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Remedial Investigation Report

Old Erie Commons
160 Center Street, Canastota, New York
BCP Site No. C727015

Prepared for:

Real Plans. Real People. Real Progress.

Old Erie Commons, LLC
1201 East Fayette Street
Syracuse, New York

December 2025

C&S Project No. W96.013.001

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HOUSINGVISIONS
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Old Erie Commons LLC
1201 East Fayette Street
Syracuse, New York

Prepared by:
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499 Col. Eileen Collins Boulevard
Syracuse, New York 13212

I, H. Nevin Bradford, certify that I am currently a NYS Registered Professional Engineer and that this Remedial Investigation Report was prepared in accordance with applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

H. Nevin Bradford
State of New York Professional Engineer No. 086008

December 5, 2025

STATE OF NEW YORK
HENRY NEVIN BRADFORD III
No. 086008
LICENSED PROFESSIONAL ENGINEER

C&S Project#: W96.013.001

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ACRONYMS

AAR – Alternatives Analysis Report

AGV – Air Guidance Value

AMSL – Above Mean Sea Level

ASP – Analytical Services Protocol

AWQS – Ambient Water Quality Standards

BCP – Brownfield cleanup Program

BGS – Below Ground Surface

BMP – Best Management Practice

BTOR – Below Top of Riser

CAMP – Community Air Monitoring Plan

CM SCO – Commercial Soil Cleanup Objective

DER – Division of Environmental Remediation

DO – Dissolved Oxygen

DUSR – Data Usability and Summary Report

EDD – Electronic Data Deliverable

ELAP – Environmental Laboratory Accreditation Program

ESA – Environmental Site Assessment

GPR – Ground Penetrating Radar

HASP – Health and Safety Plan

HDPE – High-Density Polyethylene

HFM – Historic Fill Material

HREC – Historic Recognized Environmental Condition

IN SCO – Industrial Soil Cleanup Objective

LCS – Laboratory Control Sample

L/Min – Liters per Minute

mg/L –Milligrams per Liter

ml/Min – Milliliters per Minute

MS / MSD – Matrix Spike / Matrix Spike Duplicate

mS/cm – MilliSiemens per Centimeter

mV – Millivolts

NAPL – Non-Aqueous Phase Liquid

NAVD – North American Vertical Datum

NTU – Nephelometric Turbidity Unit

NYSDEC – New York State Department of Environmental Conservation

NYSDOH – New York State Department of Health

OCWA – Onondaga County Water Authority

ORP – Oxidation Reduction Potential

PAH – Polycyclic Aromatic Hydrocarbons

PCB – Polychlorinated Biphenyl

PCE – Tetrachloroethylene

PGW SCO – Protection of Groundwater Soil Cleanup Objective

PFAS – Per- and Polyfluoroalkyl Substances

PFOA – Perfluorooctanoic Acid

PFOS - Perfluorooctanesulfonic acid

PID – Photo-ionization Detector

PM – Particulate Matter

PPB – Parts per Billion

PPE – Personal Protective Equipment

PPM – Parts per Million

PPT – Parts per Trillion

PVC – Poly Vinyl Chloride

QA / QC – Quality Assurance / Quality Control

QAPP – Quality Assurance Project Plan

REC – Recognized Environmental Condition

RI – Remedial Investigation

RIWP – Remedial Investigation Work Plan

RR SCO – Restricted Residential Soil Cleanup Objective

SCG – Standards, Criteria, Guidance

SCO – Soil Cleanup Objective

Site – 160 Center Street, Canastota, New York

SVI – Soil Vapor Intrusion

SVOC – Semi volatile Organic Compound

TAL – Target Analyte List

TCE – Trichloroethene

TCL – Target Compound List

TOGS – Technical and Operational Guidance Series

µg/m^3 – Microgram per Cubic Meter

USEPA – United States Environmental Protection Agency

UR SCO – Unrestricted Soil Cleanup Objective

UST – Underground Storage Tank

VOC – Volatile Organic Compound

VOV - Volatile Organic Vapor

EXECUTIVE SUMMARY

This document presents the Remedial Investigation (RI) Report for Brownfield Cleanup Program (BCP) Site No. C727015 located at 160 Center Street, Canastota, Onondaga County, New York (the "Site"). The RI Report reports on the data and findings resulting from implementation of the Remedial Investigation Work Plan (RIWP). The project details are summarized below:

Contaminant Source and Constituents

Contamination exceeding soil cleanup objectives (SCOs) is generally associated with historic fill material (HFM) located on the Site. Constituents in the HFM at concentrations that exceed the Restricted Residential Use SCOs (RR SCOs) are generally semi-volatile organic compounds (SVOCs) and metals. No constituents exceeded RR SCOs in the native material at the Site. Volatile organic compounds (VOCs), SVOCs, and naturally occurring metals are present in Site groundwater at concentrations that exceed NYSDEC Technical and Operation Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS). Per- and polyfluoroalkyl substances (PFAS) are also in groundwater on the western side of the Site at concentrations that exceed NYSDEC PFAS guidance values.

Extent of Contamination

Soil contamination is limited to the HFM located across the Site. The HFM is located immediately below existing surfaces and is underlain by native soils. The Site contains HFM with observed thickness of 0.5 to 5.5 feet below ground surface (bgs). The observed HFM is shallowest on the southwest side of the Site and deepest in the center and northwest and southeast corners of the Site. The presence of HFM and the observed impacts are consistent with the Site's long history of industrial operations, including coal handling and delivery via multiple rail spurs, and the placement of unregulated fill. These historical activities are considered the primary contributors to the subsurface impacts observed across the Site.

Groundwater is located across the Site at approximately 3 to 5 feet bgs. The groundwater across the Site contains acetone, p-isopropyltoluene, phenol, and polycyclic aromatic hydrocarbons (PAHs) at relatively low concentrations, but above the corresponding groundwater standards. Based on the data gathered during the RI, it appears that VOCs and SVOCs in the groundwater are related to the presence of HFM across the Site (residual constituents from coal-tar, creosote, or petroleum) or are related to the microbial breakdown of natural organic matter. Low-level PFAS contaminated groundwater is located on the western side of the Site. The likely reason for the presence of PFAS is not currently understood. Existing groundwater gradient data indicates a northeasterly flow direction. The groundwater gradient at the Site is low, averaging 0.0065 feet per foot.

