixture of Klozur SP (sodium persulfate) and water.
2. NaOH solution is 25% w/w.
3. Total injection event quantities are estimates assuming – total injection intervals within injection treatment areas beginning at the water table between 3 and 8 ft bgs.

% w/w - Percent by weight

ft bgs - feet below ground surface gal - gallons

lbs- pounds

NaOH - Sodium hydroxide

Table 2
Performance Well Construction Details
ISCO Design Document
175-225 3rd St., Brooklyn, New York

Well ID	Proposed/Existing	Well Location	Well Construction	Total Depth (ft bgs)	Screen Length (ft)	Screened Interval (ft bgs)
MW-06S	Existing	Western lot	2" Sch 40 PVC	12	10	2-12
MW-09R	Existing	Western lot	2" Sch 40 PVC	15	10	5-15
MW-22	Existing	Western lot	2" Sch 40 PVC	15	10	5-15
MW-24	Former	Eastern Lot	2" Sch 40 PVC	16.5	10	6.5-16.5
MW-24R	Existing	Eastern lot	2" Sch 40 PVC	16.5	10	6.5-16.5
MW-25	Existing	Eastern lot	2" Sch 40 PVC	15	10	5-15
MW-28	Existing	Eastern lot	2" Sch 40 PVC	18	10	8-18
MW-29	Existing	Eastern lot	2" Sch 40 PVC	11	10	1-11
MW-30	Existing	Western lot	2" Sch 40 PVC	14	10	4-14
MW-31	Proposed	Western lot	2" Sch 40 PVC	14	10	4-14
MW-32	Proposed	Western lot	2" Sch 40 PVC	13	10	3-13

Notes and Abbreviations:

ft - feet

ft bgs - feet below ground surface

PVC - poly vinyl chloride

Sch - schedule

Table 3
Proposed Performance Monitoring Plan
ISCO Design Document
175-225 3rd St., Brooklyn, New York

Sampling Parameter	Initial	Month 3	Month 6
Water Quality Parameters			
Dissolved Oxygen	x	x	x
Oxidation Reduction Potential	x	x	x
pH	x	x	x
Temperature	x	x	x
Salinity	x	x	x
Turbidity	x	x	x
Specific Conductance	x	x	x
Laboratory Analytical Samples			
VOCs	x	x	x
TOC	x		x
Sulfate	x		x
TPH	x		x
SVOCs	x	x	x
Alkalinity	x		x

Notes and Abbreviations:

TOC - Total Organic Compounds

TPH - Total Petroleum Hydrocarbons

VOCs – Volatile Organic Compounds

Table 4 - Pre-Design Groundwater Sample Summary Table

175-225 3rd Street, Brooklyn, New York

Lab Sample Id	Units	TOGS 1.1.1 WQ/GA Table 1	CT34727				CT34728				CT34729				CT38695				CT34731				CT34732				CT34733				CT34734				CT34735				CT34736				CT34737									
			Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL	Result	RL	Qual	MDL						
Collection Date	5/21/2025				5/29/2025				5/21/2025				5/29/2025				5/21/2025				5/29/2025				5/21/2025				5/29/2025				5/21/2025				5/29/2025															
Client Id	MW-06(S)				MW-09R				MW-22				MW-24R				MW-25				MW-28				MW-29				MW-30				DUP-01				TP-01				FB-01											
Matrix	Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water				Ground Water											
Project Id : 175 THIRD ST, BROOKLYN, NY																																																				
PO # : 17831																																																				
Hexachlorobenzene	ug/L	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04	< 0.04	0.04	U	0.04		
Hexachlorobutadiene	ug/L	0.5	< 0.49	0.49	U	0.49	< 0.48	0.48	U	0.48	< 0.48	0.48	U	0.48	< 0.50	0.50	U	0.50	< 0.50	0.50	U	0.50	< 0.50	0.50	U	0.50	< 0.48	0.48	U	0.48	< 0.50	0.50	U	0.50	< 0.48	0.48	U	0.48	< 0.49	0.49	U	0.49	< 0.49	0.49	U	0.49						
Hexachlorocyclopentadiene	ug/L	5	< 0.49	0.49	U	0.49	< 0.48	0.48	U	0.48	< 0.48	0.48	U	0.48	< 0.54	0.54	U	0.54	< 0.59	0.59	U	0.59	< 0.58	0.58	U	0.58	< 0.48	0.48	U	0.48	< 0.52	0.52	U	0.52	< 0.48	0.48	U	0.48	< 0.49	0.49	U	0.49	< 0.49	0.49	U	0.49						
Indeno(1,2,3-cd)pyrene	ug/L	0.002	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.14	0.14	U	0.14	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02	< 0.02	0.02	U	0.02										
Nitrobenzene	ug/L	0.4	< 0.39	0.39	U	0.39	< 0.38	0.38	U	0.38	< 0.38	0.38	U	0.38	< 0.40	0.40	U	0.40	< 0.40	0.40	U	0.40	< 0.40	0.40	U	0.40	< 0.38	0.38	U	0.38	< 0.40	0.40	U	0.40	< 0.38	0.38	U	0.38	< 0.39	0.39	U	0.39										
N-Nitrosodimethylamine	ug/L		< 0.19	0.19	U	0.19	< 0.19	0.19	U	0.19	< 0.19	0.19	U	0.19	< 0.22	0.22	U	0.22	< 0.24	0.24	U	0.24	< 0.23	0.23	U	0.23	< 0.19	0.19	U	0.19	< 0.21	0.21	U	0.21	< 0.19	0.19	U	0.19	< 0.19	0.19	U	0.19										
Pentachlorophenol	ug/L	1	< 0.49	0.49	U	0.49	< 0.48	0.48	U	0.48	< 0.48	0.48	U	0.48	< 0.54	0.54	U	0.54	< 0.59	0.59	U	0.59	< 0.58	0.58	U	0.58	< 0.48	0.48	U	0.48	< 0.52	0.52	U	0.52	< 0.48	0.48	U	0.48	< 0.49	0.49	U	0.49										
Phenanthrene	ug/L	50				< 0.48	0.48	U	0.48	< 0.48	0.48	U	0.48	< 1.3	1.3	U	1.3	< 0.48	0.48	U	0.48	< 0.59	0.59	U	0.59	< 0.58	0.58	U	0.58	< 0.48	0.48	U	0.48	< 0.52	0.52	U	0.52	< 0.48	0.48	U	0.48											
Pyrene	ug/L	50	< 4.3	4.3	U	4.3	< 0.48	0.48	U	0.48	< 0.48	0.48	U	0.48	< 2.6	2.6	U	2.6	< 0.54	0.54	U	0.54	< 0.59	0.59	U	0.59	< 0.58	0.58	U	0.58	< 1.1	1.1	U	1.1	< 0.48	0.48	U	0.48	< 0.49	0.49	U	0.49										
Semivolatiles By SW8270E																																																				
1,1-Biphenyl	ug/L	5	< 5.3	5.3	U	5.3	< 3.4	3.4	U	3.4	< 3.3	3.3	U	3.3	< 3.3	3.3	U	3.3	< 3.8	3.8	U	3.8	< 4.1	4.1	U	4.1	< 4.0	4.0	U	4.0	< 3.4	3.4	U	3.4	< 3.6	3.6	U	3.6	< 3.3	3.3	U	3.3	< 3.4	3.4	U	3.4						
1,2,4,5-Tetrachlorobenzene	ug/L		< 3.4	3.4	U	3.4	< 3.3	3.3	U	3.3	< 3.3	3.3	U	3.3	< 3.8	3.8	U	3.8	< 4.1	4.1	U	4.1	< 4.0	4.0	U	4.0	< 3.4	3.4	U	3.4	< 3.6	3.6	U	3.6	< 3.3	3.3	U	3.3	< 3.4	3.4	U	3.4										
2,2'-Oxybis(1-Chloropropane)	ug/L	5	< 4.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2,3,4,6-tetrachlorophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86						
2,4,5-Trichlorophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2,4,6-Trichlorophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2,4-Dichlorophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2,4-Dimethylphenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2,4-Dinitrophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2,4-Dinitrotoluene	ug/L	5	< 4.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2,6-Dinitrotoluene	ug/L	5	< 4.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2-Chloronaphthalene	ug/L	10	< 4.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.4	5.4	U	5.4	< 5.9	5.9	U	5.9	< 5.8	5.8	U	5.8	< 4.8	4.8	U	4.8	< 5.2	5.2	U	5.2	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2-Chlorophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2-Methylnaphthalene	ug/L		5.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.4	5.4	U	5.4	< 5.9	5.9	U	5.9	< 5.8	5.8	U	5.8	< 4.8	4.8	U	4.8	< 5.2	5.2	U	5.2	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2-Methylphenol (o-cresol)	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86										
2-Nitroaniline	ug/L	5	< 4.9	4.9	U	4.9	< 4.8	4.8	U	4.8	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 5.0	5.0	U	5.0	< 4.8	4.8	U	4.8	< 4.9	4.9	U	4.9										
2-Nitrophenol	ug/L	1	< 1.0	1.0	U	0.87	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U	0.86	< 1.0	1.0	U																											

175-225 THIRD STREET SITE
BROOKLYN, KINGS COUNTY, NEW YORK

In-Situ Chemical Oxidation Design Document
NYSDEC Site Number: C-224209

APPENDICES

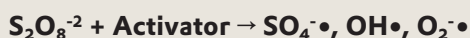
APPENDIX A – Klozur® SP Product Data Sheet

THE FIELD PROVEN AND VERSATILE ISCO SOLUTION TO ADDRESS SOIL & GROUNDWATER CONTAMINATION

KLOZUR® SP is the oxidant of choice for in situ chemical oxidation (ISCO), because of its proven ability to treat a wide range of contaminants including chlorinated solvents, petroleum and PAHs. Based upon an environmental grade of sodium persulfate (SP), KLOZUR® SP is ideal for contaminated source zones and hot spots that require rapid treatment. When properly activated, KLOZUR® SP provides an unmatched combination of oxidative power, versatility, and control that can be delivered both safely and cost effectively. Successful field applications of KLOZUR® activated persulfate have been performed globally. These applications demonstrate the ability of KLOZUR® activated persulfate to treat diverse organic contaminants of concern including: chlorinated ethenes (TCE, PCE, DCE and vinyl chloride), chlorinated ethanes (TCA and DCA), chlorinated methanes (carbon tetrachloride and methylene chloride), BTEX, MTBE, polyaromatic hydrocarbons (PAHs), petroleum hydrocarbons (TPHs, GRO, DRO), 1,4-dioxane and pesticides.

KEY BENEFITS

When used with Evonik's patented activation methods, KLOZUR® SP produces the powerful oxidative ($\text{SO}_4^{\cdot-}$, OH^{\cdot}) and reductive ($\text{O}_2^{\cdot-}$) radicals creating a multi-radical attack for the rapid destruction of recalcitrant compounds.



Multiple activation options and methods of delivery provide for a flexible and custom solution based on site conditions. With a solubility limit of up to 40 wt%, KLOZUR® SP can be applied as a fully soluble solution. KLOZUR® SP is a stable oxidant given its high oxidation potential, with a typical

active lifetime in the subsurface of weeks to months, providing an extended radius of influence. KLOZUR® SP is safe to handle with Evonik's recommended use guidelines and does not generate heat or gas.

EXAMPLES OF CONTAMINANTS OF CONCERN**CHLORINATED SOLVENTS**

PCE, TCE, DCE, VC, TCA, DCA, methylene chloride, carbon tetrachloride, chlorobenzene

PETROLEUM

TPH, BTEX, DRO, GRO

PAHs

creosote, MGP residuals 1,4-dioxane, MTBE, TBA, energetics, chlorinated pesticides

THE SOUND SCIENCE OF KLOZUR® ACTIVATED PERSULFATE

KLOZUR® activated persulfate has a long history of documented success having been used at thousands of sites to remediate contaminants of concern around the world. The field application of KLOZUR® activated persulfate has been scientifically validated in hundreds of independent peer-reviewed journal articles and conference presentations.

APPLICATION METHODS

- Direct push injection
- Fixed well injection
- Soil blending

For more information and detailed case studies, please visit our website.

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CONTAMINANTS TREATED

Use this guide by locating the contaminant of concern sorted by contaminant type. The technologies recommended for treatment of each contaminant are located to the right.

- ✓ Recommended, lab or field data available demonstrating success
- Recommended with site specific lab study

	CHEMICAL OXIDATION KLOZUR® PERSULFATE	CHEMICAL REDUCTION EHC® REAGENT, EHC® PLUS, DARAMEND® REAGENT	ENHANCED ANAEROBIC BIOREMEDIATION EHC® LIQUID, ELS® MICROEMULSION	METALS TREATMENT METAFIX® REAGENTS, EHC® METALS, DARAMEND® METALS	AEROBIC BIOREMEDIATION TERRAMEND® REAGENT	PERMEOX® ULTRA	BIOGEOCHEMICAL GEOFORM® REAGENTS
CHLORINATED SOLVENTS							
Tetrachloroethene (PCE)	✓	✓	✓	✓			✓
Trichloroethene (TCE)	✓	✓	✓	✓			✓
Dichloroethene (cis and trans DCE)	✓	✓	✓	✓			✓
Trichloroethane (TCA)	✓	✓	✓	✓			✓
Dichloroethane (DCA)	✓	✓	✓	✓			✓
Carbon tetrachloride	✓	✓	✓	✓			✓
Chloroethane	✓	✓	✓	✓			✓
Chloroform	✓	✓	✓	✓			✓
Chloromethane	✓	✓	✓	✓			✓
Chlorotoluene	✓	✓	✓	✓			✓
Methylene chloride	✓	✓	✓	✓			✓
Vinyl chloride	✓	✓	✓	✓		✓	✓
Dichloropropane	✓	✓	✓	✓			✓
Dichloropropene	✓	✓	✓	✓			✓
Hexachlorobutadiene	✓	✓	✓	✓			✓
Tetrachloroethane	✓	✓	✓	✓			✓
Trichloropropane	✓	✓	■	✓			✓
BTEX							
Benzene	✓				✓	✓	
Toluene	✓				✓	✓	
Ethylbenzene	✓				✓	✓	
Xylenes	✓				✓	✓	

CONTAMINANTS TREATED

- ✓ Recommended, lab or field data available demonstrating success
- Recommended with site specific lab study

	CHEMICAL OXIDATION KLOZUR® PERSULFATE	CHEMICAL REDUCTION EHC® REAGENT, EHC® PLUS, DARAMEND® REAGENT	ENHANCED ANAEROBIC BIOREMEDIATION EHC® LIQUID, ELS® MICROEMULSION	METALS TREATMENT METAFIX® REAGENTS, EHC® METALS, DARAMEND® METALS	AEROBIC BIOREMEDIATION TERRAMEND® REAGENT	PERMEOX® ULTRA	BIOGEOCHEMICAL GEOFORM® REAGENTS
PAHs							
Acenaphthene	✓				✓		
Acenaphthylene	✓				✓		
Anthracene	✓				✓		
Benzo(a)anthracene	✓				✓		
Benzo(a)pyrene	✓				✓		
Benzo(b)fluoranthene	✓				✓		
Benzo(ghi)perylene	✓				✓		
Chrysene	✓				✓		
Dibenzo(ah)anthracene	✓				✓		
Fluorene	✓				✓		
Naphthalene	✓				✓	✓	
Phenathrene	✓				✓		
Pyrene	✓				✓		
OXYGENATES							
Methyl tert-butyl ether (MTBE)	✓					✓	
Tert-butyl alcohol (TBA)	✓					✓	
PETROLEUM HYDROCARBONS							
GRO (gasoline range organics)	✓				✓	✓	
DRO (diesel range organics)	✓				✓	✓	
ORO (oil range organics > C20 alkanes)	✓				✓		
Creosote (coal tar)	✓				✓		
PHENOLS							
Phenol	✓				✓		
4-chloro-3-methyl phenol	✓				✓		
2-chlorophenol	✓		■		✓		
2,4-dichlorophenol	✓		■		✓		
2,4-dinitrophenol	✓		■		✓		
4-nitrophenol	✓		■		✓		
Pentachlorophenol	✓	✓	■	✓	✓		✓