Proposed Site Redevelopment

The proposed redevelopment plan for the Site is a pocket neighborhood and a multi-building residential project with on-site community and commercial spaces. The project includes six newly constructed buildings, including three 2-story apartment buildings and one 2-story townhouse building arranged around a central shared greenspace and three-story community building. There will be 48 affordable residential units. The project includes a neighborhood bakery/café, creation of canal front public space, and enhancement to the Empire State Trail. The proposed redevelopment would be considered restricted-residential.

Remedial Investigation

To characterize site conditions and identify the appropriate remedy for the Site, a RI was implemented. The RI included the collection and analysis of 44 soil samples, six soil vapor samples, and two rounds of groundwater sampling from four wells.

Based on data collected during the previous Phase II Environmental Site Assessments (ESAs) and the RI, contaminants of concern in soil are SVOCs and metals and are limited to the HFM across the Site. The variation in analyte concentrations in the soils that contain HFM indicates that the source of contamination in soil samples containing HFM is the HFM itself and no apparent discrete source is located on-site or off-site. The identified SVOCs that exceeded RR SCOs include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene while the identified metals include arsenic, barium, lead, and mercury. No constituents exceeded RR SCOs in the native material at the Site.

VOC and SVOC concentrations in groundwater only slightly exceeded TOGS 1.1.1 AWQS. Acetone, p-isopropyltoluene, and phenol were detected in excess of their TOGS limits in MW-103 during the second round of sampling. The presence of these analytes along with the hydrogen sulfide odor at MW-103 indicate that these compounds may be related to the presence of HFM across the Site (residual constituents from coal-tar, creosote, or petroleum) or are related to the microbial breakdown of natural organic matter. A singular PAH compound, benzo(a)anthracene, was detected in excess of the TOGS limits in all wells at the Site during the first round of sampling and six PAHs were detected in excess of the TOGS limit in MW-101 during the second round of sampling. In each case, the concentration was a fraction of a part per billion (ppb) (maximum of 0.11 ppb) and the corresponding TOGS limit is very low (0.002 ppb). There were also exceedances of typical hard water elements across the Site including iron, magnesium, and sodium. Groundwater PFAS concentrations on the western side of the Site exceeded applicable perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic Acid (PFOA) guidance values. The likely reason for the presence PFAS is not currently understood. However, the Site is situated hydraulically downgradient of the Canastota Volunteer Fire Department, which may represent a potential off-site source. The Fire Department is located approximately 275 feet to the west-southwest of the Site, across Center Street. Existing groundwater gradient data indicates a northeasterly groundwater flow direction.

Conclusions

Based on the work described in this document:

- Contaminants of concern in soil are SVOCs and metals and are limited to the HFM across the Site. The variation in analyte concentrations in the soils that contain HFM indicates that the source of contamination in soil samples containing HFM is the HFM itself and no apparent discrete source is located on-site or off-site. The current exposure pathways for surface and subsurface soil / HFM are as follows:

  - Under the current use, persons living and working in the vicinity of the Site and / or persons trespassing on the Site could be exposed to SVOCs and metals in the surface soil via inhalation of airborne particles, incidental ingestion of, or dermal contact with the contaminated media. Under current conditions an exposure pathway exists, however, this could be mitigated through engineering controls (i.e., site cover system) and institutional controls (i.e., Site Management Plan, Deed Restrictions) under the post-remediation scenario.

  - Exposed subsurface soil / HFM during construction presents a potential route of exposure to construction or remediation workers via contact, fugitive dust and surface water. However, the use of appropriate personal protective equipment, dust suppression techniques and personal / air monitoring, and the development of a HASP would minimize the risk of exposure during this stage of the project.

- Contaminants of concern in groundwater are VOCs, SVOCs, and PFAS. It appears that VOCs and SVOCs in the groundwater are related to the presence of HFM across the Site (residual constituents from coal-tar, creosote, or petroleum) or are related to the microbial breakdown of natural organic matter. The likely reason for the presence of PFAS is not currently understood. Groundwater is not considered a relevant mechanism for exposure due to the municipal water servicing the Site and requirement for an Environmental Easement that will restrict the use of groundwater. There is not a ban on groundwater use as a public drinking water supply in Village of Canastota. However, groundwater in the vicinity of the Site is not known to be utilized as a source of potable water. In addition, the depth of the groundwater (3 to 5 feet below grade) reasonably precludes human contact.

- The RI sampling results did not indicate a soil vapor intrusion concern. Therefore, the vapor intrusion pathway is not relevant under current conditions.

- There are no ecological resources present on or in the vicinity of the Site and, consequently, no fish and wildlife resource impacts have been identified.

1.0 INTRODUCTION

C&S Engineers, Inc. (C&S) has prepared this Remedial Investigation (RI) Report on behalf of the applicants for Brownfield Cleanup Program (BCP) Site No. C727015, Old Erie Commons LLC, (hereafter known as "Applicants"), for the Old Erie Commons BCP Site located at 160 Center Street, in the Village of Canastota, Madison County, New York (the "Site").

On November 30, 2021, Savarino Companies, LLC (previous developer) entered into a Brownfield Cleanup Agreement (BCA) as a BCP Volunteer with the New York State Department of Environmental Conservation (NYSDEC) to investigate and remediate the Site. On March 10, 2022, an amendment was executed to substitute 160 Center LLC as the sole BCP Volunteer on the existing BCA. 160 Center LLC was a related entity to Savarino Companies, LLC and was a single purpose entity formed for the proposed redevelopment project at the Site. Under 160 Center LLC, a Remedial Investigation Work Plan (RIWP) was submitted and approved by NYSDEC, however, investigation activities were never conducted at the Site. On May 30, 2025, a second amendment was executed to substitute Old Erie Commons, LLC (current developer) as the sole BCP Volunteer on the existing BCA.