CONTAMINANTS TREATED

- ✓ Recommended, lab or field data available demonstrating success
- Recommended with site specific lab study

	CHEMICAL OXIDATION KLOZUR® PERSULFATE	CHEMICAL REDUCTION EHC® REAGENT, EHC® PLUS, DARAMEND® REAGENT	ENHANCED ANAEROBIC BIOREMEDIATION EHC® LIQUID, ELS® MICROEMULSION	METALS TREATMENT METAFIX® REAGENTS, EHC® METALS, DARAMEND® METALS	AEROBIC BIOREMEDIATION TERRAMEND® REAGENT	PERMEOX® ULTRA	BIOGEOCHEMICAL GEOFORM® REAGENTS
CHLOROBENZENES							
Chlorobenzene	✓	✓	■	✓	✓	✓	■
Dichlorobenzene	✓	✓	✓	✓			■
Trichlorobenzene	✓	✓	✓	✓			■
FLUORINATED COMPOUNDS							
Dichlorodifluoromethane	✓	✓	✓	✓			■
Trichlorofluoromethane	✓	✓	✓	✓			■
Trichlorotrifluoroethane	✓	✓	✓	✓			■
PFCA/PFOA	✓						
PESTICIDES & HERBICIDES							
Chlordane	✓	✓	✓	✓			■
Heptachlor Epoxide	✓	✓		✓			■
Lindane (hexachlorocyclohexane)	✓	✓	✓	✓	✓		■
DDT, DDD, DDE	✓	✓	✓	✓			■
Toxaphene	✓	✓	✓	✓			■
Dieldrin	✓	✓	✓	✓			■
2,4-D	✓	✓	✓	✓	✓		■
2,4,5-T	✓	✓	✓	✓	✓		■
Endrin	✓	✓	✓	✓			■
Kepone	■	✓		✓			■
ENERGETICS							
TNT	✓	✓	✓	✓			■
DNT	✓	✓	✓	✓			■
Nitroglycerine	✓	✓	✓	✓			■
HMX	✓	✓	✓	✓			■
RDX	✓	✓	✓	✓			■
Perchlorate		✓	✓	✓			■

CONTAMINANTS TREATED

- ✓ Recommended, lab or field data available demonstrating success
- Recommended with site specific lab study

	CHEMICAL OXIDATION KLOZUR® PERSULFATE	CHEMICAL REDUCTION EHC® REAGENT, EHC® PLUS, DARAMEND® REAGENT	ENHANCED ANAEROBIC BIOREMEDIATION EHC® LIQUID, ELS® MICROEMULSION	METALS TREATMENT METAFIX® REAGENTS, EHC® METALS, DARAMEND® METALS	AEROBIC BIOREMEDIATION TERRAMEND® REAGENT	PERMEOX® ULTRA	BIOGEOCHEMICAL GEOFORM® REAGENTS
MISCELLANEOUS							
Acetone	✓				■	■	
4-methyl-2-pentanone	✓						
1,4-dioxane	✓						
Polychlorinated biphenyls (PCBs)	✓	■		■			
Nitrate		✓	✓	✓	✓		✓
Bis(2-ethylhexyl)phthalate	✓				✓		
Nitrobenzene	✓						
Propylbenzene	✓				■	■	
4-iso-propyltoluene	✓						
Styrene	✓						
Trimethylbenzene	✓				■	■	
n-butylbenzene	✓						
Carbon Disulfide (CS ₂)	✓						
Dioxins / Furans	■						
HEAVY METALS							
Antimony				✓			
Arsenic	✓			✓			■
Barium				✓			
Cadmium				✓			✓
Chromium		✓	✓	✓			✓
Cobalt				✓			✓
Copper				✓			✓
Lead				✓			✓
Mercury				✓			
Nickel				✓			✓
Selenium				✓			■
Vanadium				✓			
Zinc				✓			✓

APPENDIX B – Klozur[®] SP and alkaline (NaOH) activator Quantity Calculations

ZONE 1

INSTALLATION VIA INJECTION

Klozur[®] SP will be delivered as a dry powder, packaged in 55.1-lb (25 Kg) bags, and 2,204 lb (1,000 Kg) supersacks (1,102 lbs, or 500 Kg, supersacks are available as special order items). Klozur[®] SP is highly soluble in water and can be injected via fixed wells, open boreholes or using direct push technology (DPT). Klozur[®] SP is typically batched at a concentration of between 50 to 450 g/L (5 to 35%) and Evonik recommends injecting at a concentration between 50 and 250 g/L, depending upon site design and conditions. Effective treatment requires establishing contact between a sufficient amount of activated persulfate and the contaminant in the subsurface. A key element of establishing this contact in a source zone is the injection volume used to inject the activated persulfate reagents. Depending on the application method employed and site conditions, between 20% and 100% (with >50% typical) of the effective porosity is normally targeted during Klozur[®] SP injection, with a higher percent pore fill normally targeted for sites with slow groundwater velocities.

Below is an example injection scenario for the proposed mass Klozur[®] SP for this site. The suggested injection volumes may be altered based on the site specific conditions.

Number of Applications 1

<u>Klozur SP Dosage</u>	<u>Project Totals</u>	
Mass of Klozur [®] SP	41,876	lb
Concentration in Total Pore Volume	36	g/L
	3.5	% w/w
Application rate by soil mass (dry weight)	5.0	g/kg

<u>Injection Locations</u>		
Number of Injection Locations	26	locations
Radius of Influence		
Design ¹	10.0	ft
Injection ²	7.8	ft
Overlapping Design ROI ³	17	%
Approximate Spacing between locations ⁴	16.3	ft

<u>Injection Details</u>	<u>Project Totals</u>	
Total Injection Volume	55,875	gal
Percentage of Effective Pore Volume	72	%
Volume per Injection Location	2,149	gal
Klozur [®] SP Injection Concentration	90	g/L
	8.6	% w/w
Mass per Injection Location		
Klozur [®] SP	1,611	lb
25% NaOH	2,654	Lbs Solution

Design parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

Values are based upon client supplied data and other assumed values. Changes in any of the input values will affect and alter other

- Notes:
1. Design radius of influence corresponds to the desired treatment radius from each injection location.
 2. Injection radius of influence corresponds to the distance from each injection point the injection volume would distribute assuming uniform (cylindrical) distribution in the effective pore volume.
 3. Approximate percentage of overlap between the Design ROI from the various injection locations. Actually percent overlap will depend upon injection location layout.
 4. Approximate distance between injection locations. Actual distance will depend upon site layout.

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%
Dry Soil Weight	8,300,400	lb	Wet Soil Weight	10,375,500	lb

	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	g/Kg	% w/w	g/Kg	% w/w	g/Kg	% w/w
Dry Soil	5.0	0.5	2.0	0.2	30.0	3.0
Wet Soil	4.0	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

ZONE 2

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

	<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%	
Dry Soil Weight	14,203,200	lb	Wet Soil Weight	17,754,000	lb	
	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>
Dry Soil	5.0	0.5	2.0	0.2	30.0	3.0
Wet Soil	4.0	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

ZONE 3

INSTALLATION VIA INJECTION

Klozur[®] SP will be delivered as a dry powder, packaged in 55.1-lb (25 Kg) bags, and 2,204 lb (1,000 Kg) supersacks (1,102 lbs, or 500 Kg, supersacks are available as special order items). Klozur[®] SP is highly soluble in water and can be injected via fixed wells, open boreholes or using direct push technology (DPT). Klozur[®] SP is typically batched at a concentration of between 50 to 450 g/L (5 to 35%) and Evonik recommends injecting at a concentration between 50 and 250 g/L, depending upon site design and conditions. Effective treatment requires establishing contact between a sufficient amount of activated persulfate and the contaminant in the subsurface. A key element of establishing this contact in a source zone is the injection volume used to inject the activated persulfate reagents. Depending on the application method employed and site conditions, between 20% and 100% (with >50% typical) of the effective porosity is normally targeted during Klozur[®] SP injection, with a higher percent pore fill normally targeted for sites with slow permeability.

Below is an example injection scenario for the proposed mass Klozur[®] SP for this site. The suggested injection volumes may be altered based on the site specific conditions.

Number of Applications 1

<u>Klozur SP Dosage</u>	<u>Project Totals</u>	
Mass of Klozur [®] SP	30,856	lb
Concentration in Total Pore Volume	35	g/L
	3.4	% w/w
Application rate by soil mass (dry weight)	4.9	g/kg

<u>Injection Locations</u>		
Number of Injection Locations	20	locations
Radius of Influence		
Design ¹	10.0	ft
Injection ²	7.8	ft
Overlapping Design ROI ³	17	%
Approximate Spacing between locations ⁴	16.3	ft

<u>Injection Details</u>	<u>Project Totals</u>	
Total Injection Volume	42,837	gal
Percentage of Effective Pore Volume	72	%
Volume per Injection Location	2,142	gal
Klozur [®] SP Injection Concentration	86	g/L
	8.3	% w/w
Mass per Injection Location		
Klozur [®] SP	1,543	lb
25% NaOH	2,550	Lbs Solution

Design parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

Values are based upon client supplied data and other assumed values. Changes in any of the input values will affect and alter other

- Notes:
1. Design radius of influence corresponds to the desired treatment radius from each injection location.
 2. Injection radius of influence corresponds to the distance from each injection point the injection volume would distribute assuming uniform (cylindrical) distribution in the effective pore volume.
 3. Approximate percentage of overlap between the Design ROI from the various injection locations. Actually percent overlap will depend upon injection location layout.
 4. Approximate distance between injection locations. Actual distance will depend upon site layout.

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

	<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%	
Dry Soil Weight	6,363,600	lb	Wet Soil Weight	7,954,500	lb	
	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>
Dry Soil	4.9	0.5	2.0	0.2	30.0	3.0
Wet Soil	3.9	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

ZONE 4

INSTALLATION VIA INJECTION

Klozur[®] SP will be delivered as a dry powder, packaged in 55.1-lb (25 Kg) bags, and 2,204 lb (1,000 Kg) supersacks (1,102 lbs, or 500 Kg, supersacks are available as special order items). Klozur[®] SP is highly soluble in water and can be injected via fixed wells, open boreholes or using direct push technology (DPT). Klozur[®] SP is typically batched at a concentration of between 50 to 450 g/L (5 to 35%) and Evonik recommends injecting at a concentration between 50 and 250 g/L, depending upon site design and conditions. Effective treatment requires establishing contact between a sufficient amount of activated persulfate and the contaminant in the subsurface. A key element of establishing this contact in a source zone is the injection volume used to inject the activated persulfate reagents. Depending on the application method employed and site conditions, between 20% and 100% (with >50% typical) of the effective porosity is normally targeted during Klozur[®] SP injection, with a higher percent pore fill normally targeted for sites with slow permeability.

Below is an example injection scenario for the proposed mass Klozur[®] SP for this site. The suggested injection volumes may be altered based on the site specific conditions.

Number of Applications 1

<u>Klozur SP Dosage</u>	<u>Project Totals</u>	
Mass of Klozur [®] SP	19,836	lb
Concentration in Total Pore Volume	36	g/L
	3.5	% w/w
Application rate by soil mass (dry weight)	5.1	g/kg

<u>Injection Locations</u>		
Number of Injection Locations	13	locations
Radius of Influence		
Design ¹	10.0	ft
Injection ²	6.6	ft
Overlapping Design ROI ³	17	%
Approximate Spacing between locations ⁴	15.8	ft

<u>Injection Details</u>	<u>Project Totals</u>	
Total Injection Volume	19,714	gal
Percentage of Effective Pore Volume	54	%
Volume per Injection Location	1,516	gal
Klozur [®] SP Injection Concentration	121	g/L
	11.3	% w/w
Mass per Injection Location		
Klozur [®] SP	1,526	lb
25% NaOH	2,538	Lbs Solution

Design parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

Values are based upon client supplied data and other assumed values. Changes in any of the input values will affect and alter other

- Notes:
1. Design radius of influence corresponds to the desired treatment radius from each injection location.
 2. Injection radius of influence corresponds to the distance from each injection point the injection volume would distribute assuming uniform (cylindrical) distribution in the effective pore volume.
 3. Approximate percentage of overlap between the Design ROI from the various injection locations. Actually percent overlap will depend upon injection location layout.
 4. Approximate distance between injection locations. Actual distance will depend upon site layout.

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

	<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%	
Dry Soil Weight	3,904,800	lb	Wet Soil Weight	4,881,000	lb	
	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>
Dry Soil	5.1	0.5	2.0	0.2	30.0	3.0
Wet Soil	4.1	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

ZONE 5

INSTALLATION VIA INJECTION

Klozur[®] SP will be delivered as a dry powder, packaged in 55.1-lb (25 Kg) bags, and 2,204 lb (1,000 Kg) supersacks (1,102 lbs, or 500 Kg, supersacks are available as special order items). Klozur[®] SP is highly soluble in water and can be injected via fixed wells, open boreholes or using direct push technology (DPT). Klozur[®] SP is typically batched at a concentration of between 50 to 450 g/L (5 to 35%) and Evonik recommends injecting at a concentration between 50 and 250 g/L, depending upon site design and conditions. Effective treatment requires establishing contact between a sufficient amount of activated persulfate and the contaminant in the subsurface. A key element of establishing this contact in a source zone is the injection volume used to inject the activated persulfate reagents. Depending on the application method employed and site conditions, between 20% and 100% (with >50% typical) of the effective porosity is normally targeted during Klozur[®] SP injection, with a higher percent pore fill normally targeted for sites with slow groundwater velocities. Below is an example injection scenario for the proposed mass Klozur[®] SP for this site. The suggested injection volumes may be altered based on the site specific conditions.

Number of Applications 1

<u>Klozur SP Dosage</u>	<u>Project Totals</u>	
Mass of Klozur [®] SP	52,896	lb
Concentration in Total Pore Volume	36	g/L
	3.5	% w/w
Application rate by soil mass (dry weight)	5.1	g/kg

<u>Injection Locations</u>		
Number of Injection Locations	33	locations
Radius of Influence		
Design ¹	10.0	ft
Injection ²	6.7	ft
Overlapping Design ROI ³	17	%
Approximate Spacing between locations ⁴	16.2	ft

<u>Injection Details</u>	<u>Project Totals</u>	
Total Injection Volume	52,357	gal
Percentage of Effective Pore Volume	54	%
Volume per Injection Location	1,587	gal
Klozur [®] SP Injection Concentration	121	g/L
	11.4	% w/w
Mass per Injection Location		
Klozur [®] SP	1,603	lb
25% NaOH	2,636	Lbs Solution

Design parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

Values are based upon client supplied data and other assumed values. Changes in any of the input values will affect and alter other

- Notes:
1. Design radius of influence corresponds to the desired treatment radius from each injection location.
 2. Injection radius of influence corresponds to the distance from each injection point the injection volume would distribute assuming uniform (cylindrical) distribution in the effective pore volume.
 3. Approximate percentage of overlap between the Design ROI from the various injection locations. Actually percent overlap will depend upon injection location layout.
 4. Approximate distance between injection locations. Actual distance will depend upon site layout.

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%
Dry Soil Weight	10,370,400	lb	Wet Soil Weight	12,963,000	lb

	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	g/Kg	% w/w	g/Kg	% w/w	g/Kg	% w/w
Dry Soil	5.1	0.5	2.0	0.2	30.0	3.0
Wet Soil	4.1	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

ZONE 6

INSTALLATION VIA INJECTION

Klozur[®] SP will be delivered as a dry powder, packaged in 55.1-lb (25 Kg) bags, and 2,204 lb (1,000 Kg) supersacks (1,102 lbs, or 500 Kg, supersacks are available as special order items). Klozur[®] SP is highly soluble in water and can be injected via fixed wells, open boreholes or using direct push technology (DPT). Klozur[®] SP is typically batched at a concentration of between 50 to 450 g/L (5 to 35%) and Evonik recommends injecting at a concentration between 50 and 250 g/L, depending upon site design and conditions. Effective treatment requires establishing contact between a sufficient amount of activated persulfate and the contaminant in the subsurface. A key element of establishing this contact in a source zone is the injection volume used to inject the activated persulfate reagents. Depending on the application method employed and site conditions, between 20% and 100% (with >50% typical) of the effective porosity is normally targeted during Klozur[®] SP injection, with a higher percent pore fill normally targeted for sites with slow

Below is an example injection scenario for the proposed mass Klozur[®] SP for this site. The suggested injection volumes may be altered based on the site specific conditions.

Number of Applications 1

<u>Klozur SP Dosage</u>	<u>Project Totals</u>	
Mass of Klozur [®] SP	50,692	lb
Concentration in Total Pore Volume	36	g/L
	3.5	% w/w
Application rate by soil mass (dry weight)	5.1	g/kg

Injection Locations

Number of Injection Locations	31	locations
Radius of Influence		
Design ¹	10.0	ft
Injection ²	6.8	ft
Overlapping Design ROI ³	17	%
Approximate Spacing between locations ⁴	16.4	ft

Injection Details

	<u>Project Totals</u>	
Total Injection Volume	50,267	gal
Percentage of Effective Pore Volume	54	%
Volume per Injection Location	1,622	gal
Klozur [®] SP Injection Concentration	121	g/L
	11.4	% w/w
Mass per Injection Location		
Klozur [®] SP	1,635	lb
25% NaOH	2,613	Lbs Solution

Design parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

Values are based upon client supplied data and other assumed values. Changes in any of the input values will affect and alter other

- Notes:
1. Design radius of influence corresponds to the desired treatment radius from each injection location.
 2. Injection radius of influence corresponds to the distance from each injection point the injection volume would distribute assuming uniform (cylindrical) distribution in the effective pore volume.
 3. Approximate percentage of overlap between the Design ROI from the various injection locations. Actually percent overlap will depend upon injection location layout.
 4. Approximate distance between injection locations. Actual distance will depend upon site layout.

INSTALLATION USING SOIL MIXING

Soil mixing is a robust technology that can be used to establish contact between activated Klozur® SP and the contaminant by physically blending the contaminated soil with the reagents. Soil mixing is often accomplished using augers, excavator buckets, or rotating heads affixed to an excavator arm instead of the bucket. Many systems are specialized in that they can inject both liquid and slurries at depth.

Loading for soil mixing projects is often based on either wet or dry soil weight and either as grams/Kilogram or % weight/weight. All values below are estimates, calculations or assumptions based on data provided to Evonik.

	<u>Dry Weight</u>			<u>Wet Weight</u>		
Soil Dry Bulk Density	120	lbs/ft ³	Moisture Content	20	%	
Dry Soil Weight	9,956,400	lb	Wet Soil Weight	12,445,500	lb	
	<u>Klozur SP Loading</u>		<u>Hydrated Lime Loading</u>		<u>Portland Cement Loading</u>	
	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>	<u>g/Kg</u>	<u>% w/w</u>
Dry Soil	5.1	0.5	2.0	0.2	30.0	3.0
Wet Soil	4.1	0.4	1.6	0.2	24.0	2.3

Parameters should be considered approximations and suggestions. Site design engineers and contractors are ultimately responsible for the field application and design.

APPENDIX C – Klozur® SP and alkaline (NaOH) activator Safety Data Sheets

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: KLOZUR® SP

Other means of identification

None.

Recommended restrictions

Recommended use: Remediation of contaminated soil and groundwater.

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
299 Jefferson Road
Parsippany, NJ 07054
USA

Telephone : +1 973 929 8000

Fax : +1 973 929 8040

E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Oxidizing solids Category 3

Health Hazards

Acute toxicity (Oral) Category 4
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Respiratory sensitizer Category 1
Skin sensitizer Category 1
Specific Target Organ Toxicity -
Single Exposure Category 3
(Respiratory tract
irritation.)

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement:

May intensify fire; oxidizer.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing, strong acids, bases, heavy metal salts and other reducing substances, and combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear respiratory protection.

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Disodium peroxodisulphate		7775-27-1	>99%
Sodium Sulfate		7757-82-6	<1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Remove from exposure, lie down. Show this safety data sheet to the doctor in attendance.
Inhalation:	Remove from contaminated area. Apply artificial respiration if not breathing. Get medical attention immediately.
Skin Contact:	Wash skin thoroughly with soap and water.
Eye contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. Get medical attention.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Seek medical attention.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	No data available.
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5. Fire-fighting measures

General Fire Hazards:	Release of oxygen may support combustion. Release of oxygen may support combustion.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	Dry powder. Dry sand. Water.
Unsuitable extinguishing media:	Carbon dioxide High pressure inert gas, e.g. carbon dioxide jet.
Special hazards arising from the substance or mixture:	No data available.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Use personal protective equipment.

Accidental release measures: Avoid spreading dust or contaminated materials. Prevent runoff from entering drains, sewers, or streams.

Methods and material for containment and cleaning up: Pick up with vacuum or absorbent solid, store in closed container for disposal. Avoid dust formation.

Environmental Precautions: No data available.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Use only in well-ventilated areas. Minimize dust generation and accumulation.

Safe handling advice: Wear appropriate personal protective equipment. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation if fumes or vapors are generated. Handle under inert gas atmosphere in dry equipment.

Contact avoidance measures: No data available.

Storage

Safe storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Do not store near combustible materials. Avoid contamination. Keep away from food, drink and animal feeding stuffs. Avoid formation of dust.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Disodium peroxodisulphate - as persulfate	TWA	0.1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

Use only in well-ventilated areas. Minimize dust generation and accumulation.

Individual protection measures, such as personal protective equipment
Eye/face protection:

Safety goggles

Skin Protection
Hand Protection:

Material: Rubber (natural, latex).Material:
Neoprene.Material: Polyvinyl chloride (PVC).

Skin and Body Protection:

Long sleeved clothing

Respiratory Protection:

Respirator must be worn if exposed to dust. Wear suitable respiratory protection.

Hygiene measures:

Wash promptly if skin becomes contaminated. Provide eyewash station and safety shower.

9. Physical and chemical properties
Information on basic physical and chemical properties
Appearance
Physical state:

solid

Form:

Crystalline

Color:

White

Odor:

Odorless

Odor Threshold:

No data available.

Melting Point:

356 °F/180 °C

Boiling Point:

No data available.

Flammability:

No data available.

Upper/lower limit on flammability or explosive limits
Explosive limit - upper:

No data available.

Explosive limit - lower:

No data available.

Flash Point:

No data available.

Self Ignition Temperature:

No data available.

Decomposition Temperature:

No data available.

pH:

6 (1 g/l,)

Viscosity
Dynamic viscosity:

No data available.

Kinematic viscosity:

No data available.

Flow Time:

No data available.

Solubility(ies)
Solubility in Water:

42 g/l

Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	2.59 g/cm ³
Bulk density:	No data available.
Vapor density (air=1):	No data available.
Particle characteristics	
Particle Size:	< 420 nm
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Oxidizing properties:	The substance or mixture is classified as oxidizing with the category 3.
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10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable under usual application conditions.
Possibility of hazardous reactions:	Breaks down and releases toxic and spontaneously combustible gases when wet
Conditions to avoid:	Heat. Moisture.
Incompatible Materials:	Bases. Halogens and halogenated compounds. Oxidizing agents. Strong reducing agents. Combustible material
Hazardous Decomposition Products:	No data available.

11. Toxicological information**Information on toxicological effects****Information on likely routes of exposure**

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix: 929.29 mg/kg
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Dermal**Product:** Not classified for acute toxicity based on available data.**Inhalation****Product:** Not classified for acute toxicity based on available data.**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Components:**

Disodium Irritating.

peroxodisulphate

Sodium Sulfate OECD 404 (Rabbit): Not irritating

Serious Eye Damage/Eye Irritation**Product:** No data available.**Components:**

Disodium Irritating.

peroxodisulphate

Sodium Sulfate Not irritating OECD 405 Rabbit:

Respiratory or Skin Sensitization**Product:** No data available.**Components:**

Disodium May cause sensitization by skin contact.

peroxodisulphate May cause sensitization by inhalation.

Sodium Sulfate Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.

Carcinogenicity**Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity**In vitro****Product:** No data available.**Components:**

Sodium Sulfate

Ames test (OECD 471): negative

gene mutation test (OECD 476): negative

Chromosomal aberration (OECD 473): negative

In vivo**Product:** No data available.**Components:**

Sodium Sulfate

Chromosomal aberration Intraperitoneal (Mouse, Female, Male): negative

Reproductive toxicity**Product:** No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Disodium peroxodisulphate	Category 3 with respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
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Aspiration Hazard

Product:	No data available.
Components:	
Sodium Sulfate	Not applicable

Information on health hazards**Other hazards**

Product:	No data available.
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12. Ecological information**Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

Product:	No data available.
Components:	
Sodium Sulfate	LC 50 (Pimephales promelas, 96 h): 7,960 mg/l

Aquatic Invertebrates

Product:	No data available.
Components:	
Sodium Sulfate	EC 50 (Daphnia magna, 48 h): 1,776 mg/l

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Sodium Sulfate	EC 50 (Nitscheria linearis, 120 h): 1,900 mg/l (US-EPA-method)

Toxicity to microorganisms

Product:	No data available.
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Chronic hazards to the aquatic environment:**Fish**

Product:	No data available.
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Aquatic Invertebrates

Product:	No data available.
Components:	
Sodium Sulfate	Lowest Observed Effect Concentration (Ceriodaphnia dubia, 7 d): 1,329 mg/l EC 50 (Ceriodaphnia dubia, 7 d): 1,698 mg/l

Toxicity to Aquatic Plants

Product:	No data available.
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Toxicity to microorganisms

Product:	No data available.
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Persistence and Degradability**Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Components:**

Sodium Sulfate Log Kow: 3.0

Mobility in soil:**Product** No data available.**Results of PBT and vPvB assessment:****Product** No data available.**Other adverse effects:****Other hazards****Product:** No data available.**13. Disposal considerations****Disposal methods:** Waste must be disposed of in accordance with federal, state, provincial and local regulations.**Contaminated Packaging:** No data available.**14. Transport information****Domestic regulation****49 CFR**UN/ID/NA number : UN 1505
Proper shipping name : Sodium persulfateClass : 5.1
Packing group : III
Labels : 5.1
ERG Code : 140
Marine pollutant : no**International Regulations****IATA-DGR**UN/ID No. : UN 1505
Proper shipping name : Sodium persulphate
Class : 5.1

Product name: KLOZUR® SP

Packing group : III
Labels : 5.1
Packing instruction (cargo aircraft) : 563
Packing instruction (passenger aircraft) : 559

IMDG-Code

UN number or ID number : UN 1505
Proper shipping name : SODIUM PERSULPHATE

Class : 5.1
Packing group : III
Labels : 5.1
EmS Code : F-A, S-Q
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information**US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Oxidizer (liquid, solid or gas), Acute toxicity (any route of exposure), Skin Corrosion or Irritation, Serious eye damage or eye irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

16. Other information, including date of preparation or last revision
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Issue Date: 09/06/2022

Version #: 1.0

Further Information: No data available.

Revision Information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Disclaimer:

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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: KLOZUR® CAUSTIC

Other means of identification

None.

Recommended restrictions

Recommended use: Remediation of contaminated soil and groundwater.

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
299 Jefferson Road
Parsippany, NJ 07054
USA

Telephone : +1 973 929 8000

Fax : +1 973 929 8040

E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Corrosive to metal Category 1

Health Hazards

Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement:

May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary Statements

Prevention:

Keep only in original packaging. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Absorb spillage to prevent material damage.

Storage:

Store locked up. Store in corrosive resistant stainless steel container with a resistant inner liner.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
sodium hydroxide		1310-73-2	25%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:

Pay attention to self-protection. Remove victims from hazardous area. Immediately remove soiled or soaked clothing and remove it to a safe distance. Keep victim warm, in a stabilized position and covered. Do not leave the victim unattended. Place patients who are unconscious but breathing in the stabilized lateral position.

Inhalation:	Potential for exposure by inhalation if aerosols or mists are generated. After inhalation move subject to fresh air. With labored breathing: Provide with oxygen. Consult a doctor immediately. If the casualty is not breathing: Perform mouth-to-mouth resuscitation, notify emergency physician immediately.
Skin Contact:	Wash off affected area immediately with plenty of water for at least 15 minutes. Get medical attention if any discomfort continues.
Eye contact:	With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Notify emergency physician immediately (key words: burns in eye).
Ingestion:	Rinse mouth. Immediately give large quantities of water to drink. Notify the emergency physician immediately.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Corrosive
Hazards:	Strongly irritating to corrosive.

Indication of immediate medical attention and special treatment needed

Treatment:	The initial focus is only on the local action, characterized by quickly progressing deep tissue damage. Coughing is a symptom of a respiratory tract irritation after inhalation of aerosols or mists from caustic liquids. In the eye, caustic liquids cause, depending on the intensity of exposure, severe irritation, destruction, and ablation of the epithelium of the conjunctiva and cornea, corneal clouding, edema and ulcerations. Danger! Possible loss of eyesight! Superficial irritations and damage up to ulcerations and scarring develop on the skin.
-------------------	---

5. Fire-fighting measures**Suitable (and unsuitable) extinguishing media**

Suitable extinguishing media: The product is non-combustible. In case of fire in the surroundings: Water spray, foam, CO₂, dry powder.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture: In case of fire-fighting with water or foam be aware of dangers of corrosion and of slipping.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: Cool containers/tanks with water spray.

Special protective equipment for fire-fighters: In case of fire use self-contained breathing apparatus if necessary.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	For personal protection see section 8.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). After cleaning, flush away traces with water. Fill into marked, sealable containers. To be disposed of in compliance with existing regulations.
Environmental Precautions:	Prevent product from entering drains. Do not allow to reach the sewage system, the ground or natural water bodies.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits. Provide readily accessible eye wash stations and safety showers.
Safe handling advice:	Avoid residues of the product on the containers. For personal protection see section 8. Handle in accordance with good industrial hygiene and safety practice.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	In order to ensure due transportation, make certain that stacks are of the correct height, containers are securely fastened so as not to fall off, and labelled according to the regulations. Store in the original receptacle, keeping this tightly sealed, under cool and dry conditions. Minimum storage temperature: 15 °C. Suitable materials are: Stainless steel. rubber-lined steel polyolefins Inadequate materials are: aluminium zinc enamel
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
sodium hydroxide	Ceiling	2 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)
	Ceil_Time	2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits. Provide readily accessible eye wash stations and safety showers.

Individual protection measures, such as personal protective equipment

Eye/face protection: close-fitting protective goggles (e.g. closed goggles)

Skin Protection

Hand Protection: Material: Kächele-Cama Latex GmbH (KCL), Germany
 Guideline: DIN EN 374
 Additional Information: Applies to handling for longer periods or of large amounts
 Material: Kächele-Cama Latex GmbH (KCL), Germany
 Guideline: DIN EN 374
 Additional Information: Applies to handling for brief periods or of small amounts

Skin and Body Protection: Anti-static suit. acid-resistant protective clothing Alkali-resistant protective clothing

Respiratory Protection: in case vapors or aerosols appear use respiratory equipment with suitable filter or wear a self contained respiratory apparatus Suitable filter: A, code colour brown
 Note time limit for wearing respiratory protective equipment.