Previous Phase II Environmental Site Assessments (ESAs) at the Site identified impacted fill materials, which may be associated with historic site use or the import of fill material. Specifically, an ash fill layer was previously identified at the majority of the investigation locations across the Site. Analytical data from the ash layer samples confirmed the presence of semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs), and metals at concentrations exceeding the 6 NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives (RR SCOs), Commercial Use SCOs (CM SCOs) and / or Industrial Use SCOs (IN SCOs). Previous investigations are further discussed in **Section 2.3**.

In June 2022, Benchmark Civil / Environmental Engineering & Geology, PLLC (Benchmark) prepared a Remedial Investigation Work Plan (RIWP) on behalf of 160 Center LLC outlining the proposed approach to assess the full nature and extent of contamination at the Site. The RIWP was approved by the Department on June 8, 2022. On June 12, 2025, C&S proposed revisions to the approved June 2022 RIWP in a Supplemental RIWP to address any outdated information and to ensure alignment with current Site conditions. NYSDEC approved the proposed RIWP revisions on June 18, 2025. The subsequent RI included soil, groundwater, and soil vapor evaluations.

2.0 PROJECT BACKGROUND

2.1 Site Description

The Site consists of a ±2.56-acre parcel located in the Village of Canastota, Madison County, New York. The Site is bordered by the old Erie Canal (Pools Brook) to the north, Center Street to the south, residential, commercial, and vacant properties to the west, and a commercial property to the east. The current zoning for the Site is IN (Industrial District) according to the December 2015 Village of Canastota Zoning Map. A zoning change will be completed to allow for the mixed-use residential and commercial development of the Site. Surrounding properties are zoned IN and R2 (Residential 2 District).

Figure 1 shows the location of the Site and **Figure 2** shows the Project Area, Site Boundaries and Site Details.

2.2 Site History

For more than 120 years, the Site was utilized for various industrial operations, including varnishing, painting, and machining, as well as casket manufacturing, furniture manufacturing, and boat building. The former Site building, constructed prior to 1890 by the Canastota Casket Company, was subsequently occupied by several furniture manufacturers and later by an agricultural supply company before becoming vacant. Three railroad spurs extended into the Site from its southeastern corner, remaining in use from before 1890 until after 1963. According to fire insurance maps, an underground storage tank (UST) of unknown capacity was reportedly installed at the Site between 1906 and 1911 for the storage of benzine (a mixture of various aliphatic hydrocarbon compounds, also known as petroleum ether or naphtha). No information is available regarding the UST's exact location (only an approximate location is provided on fire insurance maps), size, closure, or removal. A surface feature with the potential to connect to subsurface structures was observed in the approximate vicinity of the reported UST; however, previous investigations have not been able to definitively conclude if the UST remains. The building partially collapsed in July 2011 and was fully demolished under emergency conditions in August 2011. A large building debris pile consisting of brick, stone, concrete, and wood pieces remains along the southern portion of the Site, generally within the basement of the historical main Site building.

2.3 Previous Investigations

Environmental information currently exists via the completion of the following reports:

- Phase I ESA completed by GHD in August 2019
- Phase II ESA completed by GHD in November 2019
- Phase II ESA completed by Benchmark in December 2021
- Phase I ESA completed by C&S in August 2025

Phase I ESA, GHD – April 2019

The Phase I ESA revealed the following Recognized Environmental Conditions (RECs) associated with the Site:

- Potential Benzine Underground Storage Tank (UST): According to historical Sanborn maps, an unknown capacity UST was installed at the Site sometime between 1906 and 1911 and was reportedly used to store benzine (a mixture of various aliphatic hydrocarbon compounds, also known as petroleum ether or naphtha). No additional information was provided or able to be reasonably ascertained, including information regarding specific location, closure, and removal. A surface feature with the potential to connect to subsurface structures was identified in the approximate location of the reported UST.

- Historical Site Use: The Site was utilized for various operations that involved varnishing, painting, and machining, including casket manufacturing, furniture manufacturing, and boat building, for over 120 years. These operations utilize significant quantities of petroleum products and hazardous substances.

- Historical Railroad Spurs: Historically, three railroad spurs were located on-Site and entered the Site from its southeastern corner. One railroad spur crossed the central portion of the Site and terminated on the adjoining property to the west. One railroad spur terminated in the central portion of the Site adjacent to the northern wall of the main historical Site building. One railroad spur crossed the central portion of the Site and terminated near the Site's northern boundary. In addition, one railroad spur was located immediately adjacent to the Site's eastern boundary and terminated near the Erie Canal, which adjoins the northern Site boundary. They were present from some time prior to 1890 until an unknown date after 1963.

- On-Site Building Debris: A significant quantity of intermixed brick, stone, concrete, and wood pieces were observed along the southern portion of the Site, generally within the basement of the historical main Site building. The debris pile is documented to contain potential asbestos-containing materials.

- Former Septic Systems: Based on the development of the Site dating back to at least the 1890s, it is assumed that at some point in the Site's past, prior to connecting to the municipal sanitary sewer system, a septic system(s) was previously located on-Site.

Phase II ESA, GHD – November 2019

A Limited Phase II ESA was completed by GHD to assess soil and groundwater in the vicinity of the potential UST and was not intended to characterize subsurface conditions for the entirety of the Site. The Limited Phase II ESA activities consisted of a ground penetrating radar (GPR) survey to locate the UST, the completion of five soil borings around the UST area (SB-1 through SB-5), and the installation of three temporary groundwater wells (TW-1 through TW-3). GHD collected three soil samples and three groundwater samples for laboratory analysis of volatile organic compounds (VOCs), SVOCs, metals, and polychlorinated biphenyls (PCBs). The findings of the Limited Phase II ESA are summarized below:

- The GPR survey did not confirm or deny the presence of the UST. The investigation identified the following noteworthy features:
    - A gas / flammable fuel line was mapped along the southern and western portions of the Site;
    - An unidentified subsurface line was detected trending across the western portion of the Site; and
    - A general area of a suspected UST was identified near the southwestern portion of the Site. GPR could not confirm or deny the presence of a tank in this area due to soil conditions and overgrown vegetation.