Hygiene measures: Avoid contact with skin and eyes. Wash contact areas after handling. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Take off clothing and shoes contaminated with product. Clean before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: colorless
Odor: Odorless
Odor Threshold: No data available.
Freezing point: 3 °F/-16 °C
Boiling Point: 241 °F/116 °C
Flammability: No data available.
Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	Not applicable
Explosive limit - lower:	Not applicable
Flash Point:	Not applicable
Self Ignition Temperature:	Not expected during handling from practical experience.
Decomposition Temperature:	Not expected during handling from practical experience.
pH:	14 (20 °C)
Viscosity	
Dynamic viscosity:	6.4 mPa.s (77 °F/25 °C)
Kinematic viscosity:	5.20 mm ² /s (86 °F/30 °C)
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	> 10 g/l Soluble
Solubility (other):	Soluble
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	10 - 18 hPa (86 °F/30 °C)
Relative density:	No data available.
Density:	1.273 g/cm ³ (68 °F/20 °C)
Bulk density:	No data available.
Relative vapor density:	No data available.

Other information

Explosive properties:	Not expected during handling from practical experience.
Oxidizing properties:	Not expected during handling from practical experience.
Minimum ignition temperature:	Not applicable
Formation of Flammable Gases:	Not expected during handling from practical experience.
Peroxides:	Not expected during handling from practical experience.
Metal Corrosion:	Corrosive to metal
Evaporation Rate:	No data available.
Molecular weight:	40 g/mol

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Evolution of hydrogen with: various metals e.g.: aluminium, magnesium, zinc (Formation of detonating gas with atmospheric oxygen). Exothermic reaction with: acids
Conditions to avoid:	No further information available
Incompatible Materials:	aluminium Magnesium zinc acids
Hazardous Decomposition Products:	No hazardous decomposition products are known.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: No data available.
Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Corrosive. (Rabbit): Corrosive.; Literature

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

sodium hydroxide Risk of serious damage to eyes. OECD 405 Rabbit:

Respiratory or Skin Sensitization

Product: No data available.

Components:

sodium hydroxide Sensitization test (man): Not a skin sensitizer.

Carcinogenicity

Product: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity**In vitro****Product:** No data available.**Components:**sodium hydroxide Ames test (OECD 471): negative
gene mutation test (analogous OECD method): positive**In vivo****Product:** No data available.**Components:**

sodium hydroxide Micronucleus test (analogous OECD method) Intraperitoneal (Mouse, Female, Male): negative

Reproductive toxicity**Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Components:**

sodium hydroxide Not applicable

Information on health hazards**Other hazards****Product:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Components:**

sodium hydroxide EC 50 (Ceriodaphnia, 48 h): 40.4 mg/l Literature

Toxicity to Aquatic Plants**Product:** No data available.**Toxicity to microorganisms****Product:** No data available.**Chronic hazards to the aquatic environment:**

Product name: KLOZUR® CAUSTIC

Fish**Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Toxicity to microorganisms****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: No data available.**Mobility in soil:****Product** No data available.**Results of PBT and vPvB assessment:****Product** Not a PBT, vPvB substance as per the criteria of the REACH Regulation.**Other adverse effects:****Other hazards****Product:** No further information available**Additional Information:**

no ecotoxicological studies with the product available.

13. Disposal considerations**Disposal methods:**

Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging:

Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. Transport information**Domestic regulation****49 CFR**UN/ID/NA number : UN 1824
Proper shipping name : Sodium hydroxide solution

Class : 8
Packing group : II
Labels : 8
ERG Code : 154
Marine pollutant : no
Remarks : FOR USA ONLY: When shipping in, by or via USA note of the Reportable Quantity-Regulation!

International Regulations

IATA-DGR

UN/ID No. : UN 1824
Proper shipping name : Sodium hydroxide solution
Class : 8
Packing group : II
Labels : 8
Packing instruction (cargo aircraft) : 855
Packing instruction (passenger aircraft) : 851
Remarks : FOR USA ONLY: When shipping in, by or via USA note of the Reportable Quantity-Regulation!

IMDG-Code

UN number or ID number : UN 1824
Proper shipping name : SODIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no
Remarks : Keep separate from acids., FOR USA ONLY: When shipping in, by or via USA note of the Reportable Quantity-Regulation!

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
 SODIUM HYDROXIDE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Corrosive to metal, Skin Corrosion or Irritation, Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity
 SODIUM HYDROXIDE

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	3
Flammability	0
Physical Hazards	1
PERSONAL PROTECTION	D

D - Face Shield, Gloves & Apron

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date: 09/08/2022

Version #: 1.0

Further Information: No data available.

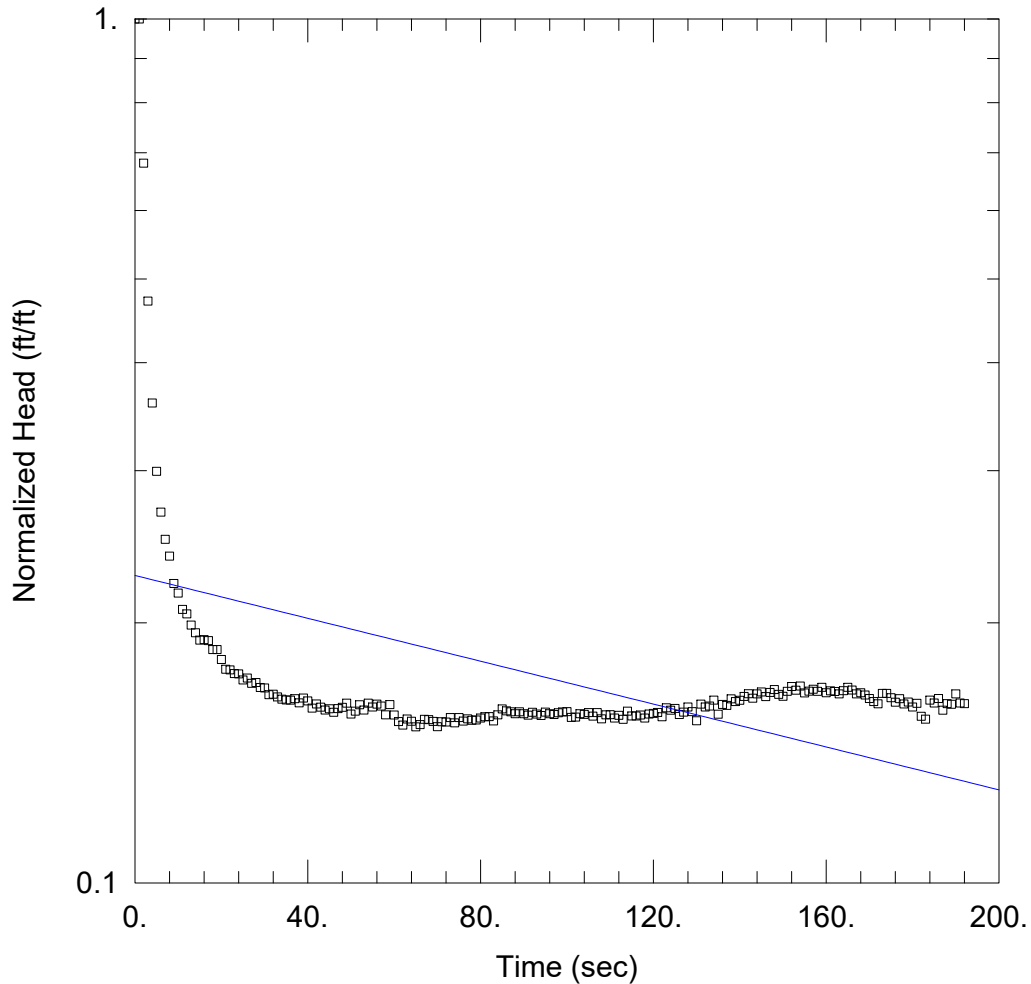
Revision Information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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APPENDIX D – Hydraulic Conductivity Test Results



WELL TEST ANALYSIS

Data Set: I:\...\MW-01S_CT#.aqt
 Date: 04/10/25

Time: 15:01:04

PROJECT INFORMATION

Company: Impact
 Project: 17831
 Location: 175 3rd Street, Brooklyn, NY
 Test Well: MW-1S

AQUIFER DATA

Saturated Thickness: 11.19 ft

Anisotropy Ratio (Kz/Kr): 0.2

WELL DATA (MW-01_CT S)

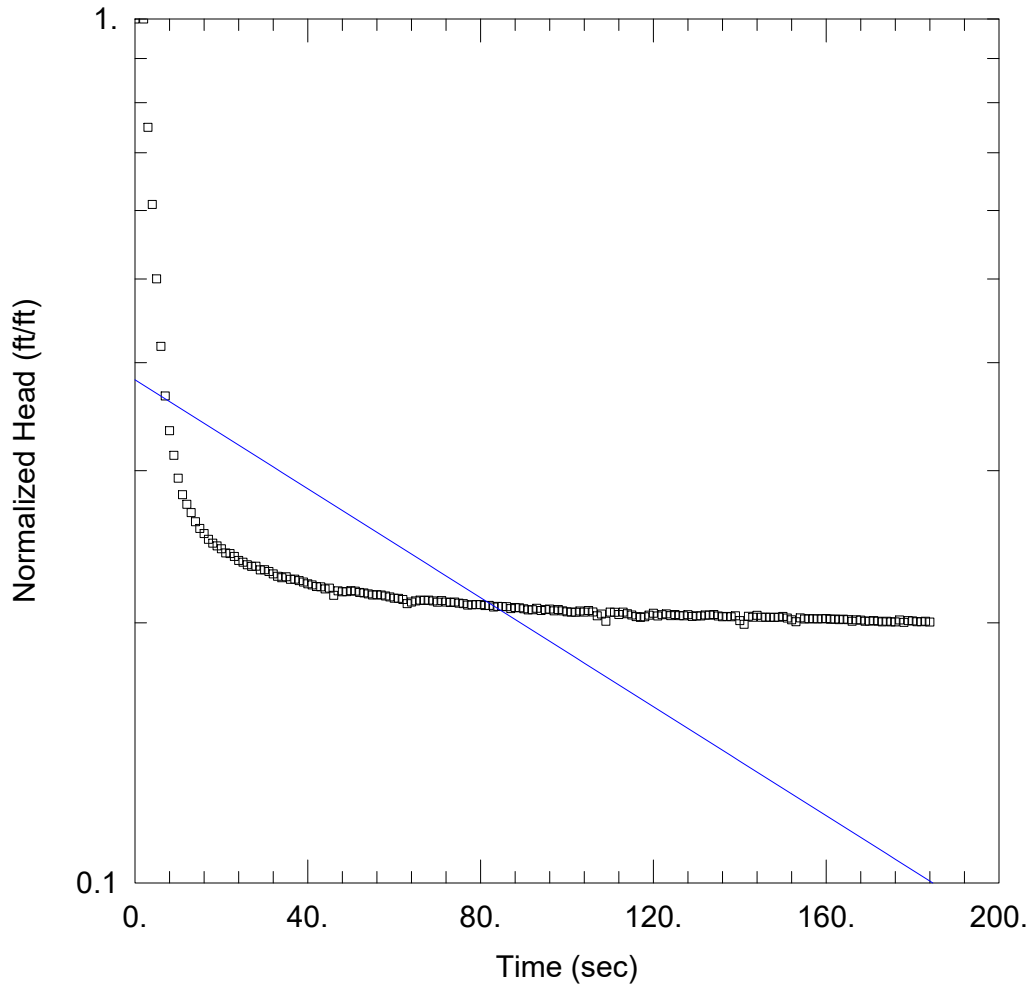
Initial Displacement: 1.557 ft
 Total Well Penetration Depth: 10. ft
 Casing Radius: 0.08333 ft

Static Water Column Height: 6.35 ft
 Screen Length: 10. ft
 Well Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
 K = 0.2577 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.3532 ft



WELL TEST ANALYSIS

Data Set: I:\...MW-06S#.aqt
Date: 04/10/25

Time: 14:58:37

PROJECT INFORMATION

Company: Impact
Project: 17831
Location: 175 3rd Street, Brooklyn, NY
Test Well: MW-06S

AQUIFER DATA

Saturated Thickness: 15.76 ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA (MW-06S)

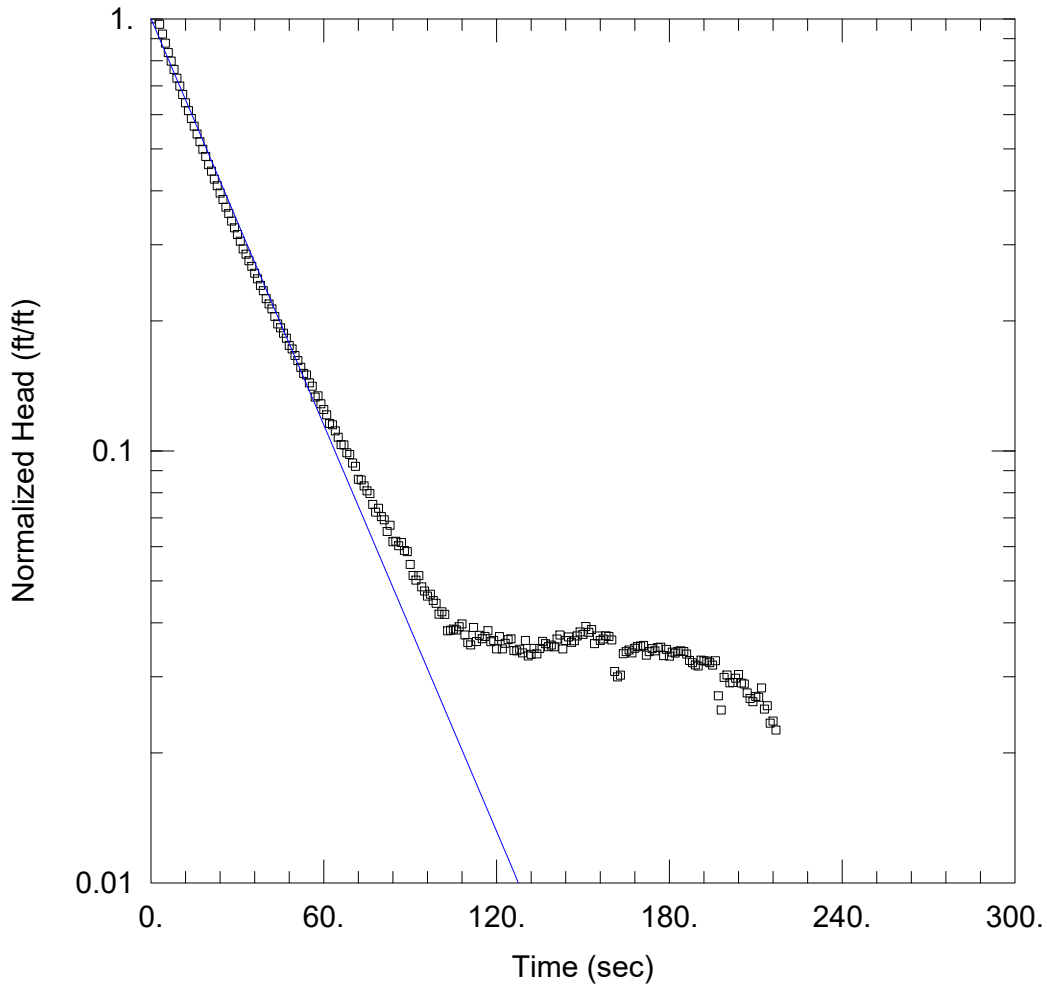
Initial Displacement: 2.491 ft
Total Well Penetration Depth: 11.39 ft
Casing Radius: 0.0833 ft