The extent and configuration of these features are illustrated on **Figure 3**.

- Subsurface conditions consisted of approximately 2 to 5 feet of fill material overlying native soils. Low-level (0.3 to 1.5 parts per million or ppm) total volatile organic vapor (VOV) field measurements were noted at the boring locations.

- Groundwater was encountered at approximately 3 feet below ground surface (bgs). One VOC (acetone) was detected exceeding its 6 NYCRR Part 375 Unrestricted Use SCO (UR SCO) at SB-5 (4-6 ft).

- SVOCs, specifically PAHs were identified exceeding UR SCOs, RR SCOs, and IN SCOs at SB-5 (4-6 ft).

- Metals, including arsenic, barium, chromium, lead, nickel, and/or zinc were identified at concentrations exceeding UR SCOs, CM SCOs, and IN SCOs at SB-1 (0-4 ft) and SB-3 (0-4 ft).

- Metals, including antimony, arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, magnesium, manganese, nickel, selenium, sodium, thallium, zinc, and / or mercury were identified at concentrations exceeding Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards / Guidance Values (AWQS) at TW-1, TW-2, and TW-3.

- The Limited Phase II ESA concluded the samples collected from the reported vicinity of the historical UST did not exhibit evidence of petroleum or chemical impacts.

<u>Phase II ESA, Benchmark – December 2021</u>

Benchmark conducted a Phase II ESA at the Site in March and October 2021. The results are documented in a report dated March 2021 and revised in December 2021. The Phase II ESA activities consisted of 19 test pits (TP-1 through TP-19) completed across the Site to depths of approximately 3 to 7 feet bgs. Eight soil / fill samples were selected for laboratory analysis for SVOCs and metals. Three groundwater samples were also collected from test pit locations TP-3, TP-5, and TP-10 for laboratory analysis of VOCs. The findings of the Phase II ESA are summarized below:

- Fill materials consisting of black fines, ash, cinders, brick, glass, wood, concrete, asphalt, slag, plastic, and metal were observed across the Site to depths of approximately 1.5 to 5.5 feet bgs. Native soil and weathered bedrock were present underlying the fill materials.

- PAHs were detected in three of the six samples analyzed for SVOCs at concentrations exceeding their respective RR SCOs, CM SCOs, and / or IN SCOs.

- Metals (arsenic, barium, lead, and / or mercury) were detected in the eight samples analyzed for metals at concentrations exceeding respective RR SCOs, CM SCOs, and IN SCOs.

Phase I ESA, C&S – August 2025

The Phase I ESA revealed the following REC associated with the Site:

- The historical land uses on and off the Site, in addition to the Site's inclusion in the NYSDEC BCP is considered a REC.

The Phase I ESA revealed the following BER associated with the Site:

- Potential hazardous building materials in demolition debris.

Based on the results of this Phase I ESA, C&S recommended no further environmental investigation beyond activities required by the BCP. The BCP includes NYSDEC oversight, as well as documentation / reporting by a qualified environmental professional to ensure that the investigation and remedial work meets the requirements of applicable NYSDEC regulation and guidance. The BCP requires that the nature and extent of contamination within the property be fully defined, that alternatives be proposed to implement the remediation, and that the remediation be performed. Completion of the required program elements will result in the REC designation being changed to a Controlled REC if the remedy involves leaving some contamination in place with the implementation of engineering and institutional controls. Completion of the required program elements will result in the REC designation being changed to a HREC if the remedy includes the removal / remediation of all impacted media.

2.4 Remedial Investigation Objectives, Scope, and Rationale

The objectives of the RI were to evaluate contaminant impacts to soil, groundwater, and soil vapor and identify and to obtain data that would facilitate the evaluation of appropriate remedial actions necessary to redevelop the Site. The investigation work included evaluating the magnitude and extent of contaminant impacts, conducting a qualitative exposure assessment for actual or potential exposures to contaminants at the Site and / or emanating from the Site, and producing data that will support the development of an acceptable RI Report and Alternatives Analysis Report (AAR).

The RI scope of work was based on information previously gathered regarding historical operations conducted at the Site, the results of previous investigations / characterizations, and the project objectives. The RI included the following:

- Soil Evaluation – This task consisted of assessing the overall soil conditions at the Site with focus on the following distinct areas / elements:
    - <u>Surface soil samples:</u> Surface soils were characterized to determine the shallow impacts in areas that are proposed to be finished with pervious surfaces (e.g. landscaping and grass).
    - <u>Historic Fill Material (HFM):</u> HFM was characterized to identify the extent and magnitude of contamination within the HFM. A map showing the depths of HFM across the site is provided as **Figure 4**. Note that the depths are reflective of conditions during the RI, prior to any development-related site work.
    - <u>Native Soils:</u> Native soils across the Site were characterized to determine the depth of impacts from the overlying HFM and / or Site operations.
- Groundwater Evaluation – Groundwater monitoring wells were installed on Site to assess groundwater quality and determine groundwater flow.
- Soil Vapor Evaluation – Soil vapor samples were collected to determine if there is potential for soil vapor intrusion to affect future buildings.

The locations of all explorations are shown on **Figure 5.**

The RI activities were completed consistent with NYSDEC *Division of Environmental Remediation (DER): Technical Guidance for Site Investigation and Remediation*, dated May 2010 (DER-10).

3.0 METHODOLOGY

The RI intended to characterize site conditions through the advancement of soil borings, the installation of groundwater monitoring wells, the installation of soil vapor implants, and the collection and analysis of soil, groundwater, and soil vapor samples.

Prior to initiating subsurface investigation activities, C&S' subcontractor, Matrix Environmental Technologies (Matrix), notified UDig New York, to arrange for identification and marking of buried public utilities at the Site. C&S endeavored to maintain a minimum setback of at least three feet from marked utilities during our investigation.