Static Water Column Height: 11.39 ft
Screen Length: 10. ft
Well Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
K = 0.6481 ft/day

Solution Method: Bouwer-Rice
 y_0 = 0.9523 ft



WELL TEST ANALYSIS

Data Set: I:\...MW-9R#.aqt
 Date: 04/10/25

Time: 14:57:46

PROJECT INFORMATION

Company: Impact
 Project: 17831
 Location: 175 3rd Street, Brooklyn, NY
 Test Well: MW-9R

AQUIFER DATA

Saturated Thickness: 11.99 ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA (MW-9R)

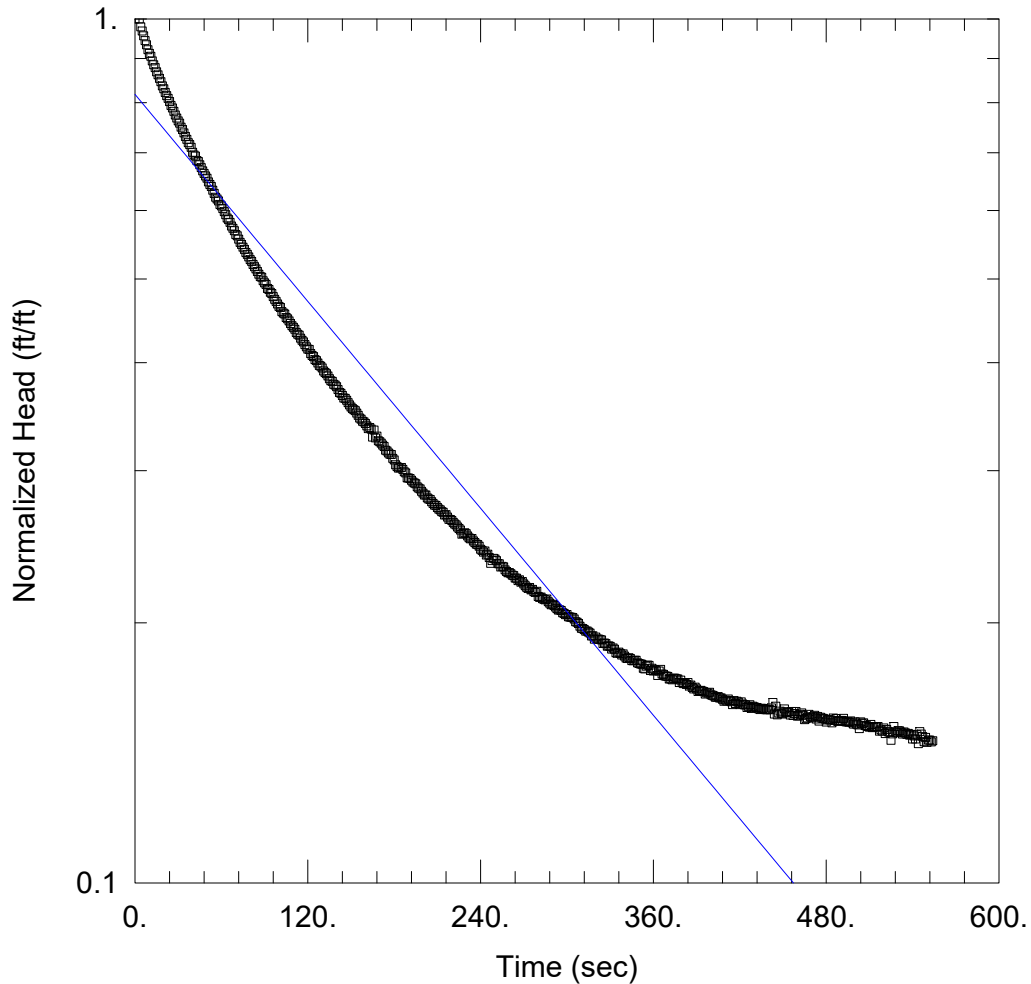
Initial Displacement: 1.765 ft
 Total Well Penetration Depth: 11.69 ft
 Casing Radius: 0.08333 ft

Static Water Column Height: 11.69 ft
 Screen Length: 10. ft
 Well Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
 K = 3.477 ft/day

Solution Method: Bouwer-Rice
 y_0 = 1.769 ft



WELL TEST ANALYSIS

Data Set: I:\...MW-22#.aqt
 Date: 04/10/25

Time: 14:57:22

PROJECT INFORMATION

Company: Impact
 Project: 17831
 Location: 175 3rd Street, Brooklyn, NY
 Test Well: MW-22

AQUIFER DATA

Saturated Thickness: 13.1 ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA (MW-22)

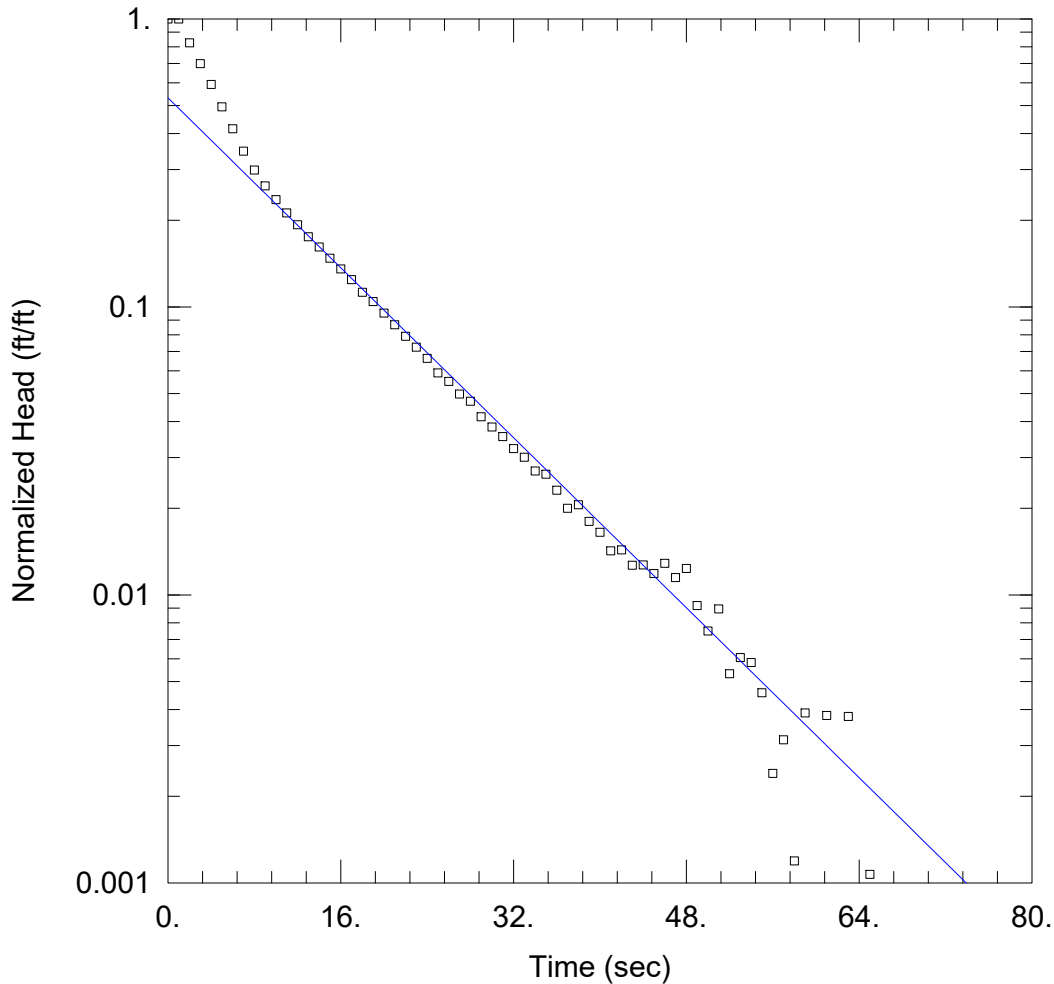
Initial Displacement: 2.502 ft
 Total Well Penetration Depth: 12. ft
 Casing Radius: 0.0833 ft

Static Water Column Height: 12. ft
 Screen Length: 10. ft
 Well Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
 K = 0.4291 ft/day

Solution Method: Bouwer-Rice
 y_0 = 2.046 ft



WELL TEST ANALYSIS

Data Set: I:\...MW-25_3-25-25#.aqt
 Date: 04/10/25

Time: 14:56:54

PROJECT INFORMATION

Company: Impact
 Project: 17831
 Location: 175 3rd Street, Brooklyn, NY
 Test Well: MW-25_3-25-25

AQUIFER DATA

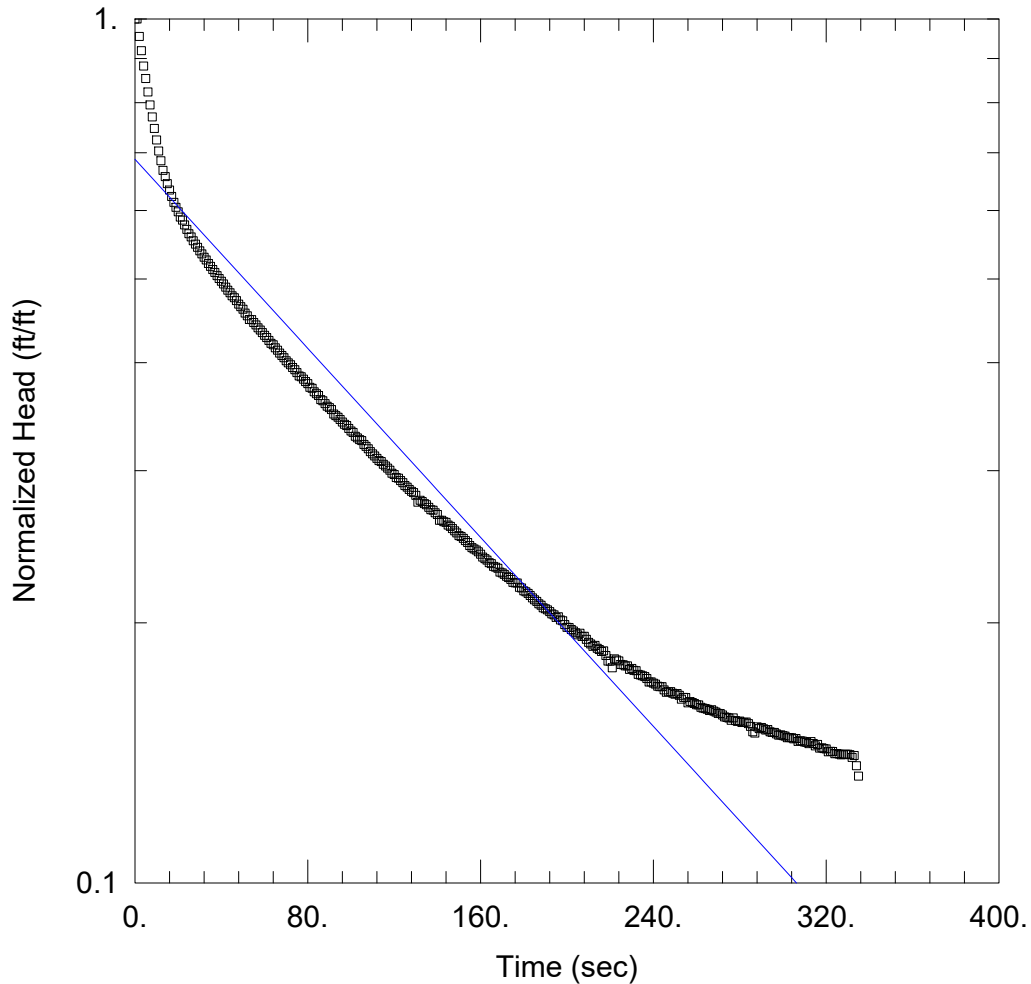
Saturated Thickness: 9.85 ft Anisotropy Ratio (Kz/Kr): 0.2

WELL DATA (MW-25_3-25-25)

Initial Displacement: <u>1.955</u> ft	Static Water Column Height: <u>8.25</u> ft
Total Well Penetration Depth: <u>10.</u> ft	Screen Length: <u>10.</u> ft
Casing Radius: <u>0.08333</u> ft	Well Radius: <u>0.3333</u> ft
	Gravel Pack Porosity: <u>0.3</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>36.51</u> ft/day	y0 = <u>1.04</u> ft



WELL TEST ANALYSIS

Data Set: I:\...MW-30#.aqt
 Date: 04/10/25

Time: 14:55:56

PROJECT INFORMATION

Company: Impact
 Project: 17831
 Location: 175 3rd Street, Brooklyn, NY
 Test Well: MW-30

AQUIFER DATA

Saturated Thickness: 10.67 ft

Anisotropy Ratio (Kz/Kr): 0.2

WELL DATA (MW-30)

Initial Displacement: 2.352 ft
 Total Well Penetration Depth: 10. ft
 Casing Radius: 0.08333 ft

Static Water Column Height: 10. ft
 Screen Length: 10. ft
 Well Radius: 0.3333 ft
 Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
 K = 3.17 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.618 ft

APPENDIX E – Laboratory Results, May 2025 Groundwater Samples



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
Location Code: IMPACT-ICL
Rush Request: Standard
P.O.#: 17831

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/21/25
05/22/25

Time

13:15
18:20

Laboratory Data

SDG ID: GCT34727
Phoenix ID: CT34727

Project ID: 175 THIRD ST, BROOKLYN, NY
Client ID: MW-06(S)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/22/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trimethylbenzene	14	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3,5-Trimethylbenzene	0.47	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Benzene	2.2	0.70	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Ethylbenzene	16	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Isopropylbenzene	7.6	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
m&p-Xylene	0.73	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	0.43	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Methylcyclohexane	3.4	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/22/25	MH	SW8260D
o-Xylene	4.6	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Toluene	0.57	J 2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Total Xylenes	5.3	1.0	1.0	ug/L	1	05/22/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	87			%	1	05/22/25	MH	70 - 130 %
% Bromofluorobenzene	88			%	1	05/22/25	MH	70 - 130 %
% Dibromofluoromethane	92			%	1	05/22/25	MH	70 - 130 %
% Toluene-d8	90			%	1	05/22/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	53	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	5.9	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.9	0.87	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.9	2.3	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.9	2.3	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	170	24	7.3	ug/L	5	05/27/25	KCA	SW8270E
Acetophenone	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	6.4	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	2.6	J 4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Fluorene	30	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	430	24	7.0	ug/L	5	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
Phenanthrene	43	3.4	1.4	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
QA/QC Surrogates								
% 2,4,6-Tribromophenol	97			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	54			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	40			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	53			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	42			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	75			%	1	05/27/25	KCA	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2,4,6-Tribromophenol (5x)	113			%	5	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl (5x)	69			%	5	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol (5x)	47			%	5	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5 (5x)	57			%	5	05/27/25	KCA	30 - 130 %
% Phenol-d5 (5x)	47			%	5	05/27/25	KCA	15 - 110 %
% Terphenyl-d14 (5x)	103			%	5	05/27/25	KCA	30 - 130 %

3

Semivolatiles

Acenaphthylene	6.9	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Anthracene	4.1	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.14	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.03	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.10	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	3.9	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.39	0.39	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	4.3	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	85			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	47			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	41			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	44			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	48			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	64			%	1	05/26/25	KCA	30 - 130 %

SVOA Library Search Top 15 Completed 05/27/25 KCA

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

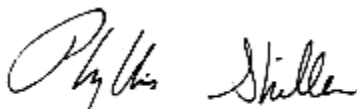
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/22/25
 05/22/25

Time

10:40
 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34728

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-09R

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
<u>Volatiles</u>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	1.2	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	86			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	94			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	88			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	88			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.95	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	78			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	56			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	43			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	56			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	49			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	65			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.03	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.03	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.02	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.02	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	82			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	54			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	43			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	52			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	49			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	63			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

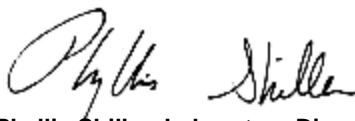
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/21/25
 05/22/25

Time

9:45
 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34729

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-22

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	86			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	89			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	88			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.95	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	96			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	71			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	64			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	67			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	67			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	77			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.03	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.03	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.02	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.02	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.02	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	100			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	66			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	62			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	66			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	67			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	72			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

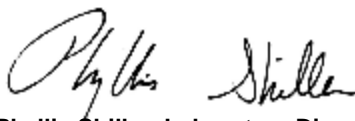
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date: 05/21/25 12:25
 05/22/25 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34730

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-24R

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Client MS/MSD	Completed					05/24/25		
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	100	50	ug/l	1	05/22/25	MH	SW8260D
<u>Volatiles</u>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/22/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Bromoform	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Bromomethane	ND	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloroform	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloromethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D	
Cyclohexane	ND	5.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D	
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Methylacetate	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D	
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Methylene chloride	ND	3.0	1.0	ug/L	1	05/22/25	MH	SW8260D	
o-Xylene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Styrene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Toluene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Total Xylenes	ND	1.0	1.0	ug/L	1	05/22/25	MH	SW8260D	
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichloroethene	0.29	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	87			%	1	05/22/25	MH	70 - 130 %	
% Bromofluorobenzene	94			%	1	05/22/25	MH	70 - 130 %	
% Dibromofluoromethane	93			%	1	05/22/25	MH	70 - 130 %	
% Toluene-d8	87			%	1	05/22/25	MH	70 - 130 %	
Volatile Library Search Top 10						Completed		05/23/25	MH
Semivolatiles									
1,1-Biphenyl	ND	4.1	4.1	ug/L	1	05/27/25	KCA	SW8270E	
1,2,4,5-Tetrachlorobenzene	ND	4.1	4.1	ug/L	1	05/27/25	KCA	SW8270E	
2,2'-Oxybis(1-Chloropropane)	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E	
2,3,4,6-tetrachlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	5.0	2.3	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	5.0	1.2	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	5.9	1.1	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	5.0	2.8	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	5.0	2.2	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	5.0	2.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	5.9	2.0	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	5.0	2.0	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	2.1	J 5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	5.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	5.9	1.2	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	5.9	1.2	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	5.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	5.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	5.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	5.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	5.9	2.2	ug/L	1	05/27/25	KCA	SW8270E
Phenol	1.7	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	85			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	74			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	55			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	65			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	57			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	81			%	1	05/27/25	KCA	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Anthracene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)anthracene	0.36	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.33	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.19	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.20	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.37	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	0.67	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.14	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.23	0.23	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	1.1	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	1.0	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	102			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	66			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	61			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	69			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	67			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	71			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

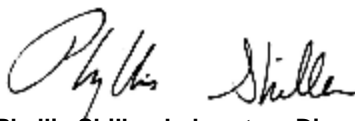
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date: 05/21/25 13:50
 05/22/25 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34731

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-25

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	100	50	ug/l	1	05/22/25	MH	SW8260D
<u>Volatiles</u>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trimethylbenzene	6.8	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3,5-Trimethylbenzene	1.6	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Benzene	5.2	0.70	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Ethylbenzene	1.7	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Isopropylbenzene	13	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
m&p-Xylene	4.1	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	0.44	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Methylcyclohexane	0.95	J 2.0	0.50	ug/L	1	05/22/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/22/25	MH	SW8260D
o-Xylene	3.4	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Toluene	0.28	J 2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Total Xylenes	7.5	1.0	1.0	ug/L	1	05/22/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
Vinyl chloride	0.29	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	85			%	1	05/22/25	MH	70 - 130 %
% Bromofluorobenzene	87			%	1	05/22/25	MH	70 - 130 %
% Dibromofluoromethane	97			%	1	05/22/25	MH	70 - 130 %
% Toluene-d8	89			%	1	05/22/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.8	3.8	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.8	3.8	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	5.0	1.5	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	5.0	2.1	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	5.4	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	5.4	1.6	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	5.0	1.1	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	5.4	0.97	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	5.0	2.5	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	5.0	2.0	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	5.4	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	5.0	2.5	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	5.4	1.8	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	190	27	8.2	ug/L	5	05/27/25	KCA	SW8270E
Acetophenone	ND	5.4	1.7	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	1.1	1.1	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	5.4	1.6	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	5.4	1.4	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	5.0	1.5	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	5.4	1.1	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	7.6	5.4	1.1	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	5.4	1.7	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	5.4	1.7	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	5.4	1.4	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	5.4	1.4	ug/L	1	05/27/25	KCA	SW8270E
Fluorene	11	5.4	1.8	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	1.1	1.1	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	5.4	1.5	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	8.4	5.4	1.6	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	5.4	1.7	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	5.4	2.1	ug/L	1	05/27/25	KCA	SW8270E
Phenanthrene	12	3.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
QA/QC Surrogates								
% 2,4,6-Tribromophenol	88			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	74			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	66			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	81			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	68			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	71			%	1	05/27/25	KCA	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Semivolatiles</u>								
Acenaphthylene	0.74	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Anthracene	2.6	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)anthracene	0.06	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.05	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	3.4	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.22	0.22	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	2.6	0.54	0.54	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	106			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	70			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	61			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	61			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	71			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	68			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

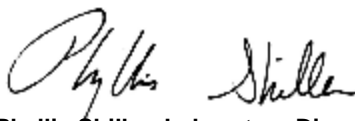
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
Location Code: IMPACT-ICL
Rush Request: Standard
P.O.#: 17831

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/21/25
05/22/25

Time

15:25
18:20

Laboratory Data

SDG ID: GCT34727
Phoenix ID: CT34732

Project ID: 175 THIRD ST, BROOKLYN, NY
Client ID: MW-28

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/22/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2,4-Trimethylbenzene	2.8	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/22/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichlorobenzene	5.6	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/22/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3,5-Trimethylbenzene	0.98	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
1,4-Dichlorobenzene	0.30	J 2.0	0.25	ug/L	1	05/22/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D
Benzene	19	0.70	0.25	ug/L	1	05/22/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Bromoform	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Bromomethane	ND	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloroethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloroform	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Chloromethane	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
cis-1,2-Dichloroethene	0.48	J 1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D	
Cyclohexane	6.8	5.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Ethylbenzene	1.5	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Isopropylbenzene	3.5	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
m&p-Xylene	6.5	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/22/25	MH	SW8260D	
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Methylacetate	ND	2.5	2.5	ug/L	1	05/22/25	MH	SW8260D	
Methylcyclohexane	7.5	2.0	0.50	ug/L	1	05/22/25	MH	SW8260D	
Methylene chloride	ND	3.0	1.0	ug/L	1	05/22/25	MH	SW8260D	
o-Xylene	2.1	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Styrene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Toluene	0.89	J 2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Total Xylenes	8.6	1.0	1.0	ug/L	1	05/22/25	MH	SW8260D	
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichloroethene	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/22/25	MH	SW8260D	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	89			%	1	05/22/25	MH	70 - 130 %	
% Bromofluorobenzene	90			%	1	05/22/25	MH	70 - 130 %	
% Dibromofluoromethane	99			%	1	05/22/25	MH	70 - 130 %	
% Toluene-d8	91			%	1	05/22/25	MH	70 - 130 %	
Volatile Library Search Top 10						Completed		05/23/25	MH
Semivolatiles									
1,1-Biphenyl	ND	4.1	4.1	ug/L	1	05/27/25	KCA	SW8270E	
1,2,4,5-Tetrachlorobenzene	ND	4.1	4.1	ug/L	1	05/27/25	KCA	SW8270E	
2,2'-Oxybis(1-Chloropropane)	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E	
2,3,4,6-tetrachlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	5.0	2.3	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	5.0	1.9	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	5.0	1.2	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	5.9	1.1	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	5.0	2.8	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	5.0	2.2	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	5.0	2.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	5.9	2.0	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	5.0	2.0	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	5.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	5.9	1.2	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	5.9	1.2	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	5.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	2.2	J 5.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	5.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	5.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	5.9	1.7	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	5.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	5.9	2.3	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	139			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	73			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	62			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	90			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	65			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	56			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)

3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.12	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.15	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.09	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.06	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.15	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.08	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.24	0.24	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	0.65	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.59	0.59	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	116			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	59			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	61			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	74			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	69			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	56			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

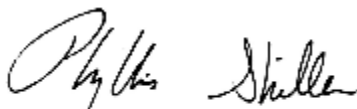
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/21/25
 05/22/25

Time

10:35
 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34733

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-29

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	90			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	95			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	87			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10						Completed	05/23/25	MH
Semivolatiles								
1,1-Biphenyl	ND	4.0	4.0	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	4.0	4.0	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	5.0	2.3	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	5.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	5.8	1.7	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	5.0	1.2	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	5.8	1.0	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	5.0	2.7	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	5.0	2.2	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	5.8	1.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	5.0	2.7	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	5.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	5.0	1.9	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	5.8	1.7	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	5.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	5.8	1.7	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	5.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	5.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	5.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	5.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	5.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	5.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	5.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	5.0	1.8	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	1.2	1.2	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	5.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	5.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	5.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	90			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	75			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	53			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	72			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	<10			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	26			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.46	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.09	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.53	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.27	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.60	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	1.3	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.14	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.23	0.23	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	0.59	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.58	0.58	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	98			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	65			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	52			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	67			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	<10			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	25			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

3
3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

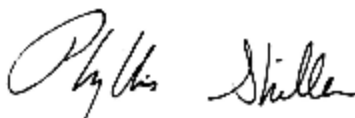
Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/22/25
 05/22/25

Time

9:20
 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34734

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: MW-30

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	4.9	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	0.59	J 1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	0.61	J 1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	87			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	94			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	87			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.8	0.96	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.8	2.3	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.96	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	1.9	J 4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.96	0.96	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.96	0.96	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.8	0.96	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	4.8	0.96	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.96	0.96	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.90	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	83			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	71			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	57			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	78			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	33			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	63			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.24	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.11	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.12	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.11	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.22	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	0.85	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.07	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	1.1	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	114			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	68			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	55			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	64			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	34			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	65			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
 Impact Closures
 170 Keyland Court
 Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
 Location Code: IMPACT-ICL
 Rush Request: Standard
 P.O.#: 17831

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/21/25
 05/22/25

Time

12:30
 18:20

Laboratory Data

SDG ID: GCT34727
 Phoenix ID: CT34735

Project ID: 175 THIRD ST, BROOKLYN, NY
 Client ID: DUP-01

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
<u>Volatiles</u>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	87			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	95			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	87			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.6	3.6	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.6	3.6	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	5.0	1.4	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	5.2	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	5.2	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	5.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	5.2	0.93	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	5.0	1.9	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	5.2	1.5	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	5.0	2.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	5.2	1.7	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	5.0	1.7	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	5.2	1.6	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	5.2	1.6	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	5.2	1.5	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	5.2	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	5.2	1.0	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	5.2	1.0	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	5.0	1.5	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	5.2	1.6	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	5.2	1.6	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	5.2	1.4	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	5.2	1.3	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	5.0	1.6	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	1.0	1.0	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	5.2	1.4	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	5.0	1.5	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	5.2	1.7	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	5.2	2.0	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.93	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	87			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	57			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	45			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	61			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	23			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	55			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	0.15	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	0.07	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	0.12	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	0.09	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	0.19	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.06	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.21	0.21	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	0.92	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.52	0.52	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	92			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	56			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	45			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	54			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	25			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	55			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

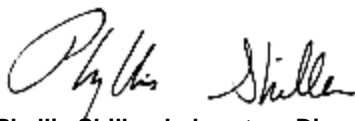
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
Location Code: IMPACT-ICL
Rush Request: Standard
P.O.#: 17831

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/21/25
05/22/25

Time

8:00
18:20

Laboratory Data

SDG ID: GCT34727
Phoenix ID: CT34736

Project ID: 175 THIRD ST, BROOKLYN, NY
Client ID: TP-01

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	5.4	S 5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	87			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	94			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	94			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	87			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.95	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.8	2.2	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.8	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	4.8	2.0	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	4.8	0.95	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.95	0.95	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.8	1.3	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	4.8	1.4	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.8	1.5	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	05/27/25	KCA	SW8270E
Phenol	ND	1.0	0.86	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	90			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	61			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	58			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	72			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	16			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	45			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	94			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	58			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	55			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	62			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	18			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	46			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:

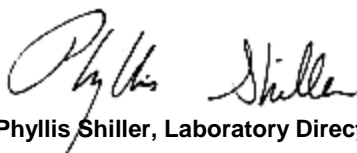
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
Location Code: IMPACT-ICL
Rush Request: Standard
P.O.#: 17831

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/21/25
05/22/25

Time

12:45
18:20

Laboratory Data

SDG ID: GCT34727
Phoenix ID: CT34737

Project ID: 175 THIRD ST, BROOKLYN, NY
Client ID: FB-01

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/22/25	L/K/MQ	SW3520C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/23/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/23/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/23/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Acetone	5.6	S 5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Benzene	ND	0.70	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/23/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/23/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/23/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/23/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/23/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/23/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichloroethene	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/23/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	86			%	1	05/23/25	MH	70 - 130 %
% Bromofluorobenzene	94			%	1	05/23/25	MH	70 - 130 %
% Dibromofluoromethane	93			%	1	05/23/25	MH	70 - 130 %
% Toluene-d8	87			%	1	05/23/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/23/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	05/27/25	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dichlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dimethylphenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2,4-Dinitrotoluene	ND	4.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
2,6-Dinitrotoluene	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
2-Chloronaphthalene	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Chlorophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2-Methylnaphthalene	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
2-Nitroaniline	ND	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
2-Nitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.9	0.87	ug/L	1	05/27/25	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	4.9	2.3	ug/L	1	05/27/25	KCA	SW8270E
3-Nitroaniline	ND	4.9	1.8	ug/L	1	05/27/25	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.97	ug/L	1	05/27/25	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
4-Chloroaniline	ND	4.9	2.3	ug/L	1	05/27/25	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitroaniline	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
4-Nitrophenol	ND	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
Acenaphthene	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Acetophenone	ND	4.9	2.0	ug/L	1	05/27/25	KCA	SW8270E
Atrazine	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Benzaldehyde	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Benzyl butyl phthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Caprolactam	ND	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
Carbazole	ND	4.9	0.97	ug/L	1	05/27/25	KCA	SW8270E
Dibenzofuran	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Diethyl phthalate	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Dimethylphthalate	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Di-n-butylphthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Di-n-octylphthalate	ND	4.9	1.3	ug/L	1	05/27/25	KCA	SW8270E
Hexachlorocyclopentadiene	ND	4.9	1.5	ug/L	1	05/27/25	KCA	SW8270E
Hexachloroethane	ND	0.97	0.97	ug/L	1	05/27/25	KCA	SW8270E
Isophorone	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
Naphthalene	ND	4.9	1.4	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	4.9	1.6	ug/L	1	05/27/25	KCA	SW8270E
N-Nitrosodiphenylamine	ND	4.9	1.9	ug/L	1	05/27/25	KCA	SW8270E
Phenol	1.3	1.0	0.87	ug/L	1	05/27/25	KCA	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	87			%	1	05/27/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	68			%	1	05/27/25	KCA	30 - 130 %
% 2-Fluorophenol	62			%	1	05/27/25	KCA	15 - 110 %
% Nitrobenzene-d5	78			%	1	05/27/25	KCA	30 - 130 %
% Phenol-d5	68			%	1	05/27/25	KCA	15 - 110 %
% Terphenyl-d14	77			%	1	05/27/25	KCA	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluoranthene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Fluorene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorobutadiene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Nitrobenzene	ND	0.39	0.39	ug/L	1	05/26/25	KCA	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pentachlorophenol	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Phenanthrene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
Pyrene	ND	0.49	0.49	ug/L	1	05/26/25	KCA	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	92			%	1	05/26/25	KCA	15 - 110 %
% 2-Fluorobiphenyl	64			%	1	05/26/25	KCA	30 - 130 %
% 2-Fluorophenol	59			%	1	05/26/25	KCA	15 - 110 %
% Nitrobenzene-d5	66			%	1	05/26/25	KCA	30 - 130 %
% Phenol-d5	71			%	1	05/26/25	KCA	15 - 110 %
% Terphenyl-d14	74			%	1	05/26/25	KCA	30 - 130 %
SVOA Library Search Top 15	Completed					05/27/25	KCA	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:

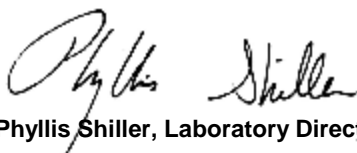
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

June 02, 2025

FOR: Attn: Dan Fruhauf
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information

Matrix: GROUND WATER
Location Code: IMPACT-ICL
Rush Request: 48 Hour
P.O.#: 17831

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/29/25
05/29/25

Time

11:30
18:20

Laboratory Data

SDG ID: GCT34727
Phoenix ID: CT38695

Project ID: 175 THIRD STREET, BROOKLYN NY
Client ID: MW-24R

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/29/25	/EC/MQ	SW3510C
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	05/30/25	MH	SW8260D
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2,4-Trimethylbenzene	0.60	J 1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	05/30/25	MH	SW8260D
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	05/30/25	MH	SW8260D
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
2-Hexanone	ND	2.5	2.5	ug/L	1	05/30/25	MH	SW8260D
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/30/25	MH	SW8260D
Acetone	2.9	JS 5.0	2.5	ug/L	1	05/30/25	MH	SW8260D
Benzene	0.42	J 0.70	0.25	ug/L	1	05/30/25	MH	SW8260D
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Bromoform	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Bromomethane	ND	2.0	0.50	ug/L	1	05/30/25	MH	SW8260D
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Chlorobenzene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Chloroethane	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Chloroform	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Chloromethane	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/30/25	MH	SW8260D
Cyclohexane	ND	5.0	0.50	ug/L	1	05/30/25	MH	SW8260D
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Ethylbenzene	0.33	J 1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Isopropylbenzene	1.1	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	05/30/25	MH	SW8260D
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Methylacetate	ND	2.5	2.5	ug/L	1	05/30/25	MH	SW8260D
Methylcyclohexane	ND	2.0	0.50	ug/L	1	05/30/25	MH	SW8260D
Methylene chloride	ND	3.0	1.0	ug/L	1	05/30/25	MH	SW8260D
o-Xylene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Styrene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Toluene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Total Xylenes	ND	1.0	1.0	ug/L	1	05/30/25	MH	SW8260D
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	05/30/25	MH	SW8260D
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/30/25	MH	SW8260D
Trichloroethene	0.27	J 1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/30/25	MH	SW8260D
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99			%	1	05/30/25	MH	70 - 130 %
% Bromofluorobenzene	99			%	1	05/30/25	MH	70 - 130 %
% Dibromofluoromethane	94			%	1	05/30/25	MH	70 - 130 %
% Toluene-d8	102			%	1	05/30/25	MH	70 - 130 %
Volatile Library Search Top 10	Completed					05/30/25	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.3	3.3	ug/L	1	06/02/25	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	06/02/25	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	4.8	1.3	ug/L	1	06/02/25	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	06/02/25	MR	SW8270E
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
2-Chloronaphthalene	ND	4.8	1.3	ug/L	1	06/02/25	MR	SW8270E
2-Chlorophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
2-Nitroaniline	ND	4.8	0.95	ug/L	1	06/02/25	MR	SW8270E
2-Nitrophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	06/02/25	MR	SW8270E
3,3'-Dichlorobenzidine	ND	4.8	2.2	ug/L	1	06/02/25	MR	SW8270E
3-Nitroaniline	ND	4.8	1.8	ug/L	1	06/02/25	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1.0	0.95	ug/L	1	06/02/25	MR	SW8270E
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
4-Chloroaniline	ND	4.8	2.2	ug/L	1	06/02/25	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	06/02/25	MR	SW8270E
4-Nitroaniline	ND	4.8	1.6	ug/L	1	06/02/25	MR	SW8270E
4-Nitrophenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
Acenaphthene	6.8	4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
Acetophenone	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
Atrazine	ND	0.95	0.95	ug/L	1	06/02/25	MR	SW8270E
Benzaldehyde	ND	4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	06/02/25	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	06/02/25	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	0.95	0.95	ug/L	1	06/02/25	MR	SW8270E
Caprolactam	ND	4.8	0.95	ug/L	1	06/02/25	MR	SW8270E
Carbazole	ND	4.8	0.95	ug/L	1	06/02/25	MR	SW8270E
Dibenzofuran	ND	4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
Diethyl phthalate	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
Dimethylphthalate	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	06/02/25	MR	SW8270E
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	06/02/25	MR	SW8270E
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
Hexachloroethane	ND	0.95	0.95	ug/L	1	06/02/25	MR	SW8270E
Isophorone	ND	4.8	1.3	ug/L	1	06/02/25	MR	SW8270E
Naphthalene	2.0	J 4.8	1.4	ug/L	1	06/02/25	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	4.8	1.5	ug/L	1	06/02/25	MR	SW8270E
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	06/02/25	MR	SW8270E
Phenol	ND	1.0	0.86	ug/L	1	06/02/25	MR	SW8270E
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	79			%	1	06/02/25	MR	15 - 110 %
% 2-Fluorobiphenyl	66			%	1	06/02/25	MR	30 - 130 %
% 2-Fluorophenol	47			%	1	06/02/25	MR	15 - 110 %
% Nitrobenzene-d5	62			%	1	06/02/25	MR	30 - 130 %
% Phenol-d5	31			%	1	06/02/25	MR	15 - 110 %
% Terphenyl-d14	67			%	1	06/02/25	MR	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Benz(a)anthracene	0.12	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Benzo(a)pyrene	0.07	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Benzo(b)fluoranthene	0.08	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Benzo(k)fluoranthene	0.08	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Chrysene	0.12	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Fluorene	0.48	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	06/02/25	MR	SW8270E (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Indeno(1,2,3-cd)pyrene	0.06	0.02	0.02	ug/L	1	06/02/25	MR	SW8270E (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	06/02/25	MR	SW8270E (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	06/02/25	MR	SW8270E (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Phenanthrene	1.3	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
Pyrene	0.48	0.48	0.48	ug/L	1	06/02/25	MR	SW8270E (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	93			%	1	06/02/25	MR	15 - 110 %
% 2-Fluorobiphenyl	57			%	1	06/02/25	MR	30 - 130 %
% 2-Fluorophenol	50			%	1	06/02/25	MR	15 - 110 %
% Nitrobenzene-d5	63			%	1	06/02/25	MR	30 - 130 %
% Phenol-d5	40			%	1	06/02/25	MR	15 - 110 %
% Terphenyl-d14	62			%	1	06/02/25	MR	30 - 130 %
SVOA Library Search Top 15	Completed					06/02/25	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:

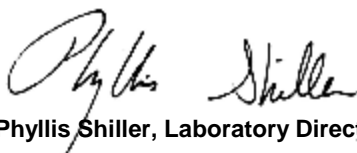
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 02, 2025

Official Report Release To Follow

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW-06(S)

Lab Name: Phoenix Environmental Labs

Client: IMPACT-ICL

Lab Code: Phoenix Case No.: _____

SAS No.: _____

SDG No.: GCT34727

Matrix:(soil/water) GROUND WATER

Lab Sample ID: CT34727

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0522_35.D

Level: (low/med) _____

Date Received: 05/22/25

% Moisture: not dec. 100

Date Analyzed: 05/22/25

GC Column: RTX-VMS ID: 0.18(mm)

Dilution Factor: _____ 1

Purge Volume: 25000 (uL)

Soil Aliquot Vol (uL): _____ n.a.

CONCENTRATION UNITS:

Number TICs found: 18 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
103-65-1	n-Propylbenzene	7.136	4.8	Q
	Benzene, 1-ethyl-2-methyl- Isomer	7.215	12	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	7.425	15	JN
000098-83-9	.alpha.-Methylstyrene	7.451	3.2	JN
526-73-8	1,2,3-Trimethylbenzene	7.816	4.5	Q
	unknown	7.895	5.9	J
000496-11-7	Indane	7.900	37	JN
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	8.131	2.2	JN
	unknown	8.172	3	J
000767-58-8	Indan, 1-methyl-	8.230	7.5	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	8.549	15	JN
	1H-Indene, 2,3-dihydro-4-methyl- Isomer	8.643	8.7	JN
000767-59-9	1H-Indene, 1-methyl-	8.716	32	JN
002177-47-1	2-Methylindene	8.774	7.7	JN
	1H-Indene, 1-methyl- Isomer	8.795	24	JN
91-20-3	Naphthalene	9.051	150	Q
051783-46-1	1H-Indene, 1-ethenyl-2,3-dihydro-	9.218	2.8	JN
000091-57-6	Naphthalene, 2-methyl-	9.668	16	JN

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero.
 N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified
 Q - For TICs, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW-28

Lab Name: Phoenix Environmental Labs

Client: IMPACT-ICL

Lab Code: Phoenix Case No.: _____

SAS No.: _____

SDG No.: GCT34727

Matrix:(soil/water) GROUND WATER

Lab Sample ID: CT34732

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0522_40.D

Level: (low/med) _____

Date Received: 05/22/25

% Moisture: not dec. 100

Date Analyzed: 05/22/25

GC Column: RTX-VMS ID: 0.18(mm)

Dilution Factor: _____ 1

Purge Volume: 25000 (uL)

Soil Aliquot Vol (uL): _____ n.a.

CONCENTRATION UNITS:

Number TICs found: 22 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown	2.754	8.2	J
000110-83-8	Cyclohexene	3.496	4.5	JN
103-65-1	n-Propylbenzene	7.136	2.3	Q
	Benzene, 1-ethyl-2-methyl- Isomer	7.215	7.8	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	7.424	9.8	JN
135-98-8	sec-Butylbenzene	7.612	0.66	Q
99-87-6	p-Isopropyltoluene	7.706	0.36	Q
526-73-8	1,2,3-Trimethylbenzene	7.816	8.7	Q
527-84-4	2-Isopropyltoluene	7.863	0.43	Q
104-51-8	n-Butylbenzene	7.968	0.46	Q
000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	8.120	3.8	JN
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	8.172	4.5	JN
000767-58-8	Indan, 1-methyl-	8.230	16	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	8.397	12	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	8.429	16	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	8.544	7.1	JN
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	8.643	3.8	JN
000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	8.653	3.8	JN
004175-53-5	1H-Indene, 2,3-dihydro-1,3-dimethyl	8.784	5.3	JN
017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethyl	8.873	7.1	JN
91-20-3	Naphthalene	9.045	4.1	Q
000091-57-6	Naphthalene, 2-methyl-	9.658	4.6	JN

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW-06(S)

Lab Name: Phoenix Environmental Labs

Client: IMPACT-ICL

Lab Code: Phoenix Case No.: _____

SAS No.: _____

SDG No.: GCT34727

Matrix:(soil/water) GROUND WATER

Lab Sample ID: CT34727

Sample wt/vol: 1035 (g/mL) mL

Lab File ID: 0527_10.D

Level: (low/med) Low

Date Received: 05/22/25

% Moisture: not dec. 100 decanted:(Y/N) NA

Date Extracted: 05/27/25

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 5/27/2025

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 13

(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000100-41-4	Ethylbenzene	2.204	8.3	JN
000098-82-8	Benzene, (1-methylethyl)-	2.580	4.3	JN
000095-63-6	Benzene, 1,2,4-trimethyl-	3.009	8.9	JN
000496-11-7	Indane	3.268	15	JN
000095-13-6	Indene	3.326	10	JN
002177-47-1	2-Methylindene	3.938	4.1	JN
000767-59-9	1H-Indene, 1-methyl-	3.973	3.9	JN
000091-57-6	Naphthalene, 2-methyl-	4.836	12	JN
001127-76-0	Naphthalene, 1-ethyl-	5.236	7.1	JN
000582-16-1	Naphthalene, 2,7-dimethyl-	5.359	4.1	JN
1000337-61-3	1H-Indene-5-carboxylic acid, 2,3-d	5.906	6.7	JN
002235-15-6	1(2H)-Acenaphthylenone	6.452	5.5	JN
000203-64-5	4H-Cyclopenta[def]phenanthrene	7.486	9	JN

FORM I SEMIVOA-TIC

- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
- C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW-09R

Lab Name: Phoenix Environmental Labs

Client: IMPACT-ICL

Lab Code: Phoenix Case No.: _____

SAS No.: _____

SDG No.: GCT34727

Matrix: (soil/water) GROUND WATER

Lab Sample ID: CT34728

Sample wt/vol: 1050 (g/mL) mL

Lab File ID: 0527_05.D

Level: (low/med) Low

Date Received: 05/22/25

% Moisture: not dec. 100 decanted: (Y/N) NA

Date Extracted: 05/27/25

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 5/27/2025

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SEMIVOA-TIC

- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
- C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID MW-22

Lab Name: <u>Phoenix Environmental Labs</u>	Client: <u>IMPACT-ICL</u>
Lab Code: <u>Phoenix</u> Case No.: _____	SAS No.: _____ SDG No.: <u>GCT34729</u>
Matrix:(soil/water) <u>GROUND WATER</u>	Lab Sample ID: <u>CT34729</u>
Sample wt/vol: <u>1050</u> (g/mL) <u>mL</u>	Lab File ID: <u>0527_06.D</u>
Level: (low/med) <u>Low</u>	Date Received: <u>05/22/25</u>
% Moisture: not dec. <u>100</u> decanted:(Y/N) <u>NA</u>	Date Extracted: <u>05/27/25</u>
GPC Cleanup (Y/N): <u>N</u> pH: <u>NA</u>	Date Analyzed: <u>5/27/2025</u>
Conc. Extract Volume: <u>1000</u> (uL)	Dilution Factor <u>1</u>
Injection Volume: <u>1</u> (uL)	
Number TICs found: <u>0</u>	CONCENTRATION UNITS: (ug/L or ug/KG) <u>ug/L</u>

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SEMIVOA-TIC

- A - Indicates that the tentatively identified compound is a suspected aldol condensation product.
Aldol condensation products are produced during the extraction process.
- C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW-25

Lab Name: Phoenix Environmental Labs

Client: IMPACT-ICL

Lab Code: Phoenix Case No.: _____

SAS No.: _____

SDG No.: GCT34727

Matrix:(soil/water) GROUND WATER

Lab Sample ID: CT34731

Sample wt/vol: 925 (g/mL) mL

Lab File ID: 0527_07.D

Level: (low/med) Low

Date Received: 05/22/25

% Moisture: not dec. 100 decanted:(Y/N) NA

Date Extracted: 05/27/25

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 5/27/2025

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

Number TICs found: 13

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000098-82-8	Benzene, (1-methylethyl)-	2.533	9.4	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	2.968	7.4	JN
000496-11-7	Indane	3.227	200	JN
000141-93-5	Benzene, 1,3-diethyl-	3.274	5.4	JN
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	3.826	8.1	JN
000767-59-9	1H-Indene, 1-methyl-	3.891	16	JN
	1H-Indene, 1-methyl- Isomer	3.920	20	JN
000090-12-0	Naphthalene, 1-methyl-	4.778	62	JN
001127-76-0	Naphthalene, 1-ethyl-	5.177	5	JN
000575-41-7	Naphthalene, 1,3-dimethyl-	5.301	4.8	JN
002235-15-6	1(2H)-Acenaphthyleneone	6.394	8.8	JN
000203-64-5	4H-Cyclopenta[def]phenanthrene	7.422	10	JN
000506-17-2	cis-Vaccenic acid	8.039	5.8	JN