3.1 Decontamination Methods

The typical decontamination system to remove contaminants and debris from non-disposable field equipment is gross contamination removal followed by a "three-step decontamination". The gross contamination removal consisted of using tools or gloved hand to removal heavy amounts of soiling. The three-step decontamination was comprised of:

Initial Pre-Rinse → Alconox® Soap Cleaning → Final Rinse

Electronic field meters and equipment were wiped down with a damp towel or cloth to remove loose and caked soil or contaminants. In the case of a PID, it was ensured that the inlet was free of debris that could cause false positive readings. Non-disposable soil and groundwater sampling / monitoring equipment (e.g. water level depth meters, shovels, etc.) were thoroughly decontaminated between each sampling location.

Decontamination water was obtained from C&S facilities which is supplied potable public water from OCWA.

3.2 Soil Characterization

Soil sampling was performed in accordance with the approved RIWP and Supplemental RIWP. The general soil sampling rationale is summarized below:

- Previous investigations indicate that HFM is present across the Site. SVOCs and metals are common contaminants in HFM and were therefore analyzed at a higher frequency to better characterize the HFM and evaluate potential impacts on underlying native soils.

- VOCs, pesticides, herbicides, PCBs, 1,4-dioxane, and PFAS were analyzed at a lower frequency while still ensuring adequate spatial coverage across the Site.

- Samples collected near the on-site debris pile were analyzed for asbestos due to the potential presence of hazardous building materials.

- Four surface soil samples (SS-113 through SS-116) were analyzed for lead only to delineate the shallow lead impacts previously identified at TP-16 during the Benchmark Phase II ESA.

3.2.1 Surface Soil Sample Collection

Surface soil samples were collected across the Site to assess conditions in the vicinity of the building debris, to delineate lead impacts observed in the northern portion of the Site during the Phase II ESA, and to provide general spatial representation across the Site. A total of 16 surface soil samples were collected and analyzed as shown on **Figure 6**.

A steel shovel was used to remove the overlying turf. The exposed soil located zero to two inches below the root zone was collected with a stainless-steel spoon or gloved hand.

Soil from each location was screened in the field for visible impairment, olfactory indications of impairment, evidence of non-aqueous phase liquids (NAPLs), and / or indication of detectable VOVs with a photoionization detector (PID), collectively referred to as "evidence of impairment".

3.2.1.1 Surface Soil Sampling

Surface soil samples were collected from each strategically placed sample location to provide characterization across the Site. A total of 16 surface soil samples were collected and analyzed for the following:

- Target Compound List (TCL) VOCs (12 of 16 samples)
- TCL SVOCs (12 of 16 samples)
- TCL pesticides (5 of 16 samples)
- TCL herbicides (5 of 16 samples)
- PCBs (5 of 16 samples)
- Target Analyte List (TAL) metals, including mercury and cyanide (12 of 16 samples analyzed for full list, 4 of 16 samples analyzed for lead only)
- 1,4-Dioxane (8 of 16 samples)
- Per- and Polyfluoroalkyl Substances (PFAS) (5 of 16 samples)
- Asbestos (4 of 16 samples)

A master sample log is presented as **Table 1**.

3.2.2 Test Pit Completion

A total of 15 test pits were excavated across the Site. The purpose of the test pits was to visually assess subsurface conditions and document the presence of HFM at the Site. Observations were used to evaluate the nature and extent of fill and to identify any subsurface structures or features. The location of the test pits are shown on **Figure 7a** and **Figure 7b**.

An excavator with an appropriately sized bucket was utilized to complete the excavations. Soils from the test pits were screened for evidence of impairment. The results were recorded on test pit logs.

The test pits were distributed to characterize both HFM and underlying native soils. At each location, two samples were generally collected: one from the HFM layer and one from the native soil beneath. Care was taken to prevent comingling of the HFM and native soil so that the respective samples were representative of each medium. Test pit logs were prepared and include soil description / lithology, PID readings, relevant observations, etc. The test pit logs are provided in **Appendix A**.

3.2.2.1 Test Pit – HFM Sampling

HFM samples were collected from each test pit where HFM was encountered. Since HFM was encountered in all test pits, a total of 15 samples were collected. HFM samples were collected based on evidence of impairment and to provide characterization across the Site. The HFM samples were collected and analyzed for the following:

- TCL VOCs (7 of 15 samples)
- TCL SVOCs (15 of 15 samples)
- TCL pesticides (11 of 15 samples)
- TCL herbicides (11 of 15 samples)
- PCBs (11 of 15 samples)
- TAL metals, including mercury and cyanide (15 of 15 samples)
- PFAS (11 of 15 samples)
- Asbestos (1 of 15 samples)
- 1,4 Dioxane (14 of 15 samples)

A master sample log that includes sample identification is presented in **Table 1**.

3.2.2.2 Test Pit – Native Soil Sampling

Native soil samples were collected from the majority of test pits, based on the approved RIWP. Of the 15 test pits advanced, a total of 13 native soil samples were collected. To assess the impact of HFM and / or Site operations on the underlying native soil, soil samples were generally collected from the upper portion of the native material, at least one foot below the observed HFM (to prevent comingling of the HFM and native soil). The native soil samples were collected and analyzed for the following:

- TCL VOCs (6 of 13 samples)
- TCL SVOCs (13 of 13 samples)
- TCL pesticides (10 of 13 samples)
- TCL herbicides (10 of 13 samples)
- PCBs (10 of 13 samples)

- TAL metals, including mercury and cyanide (13 of 13 samples)
- PFAS (10 of 13 samples)
- Asbestos (1 of 13 samples)
- 1,4 Dioxane (13 of 13 samples)

A master sample log is presented as **Table 1**.

3.3 Groundwater Characterization

3.3.1 Well Construction

To characterize groundwater conditions at the Site, four groundwater monitoring wells were installed. The wells were distributed across the Site, as shown in **Figure 8** and **Figure 9**. MW-101 through MW-104 were installed in July 2025 based on locations shown in the approved RIWP.

A rotary drill was used to advance 4-1/4-inch inner diameter hollow stem augers. The wells were constructed to intersect the top of the water table. Each well (with the exception of MW-104) was completed with approximately 10 feet of 2-inch Schedule 40 0.010-slot well screen. MW-104 was set at 15 feet bgs, slightly deeper than the other three wells, therefore it was completed with 11 feet of 2-inch Schedule 40 0.010-slot well screen to ensure the screen intercepted the water table. connected to an appropriate length of schedule 40 polyvinyl chloride (PVC) well riser to complete the well. The annulus was sand packed with quartz sand to approximately 0.5 to 2 feet above the screened section and 1.5 feet of bentonite chips or pellets was placed above the sand. The remaining annulus was backfilled with soil cuttings to ground surface. Each well was completed with a flush-mount protective casing. Well construction logs are included in **Appendix B**.

3.3.2 Well Development & Sampling

After a minimum of 24-hours following installation, the monitoring wells were developed using a peristaltic pump capable of low-flow pumping techniques (0.1 – 0.5 L/min). An in-line water quality measurement device with an equipped flow through cell (Horiba U-52-2) was used during well development to monitor pH, temperature, dissolved oxygen (DO), conductivity, oxidation / reduction potential (ORP), and turbidity. Water levels were measured periodically throughout well development to establish stabilization criteria for drawdown. Data on pumping rate, drawdown, and water volume required to meet parameter stability was used during well purging and sampling activities. The well development continued until:

- A minimum of three well volumes were removed to promote the infiltration of new groundwater through the well screen; and

- Field parameters stabilized. Conditions were considered to be stabilized when water quality readings recorded from three consecutive recordings were within the following tolerances:

Table 3-1: Groundwater Stabilization Criteria

Parameter	Units	Stabilization Criteria
pH	Standard Units	± 0.1
Conductivity	mS/cm	3%
Turbidity	NTU	10% or < 10 NTU
D.O.	mg/L	10% or < 0.5 mg/L
Temperature	°F / °C	3%
ORP	mV	± 10

The flow rate observed during well development and sampling was 200-400 mL/min. The data on pumping rates, drawdown, water volume, and water quality were documented on the field sheets provided in **Appendix B.**

3.3.3 Groundwater Sampling

Groundwater sampling was conducted immediately following well development using low-flow purging and sampling techniques. Before purging the wells, water levels were measured using an electric water level sounder capable of measuring to the 0.01-foot accuracy. A peristaltic pump was utilized. According to the equipment supplier, the pumping system, when fitted with high-density polyethylene (HDPE) tubing, does not contain materials that could affect PFAS sampling results. Calibration, purging and sampling procedures were performed as specified by the United States Environmental Protection Agency (USEPA) and NYSDEC[1] for low-flow and emerging contaminant sampling. Calibration times, purging volumes, water levels and field measurements were recorded in a field log included in **Appendix B**.

The first round of groundwater sampling was completed on July 30 and July 31, 2025. The second round of groundwater sampling was completed on October 21, 2025.

Groundwater samples were collected from all wells during both events and analyzed for the following:

- TCL VOCs
- TCL SVOCs
- TCL pesticides
- TCL herbicides
- PCBs
- Total TAL metals, including mercury and cyanide
    - If turbidity was above 50 nephelometric turbidity units (NTU), the sample was analyzed for dissolved TAL metals

[1] U.S. EPA Region 1 Low Stress (low-flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, September 19, 2017.
NYSDEC Guidelines for Sampling and Analysis of PFAS, January 2020.

- PFAS
- 1,4 Dioxane

A master sample log is presented as **Table 1**.

3.4 Soil Vapor Sampling

Soil vapor sampling was performed across the Site to determine if there is a potential for soil vapor intrusion into future Site buildings and if there is potential for soil vapor to impact off-site receptors. The sampling was performed consistent with the New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006, and applicable updates. Six soil vapor implants were positioned near the periphery of the Site to assess the potential for on-site or off-site impacts / migration. Soil vapor intrusion sampling locations are shown on **Figure 10**.

3.4.1 Soil Vapor Implant Installation

Six semi-permanent soil vapor monitoring points were installed across the site. The soil vapor implants were installed using direct-push methods. Continuous soil sampling was conducted at each location using Geoprobe® Systems' Macro-Core® soil samplers, to create a nominal 2.25-inch diameter borehole. The direct-push borings were terminated at the target depth of the vapor implant placement. As consistent with NYSDOH guidance, the vapor implants were positioned to allow collection of vapor samples at depths comparable to the depths of nearby foundation footings (normally +/- five feet in depth), or at least 12 inches above the water table, if groundwater is present at a depth less than six feet bgs. The groundwater depth was determined based upon static water levels recorded in nearby wells.

Following creation of the borehole, the vapor implants were placed at the target sampling depth. For purposes of this Site, the borings were advanced to a depth of two to five feet bgs (since groundwater was observed less than 6 feet bgs) and the vapor implants were installed at depths ranging from 2 to 4.5 feet below grade. Each implant consisted of a six-inch long vapor implant with stainless steel mesh / screen. Polyethylene tubing was affixed to the top of the stainless-steel screen and extended to the ground surface. The borehole annulus below, surrounding, and to twelve inches above the top of the screen was filled with 00N sand to create an inert, porous vapor sampling zone. The remainder of the borehole annulus was filled with a bentonite slurry to minimize outdoor air from entering the sampling zone. Each vapor implant was completed with a flush-mount protective casing. Vapor implant construction logs are provided in **Appendix C**.

Following installation, a certified clean Summa™ canister (6-Liter capacity) equipped with a laboratory calibrated regulator was connected to the tubing to collect the sample over a 4-hour period.

3.4.2 Ambient Air Sampling

One ambient air sample was collected using a Summa™ canister (6-Liter capacity) equipped with critical orifice flow regulation devices calibrated to allow an air sample to be collected over a 4-hour sampling period. The sampling device was located at the upwind side of the Site and was placed approximately three to five feet off the ground for sample collection purposes.