FORM I SEMIVOA-TIC

- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
- C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID CT38695 BLK

Lab Name: Phoenix Environmental Labs

Client: _____

Lab Code: Phoenix Case No.: _____

SAS No.: _____ SDG No.: _____

Matrix:(soil/water) Water

Lab Sample ID: CT38695 BLK

Sample wt/vol: 1000 (g/mL) mL

Lab File ID: 0602_05.D

Level: (low/med) Low

Date Received: 05/29/25

% Moisture: not dec. n.a. decanted:(Y/N) NA

Date Extracted: 06/02/25

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 6/2/2025

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/KG)

Number TICs found: 4 ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown	8.467	4.2	J
	unknown	8.867	5.5	J
	unknown	9.560	5.4	J
	unknown	11.182	5.1	J

FORM I SEMIVOA-TIC

- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
- C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

Sample Criteria Exceedances Report

GCT34727 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Criteria	Analysis Units
CT34727	\$DP8260_TCL	Total Xylenes	NY / TAGM - Volatile Organics / Groundwater Standards	5.3	1.0	5	5		ug/L
CT34727	\$DP8260_TCL	Total Xylenes	NY / TOGS - Water Quality / GA Criteria	5.3	1.0	5	5		ug/L
CT34727	\$DP8260_TCL	Benzene	NY / TAGM - Volatile Organics / Groundwater Standards	2.2	0.70	0.7	0.7		ug/L
CT34727	\$DP8260_TCL	Ethylbenzene	NY / TAGM - Volatile Organics / Groundwater Standards	16	1.0	5	5		ug/L
CT34727	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04		ug/L
CT34727	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006		ug/L
CT34727	\$DP8260_TCL	Benzene	NY / TOGS - Water Quality / GA Criteria	2.2	0.70	1	1		ug/L
CT34727	\$DP8260_TCL	Ethylbenzene	NY / TOGS - Water Quality / GA Criteria	16	1.0	5	5		ug/L
CT34727	\$DP8260_TCL	Isopropylbenzene	NY / TOGS - Water Quality / GA Criteria	7.6	1.0	5	5		ug/L
CT34727	\$DP8260_TCL	1,2,4-Trimethylbenzene	NY / TOGS - Water Quality / GA Criteria	14	1.0	5	5		ug/L
CT34727	\$DPWM_TCLR	Acenaphthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	170	24	20	20		ug/L
CT34727	\$DPWM_TCLR	Naphthalene	NY / TAGM - Semi-Volatiles / Groundwater Standards	430	24	10	10		ug/L
CT34727	\$DPWM_TCLR	Naphthalene	NY / TAGM - Volatile Organics / Groundwater Standards	430	24	5	5		ug/L
CT34727	\$DPWM_TCLR	Naphthalene	NY / TOGS - Water Quality / GA Criteria	430	24	10	10		ug/L
CT34727	\$DPWM_TCLR	1,1-Biphenyl	NY / TOGS - Water Quality / GA Criteria	53	3.4	5	5		ug/L
CT34727	\$DPWM_TCLR	Acenaphthene	NY / TOGS - Water Quality / GA Criteria	170	24	20	20		ug/L
CT34727	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.10	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.14	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.10	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.14	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CT34727	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CT34728	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04		ug/L
CT34728	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006		ug/L
CT34728	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.03	0.02	0.002	0.002		ug/L
CT34728	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002		ug/L

Sample Criteria Exceedances Report

Criteria: NY: GW

GCT34727 - IMPACT-ICL

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CT34729	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34729	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34729	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.03	0.02	0.002	0.002	ug/L
CT34729	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002	ug/L
CT34730	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34730	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34730	\$DPWM_TCLR	Phenol	NY / TAGM - Semi-Volatiles / Groundwater Standards	1.7	1.0	1	1	ug/L
CT34730	\$DPWM_TCLR	Phenol	NY / TOGS - Water Quality / GA Criteria	1.7	1.0	1	1	ug/L
CT34730	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.19	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.14	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.37	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.20	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.33	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.36	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.20	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.37	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.36	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.14	0.02	0.002	0.002	ug/L
CT34730	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.19	0.02	0.002	0.002	ug/L
CT34731	\$DP8260_TCL	Total Xylenes	NY / TAGM - Volatile Organics / Groundwater Standards	7.5	1.0	5	5	ug/L
CT34731	\$DP8260_TCL	Total Xylenes	NY / TOGS - Water Quality / GA Criteria	7.5	1.0	5	5	ug/L
CT34731	\$DP8260_TCL	Benzene	NY / TAGM - Volatile Organics / Groundwater Standards	5.2	0.70	0.7	0.7	ug/L
CT34731	\$DP8260_TCL	Benzene	NY / TOGS - Water Quality / GA Criteria	5.2	0.70	1	1	ug/L
CT34731	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34731	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34731	\$DP8260_TCL	1,2,4-Trimethylbenzene	NY / TOGS - Water Quality / GA Criteria	6.8	1.0	5	5	ug/L
CT34731	\$DP8260_TCL	Isopropylbenzene	NY / TOGS - Water Quality / GA Criteria	13	1.0	5	5	ug/L
CT34731	\$DPWM_TCLR	Naphthalene	NY / TAGM - Volatile Organics / Groundwater Standards	8.4	5.4	5	5	ug/L
CT34731	\$DPWM_TCLR	Acenaphthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	190	27	20	20	ug/L
CT34731	\$DPWM_TCLR	Acenaphthene	NY / TOGS - Water Quality / GA Criteria	190	27	20	20	ug/L
CT34731	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L

Sample Criteria Exceedances Report

GCT34727 - IMPACT-ICL

Criteria: NY: GW

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CT34731	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.05	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.06	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.06	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.05	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34731	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34732	\$DP8260_TCL	Total Xylenes	NY / TAGM - Volatile Organics / Groundwater Standards	8.6	1.0	5	5	ug/L
CT34732	\$DP8260_TCL	Total Xylenes	NY / TOGS - Water Quality / GA Criteria	8.6	1.0	5	5	ug/L
CT34732	\$DP8260_TCL	1,2-Dichlorobenzene	NY / TAGM - Volatile Organics / Groundwater Standards	5.6	2.0	4.7	4.7	ug/L
CT34732	\$DP8260_TCL	Benzene	NY / TAGM - Volatile Organics / Groundwater Standards	19	0.70	0.7	0.7	ug/L
CT34732	\$DP8260_TCL	Benzene	NY / TOGS - Water Quality / GA Criteria	19	0.70	1	1	ug/L
CT34732	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34732	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34732	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.15	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.08	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.06	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.15	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.12	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.09	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.08	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.09	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.06	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.12	0.02	0.002	0.002	ug/L
CT34732	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.15	0.02	0.002	0.002	ug/L
CT34733	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34733	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34733	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.60	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.46	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.14	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.09	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.53	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.27	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.60	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.46	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.53	0.02	0.002	0.002	ug/L
CT34733	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.14	0.02	0.002	0.002	ug/L

Sample Criteria Exceedances Report

GCT34727 - IMPACT-ICL

Criteria: NY: GW

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CT34733	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.27	0.02	0.002	0.002	ug/L
CT34734	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34734	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34734	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.22	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.24	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.11	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.12	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.11	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.07	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.11	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.12	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.24	0.02	0.002	0.002	ug/L
CT34734	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.22	0.02	0.002	0.002	ug/L
CT34735	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34735	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34735	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.19	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.15	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.12	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.06	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.09	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.06	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.19	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.12	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.15	0.02	0.002	0.002	ug/L
CT34735	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.09	0.02	0.002	0.002	ug/L
CT34736	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34736	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34736	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34736	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L

Sample Criteria Exceedances Report

GCT34727 - IMPACT-ICL

Criteria: NY: GW

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CT34737	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT34737	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT34737	\$DPWM_TCLR	Phenol	NY / TAGM - Semi-Volatiles / Groundwater Standards	1.3	1.0	1	1	ug/L
CT34737	\$DPWM_TCLR	Phenol	NY / TOGS - Water Quality / GA Criteria	1.3	1.0	1	1	ug/L
CT34737	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT34737	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CT38695	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CT38695	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CT38695	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.12	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.06	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.12	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.08	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.08	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.08	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.08	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.12	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.06	0.02	0.002	0.002	ug/L
CT38695	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.12	0.02	0.002	0.002	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: Makrina.Nolan.makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Cooler: Yes No
 Coolant: IPK ICE
 Temp 3.3 °C Pg 1 of 2

Contact Options:
 Phone: 631-269-8800
 Fax: 631-269-1599
 Email: info@phoenixlabs.com

Customer: Impact Environmental
Address: 170 Keyland Ct
 Bohemia, NY 11716
Project: 175 Third St, Bozrah, NY
Report to: Dan Finkauf
Invoice to: Christine Bell
QUOTE # :

Project P.O.: 17831

This section MUST be completed with Bottle Quantities.

Sampler's Signature	Client Sample - Information - Identification		Analysis Request	Turnaround:	Time:	Date:	Accepted by:	Relinquished by:	PA	NY	NJ	Data Package:	State Samples Collected?
	Customer Sample Identification	Sample Matrix											
Angela Bellia	MW-06(S)	GW	5/22/25	1315	X	5/22/25	[Signature]	[Signature]	<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> TOGS GW	<input type="checkbox"/> Res. Criteria	<input type="checkbox"/> NJ Reduced Deliv. *	<input type="checkbox"/> PA Soil Restricted
	MW-09R		5/22/25	1040	X	5/22/25			<input type="checkbox"/> PA-GW	<input type="checkbox"/> CP-51 SOIL	<input type="checkbox"/> Non-Res. Criteria	<input type="checkbox"/> NY Enhanced (ASP B) *	<input type="checkbox"/> PA Soil non-restricted
	MW-22		5/21/25	0945	X	5/22/25			<input type="checkbox"/> Reg Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW Soil Cleanup Criteria	<input type="checkbox"/> Commercial Soil	<input type="checkbox"/> PA Soil Restricted
	MW-24R			1225	X				<input type="checkbox"/> PA Soil Restricted	<input type="checkbox"/> Unrestricted Soil	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Industrial Soil	<input type="checkbox"/> PA Soil non-restricted
	MW-25			1350	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	MW-28			1525	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	MW-29			1035	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	MW-30		5/22/25	0920	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	DUP-01		5/21/25	1230	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	TP-01			0800	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted
	FB-01			1245	X				<input type="checkbox"/> Clean Fill Limits	<input type="checkbox"/> 375SCO	<input type="checkbox"/> Impact to GW soil screen Criteria	<input type="checkbox"/> Support 5 DW	<input type="checkbox"/> PA Soil non-restricted

Comments, Special Requirements or Regulations:

Phoenix Std Report EQUIS
 Excel NJ Hazsite EDD
 PDF NY EZ EDD (ASP)
 GIS/Key Other

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

Turnaround:
 1 Day*
 2 Days*
 3 Days*
 4 Days*
 5 Days*
 Standard
 * SURCHARGE APPLIES

Time:
 1212
 1305
 1725

Date:
 5/22/25
 5/22/25
 5/22/25

Accepted by:
 [Signature]

Relinquished by:
 [Signature]

PA
 Clean Fill Limits
 PA-GW
 Reg Fill Limits
 PA Soil Restricted
 PA Soil non-restricted

NY
 TOGS GW
 CP-51 SOIL
 375SCO
 Unrestricted Soil
 375SCO
 Residential Soil
 375SCO
 Residential Soil
 Restricted Soil
 375SCO
 Commercial Soil
 375SCO
 Industrial Soil
 Support 5 DW

NJ
 Res. Criteria
 Non-Res. Criteria
 Impact to GW Soil Cleanup Criteria
 Impact to GW soil screen Criteria
 GW Criteria

Data Package:
 NJ Reduced Deliv. *
 NY Enhanced (ASP B) *

GCT 34727

Sam Runyon

From: Dan Fruhauf <dfruhauf@impactenvironmental.com>
Sent: Thursday, May 22, 2025 6:13 PM
To: Sam Runyon
Subject: Re: ms/msd

Sam,
MW-24



DAN FRUHAUF | Project Manager

O: 631-269-8800 x141 C: 631-901-2470
170 Keyland Court, Bohemia, NY 11716
[Our email policies](#)

From: Sam Runyon <samr@phoenixlabs.com>
Sent: Thursday, May 22, 2025 5:29:18 PM
To: Dan Fruhauf <dfruhauf@impactenvironmental.com>
Subject: ms/msd

Good afternoon,

Would you be able to let me know which sample ID the MS/MSD is supposed to go with? They are listed on page 2 on separate lines.

Thank you,

Samantha Runyon (she/her)
Client Services
Phoenix Environmental Laboratories
587 East Middle Tpke.
Manchester, CT 06040
samr@phoenixlabs.com
PH: 860-645-1102

60734727

Shannon Wilhelm

To: Michael Lapman
Subject: RE: Impact--TAT Change

From: Michael Lapman <michael@phoenixlabs.com>
Sent: Thursday, May 22, 2025 3:27 PM
To: Shannon Wilhelm <shannon@phoenixlabs.com>; Christine Paradise <christine@phoenixlabs.com>
Subject: FW: Impact--TAT Change

Please compare to NY TOGs GW criteria.

Thanks!!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com



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60734727

Shannon Wilhelm

To: Michael Lapman
Subject: Impact--TAT Change

From: Michael Lapman <michael@phoenixlabs.com>
Sent: Thursday, May 22, 2025 3:24 PM
To: Shannon Wilhelm <shannon@phoenixlabs.com>
Subject: FW: Impact--TAT Change

Shannon:

For the VOC and SVOC GW samples please change this to a 24 Hour Rush TAT, thank you.

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com



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GCT 34727

Shannon Wilhelm

From: Michael Lapman
Sent: Thursday, May 22, 2025 1:50 PM
To: Shannon Wilhelm
Subject: FW: Impact
Attachments: 20250522121351.pdf

Impact—ICL

5-Day Rush TAT and compare to:

- EPA TOX
- NY Restricted
- NY Unrestricted
- NY Commercial

Thank you.

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com



This message, including any attachments hereto, may contain privileged or confidential information and is sent solely for the attention and use of the intended addressee(s). If you are not an intended addressee, you may neither use this message nor copy or deliver it to anyone. In such case, you should immediately destroy this message and kindly notify the sender by reply email. Thank you.

From: Shannon Wilhelm <shannon@phoenixlabs.com>
Date: Thursday, May 22, 2025 at 1:15 PM
To: Michael Lapman <michael@phoenixlabs.com>
Subject: Impact

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike

GCT 34727

Sam Runyon

Subject: FW: impact chains
Attachments: 20250529142247.pdf

From: Michael Lapman <michael@phoenixlabs.com>
Sent: Thursday, May 29, 2025 3:34 PM
To: Sam Runyon <samr@phoenixlabs.com>
Subject: FW: impact chains

Impact—ICL WM:

4-Day Rush TAT and compare to:

- EPA TOX
- NJ SR MGW
- NJ-Soil Res Inhalation
- NJ-Soil Res. (ID)
- NY-UnRestricted SCO
- PA-CleanFill
- PA-RegFill

Impact—ICL:

3rd Street---24 Hour Rush TAT, per Impacts request they would like this report combined with GCT34727 and will require an ASP B Data Package for both sample sets (the DP request was not indicated but needed on the chain for GCT34727). Thank you.

Compare to:

- NY TOGS GW

Thanks!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com