3.4.3 Sample Canister Deployment and Retrieval

For the soil vapor and outdoor air sampling locations described above, Summa™ canisters (6-Liter capacity) were deployed and retrieved as described below:

- Sample canisters were labeled with a unique sample designation number. The sample number and location were recorded on the field log.

- The canister vacuum was measured using an integrated vacuum gauge immediately prior to canister deployment and recorded on the field log. The critical orifice flow controller was installed, as supplied by the laboratory, on the canister; the canister was opened fully at the beginning of sample collection period; and the start time was recorded.

- The canister vacuum was measured and recorded immediately prior to canister retrieval at the end of the sample period. Once the vacuum was measured, the canister valve was closed fully at the end of the sample period by disconnecting the regulator from the canister (after 4-hours) and the end time was recorded. At the end of sampling, at least one inch of vacuum was left in the canister to meet data quality objectives.

- The canisters were returned to their sampling boxes for safe storage and shipping. Field data was verified as correctly entered into field books prior to shipment and the canisters were shipped to the laboratory under a chain-of-custody.

- Each sample was analyzed for VOCs via USEPA Compendium Method TO-15.

A master sample log is presented as **Table 1**.

3.5 Investigation Derived Waste

Soil cuttings with no apparent staining, odors, or elevated PID readings were used to backfill boreholes. Purged groundwater was placed in steel 55-gallon drums with closed tops. Drums were properly labeled and sealed and will be characterized as necessary for disposal.

Discarded personal protective equipment (PPE), paper towels, plastic bags, disposable sampling equipment (i.e., groundwater development and sample tubing, bailers), and other general refuse was placed in sealed plastic garbage bags and disposed of as municipal solid waste.

3.6 Community Air Monitoring

Community air monitoring was conducted to ensure that airborne contaminants were not leaving the project site and affecting adjacent, downwind areas. Air monitoring was conducted during active invasive activities periods, such as test pit advancement, well installation, and soil vapor implant installation. The monitoring included dust and VOC screening.

VOC concentrations were monitored using a PID and particulate matter (PM)-10 concentrations were monitored using a real-time particulate monitor (DustTrak) at upwind and downwind locations, depending on the work area and wind direction. The monitors were moved throughout the day as needed, as winds shifted direction. The monitors were calibrated each day. The action threshold established in the Community Air Monitoring Plan (CAMP) was 5 ppm above background for VOCs and 100 micrograms per cubic meter ($\mu g/m^3$) above background for PM-10, during a 15-minute average.

Community air monitoring was conducted in accordance with the CAMP provided in the approved RIWP. An updated CAMP prepared by C&S is attached as **Appendix D.**

Daily CAMP reports were provided to NYSDEC and NYSDOH project managers. The reports consisted of figures showing work zones and monitoring stations and CAMP data.

3.7 Quality Assurance / Quality Control / Data Usability

Quality Assurance / Quality Control (QA / QC) samples were collected based on the following minimum number of samples per media type, as defined in the RIWP and project-specific Quality Assurance Project Plan (QAPP). The project-specific QAPP was provided in the approved RIWP. An updated QAPP prepared by C&S is attached as **Appendix E.**

- Soil samples
    - Blind duplicate – 5% (2 total)
    - Matrix Spike / Matrix Spike Duplicate (MS / MSD) – 5% (2 total)

- Groundwater samples
    - Trip blank – 1 per shipment (3 total)
    - Field blank – 1 per PFAS sampling event (2 total)
    - Blind Duplicate – 5% (2 total)
    - MS / MSD – 5% (2 total)

A total of 44 soil samples were collected during the RI activities, and six QA/QC samples were taken (two blind duplicates and two MS / MSD), meeting the 5% criteria. Over two groundwater sampling events, a total of eight groundwater samples were collected with an additional 11 QA / QC samples, including two blind duplicates, two field blanks, three trip blanks, and two MS / MSD, also meeting the 5% criteria.

A third-party data consultant, Vali-Data of WNY, LLC, prepared the Data Usability and Summary Report (DUSR) as required by DER-10 Section 2.2, and as reflected in the RIWP. The DUSR is included as **Appendix F.** The following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate Standard Recoveries
- Matrix Spike Recoveries / Duplicate Recoveries
- Blind Field Duplicate Correlations
- Preparation/calibration Blanks
- Laboratory Control Samples (LCSs)
- Calibration/Low Level Standards
- ICP Serial Dilution
- Instrument MDLs
- Sample Result Verification

Pace Analytical Services, LLC, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory, performed the analytical testing. The laboratory results for the samples were reported in an Analytical Services Protocol (ASP) Category B deliverables package to facilitate validation of the data, and a third-party validator reviewed the laboratory data and prepared the DUSR. The validator evaluated the analytical results for the field samples and quality assurance / quality control samples and compared the findings to USEPA guidance to determine the accuracy and validity of the results.

Details regarding RI activities are submitted to NYSDEC in monthly progress reports and will be included in the Final Engineering Report. In addition, a RI Results Memo was submitted to the Department on September 8, 2025. All data submitted to the NYSDEC was in approved electronic data deliverable (EDD) format.

3.8 Deviations from the Remedial Investigation Work Plan (RIWP)

On June 12, 2025, C&S proposed revisions to the approved June 2022 RIWP in a Supplemental RIWP to address any outdated information and to ensure alignment with current Site conditions. NYSDEC approved the proposed RIWP revisions on June 18, 2025. Deviations from the RIWP are outlined below:

- Surface soil sample SS-103 was shifted approximately 25 feet north and surface soil sample SS-104 was shifted approximately 40 feet northeast to be in an accessible location by the on-site debris pile.

- Surface soil sample SS-107 was shifted approximately 15 feet northeast due to dense vegetation.

- Test pit TP-101 was shifted approximately 8 feet southeast to be further away from the property line and the adjoining owner's driveway.

- Test pit TP-102 was shifted approximately 45 feet southeast and test pit TP-105 was shifted approximately 35 feet northwest to be in an accessible location by the on-site debris pile.

- Test pit TP-106 was shifted approximately 25 feet west to avoid a steep slope to the east.

- Test pit TP-109 was shifted approximately 12 feet northwest due to dense vegetation.

- Test pit TP-111 was shifted approximately 8 feet northeast due to an infiltration test in the original location.

- Monitoring well MW-101 was shifted approximately 10 feet and monitoring well MW-103 was shifted approximately 19 feet northwest due to dense vegetation.

- Monitoring well MW-104 was shifted approximately 25 feet west to avoid a steep slope to the east.

- Soil vapor point SV-102 was shifted approximately 14 feet northwest and soil vapor point SV-104 was shifted approximately 9 feet east due to dense vegetation.

- Soil vapor point SV-103 was shifted approximately 11 feet northeast to be further away from the previously excavated TP-110.

- Soil vapor point SV-105 was shifted approximately 25 feet southwest to avoid a steep slope to the east.

- Due to shallow groundwater, soil vapor implants could not be set at 5 feet below grade. Instead, the implants were set 12 inches above the groundwater table in accordance with the recommendations provided in the NYSDOH Soil Vapor Intrusion Guidance document. SV-105 was set at 4.5 feet below grade but was impacted by groundwater intrusion; therefore, the sample could not be analyzed by the laboratory.

As shown in the **Figures**, the RI included a high density of test pits, monitoring wells, and soil vapor implants, and a significant number of sampling locations. The deviations from the RIWP did not negatively impact the outcome of the RI.

4.0 FINDINGS

4.1 Geology and Hydrogeology

4.1.1 Site Geology

The Site contains a surficial cover of topsoil, generally less than 1.5 feet thick, underlain by varying thicknesses of HFM. HFM was observed in the majority test pits and soil borings advanced during the RI and Phase II ESAs, with thicknesses ranging from approximately 0.5 to 5.5 feet bgs. The HFM contains coal, cinders, brick, concrete, slag, asphalt, wood, and other building materials.

Underlying the fill, stiff reddish brown lean clay with medium plasticity was encountered consistently across the Site at depths ranging from approximately 2 to 6 feet bgs. Below this layer, a hard gravelly lean clay was observed and was interpreted to be glacial till or highly weathered bedrock. Test pits and soil borings were generally terminated on refusal within the glacial till layer at depths ranging from 5.5 to 7 feet bgs.

According to Geologic Map of New York, bedrock at the Site consists of the Vernon Formation of the Upper Silurian age. The primary rock type is shale. The GHD Phase II ESA indicated "red weathered shale bedrock" was encountered from 5.5 to 8 feet bgs; however, both the C&S RI and Benchmark Phase II ESA classified this layer as a hard lean clay (interpreted to be glacial till or highly weathered bedrock) rather than competent bedrock.

A map showing the distribution of HFM thickness and depth to native clay across the Site is presented as **Figure 4**.

4.1.2 Site Hydrogeology

The Site is located in the Oswego River / Finger Lakes major drainage basin, south of Oneida Lake. Regional groundwater flow is to the northeast. The Site is south of Oneida Lake and most major rivers within the Finger Lakes major drainage basin flow northerly, with an ultimate discharge to Lake Ontario. Groundwater is present within the HFM at depths between 3 and 5 feet bgs across the Site. The Site is located at approximately 432 feet above mean sea level (AMSL) and slopes downward slightly to the north. Regional groundwater is to the northeast towards Pools Brook (formerly the Erie Canal), which is adjacent to the Site. However, local groundwater flow may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions.

The Site is located in the Village of Canastota, Oneida County, which is served by the municipal water supply system operated by the Onondaga County Water Authority (OCWA). Potable water processed by OCWA undergoes treatment to ensure compliance NYSDEC and USEPA drinking water standards. Groundwater within the municipal service area is not utilized as a public drinking water source.

Table 4-1 presents water level measurements and **Figure 9a** and **Figure 9b** present groundwater contours at the site. Groundwater contours were generally the same across the two sampling events and indicate a generally northeasterly flow direction. On average, the groundwater table was approximately 0.25 to 0.75 feet higher in July as compared to October, due to October being a drier month than July. The average groundwater gradient was 0.0074 feet per foot in July and 0.0053 feet per foot in October.

Table 4-1: Groundwater Elevations

Well No.	Ground Elevation (ft AMSL)	PVC Elevation (ft AMSL)	Depth (ft BTOR)	Elevation (ft AMSL)	Depth (ft BTOR)	Elevation (ft AMSL)
Date	--	--	***July 2025***		***October 2025***	
MW-101	428.18	427.91	3.07	424.84	3.37	424.54
MW-102	426.99	426.62	3.07	423.55	3.30	423.32
MW-103	427.37	427.06	4.40	422.66	5.15	421.91
MW-104	427.79	427.40	3.62	423.78	3.60	423.80

Table Notes:
- Survey performed by Passero Associates on October 2, 2025 using a RTK GPS on the NYS Network.
- Elevations tied to North American Vertical Datum (NAVD) 88.
- All units in feet.
- BTOR – Below top of riser
- AMSL – Above mean sea level

4.2 Field Observations

Throughout the Site, surface and subsurface soil did not exhibit evidence of contamination, such as staining, odors, or elevated PID measurements. Evidence of impacts was limited to the presence of HFM across the Site.

Throughout the Site, groundwater did not exhibit evidence of contamination, such as sheens, free product, odors, or elevated PID measurements. Well headspace PID measurements ranged from non-detect to 0.6 ppm, with the highest readings at MW-103. An organic odor (likely hydrogen sulfide) was also observed emanating from MW-103.

4.3 Analytical Results

The following sections summarize and discuss the analytical results generated during the RI. Soil, groundwater, and soil vapor were collected for chemical analysis to determine the magnitude and extent of potential contamination occurring in various media at the Site. A summary of the RI sampling program, including the number and type of QA / QC samples, is presented in **Table 1**.

For discussion purposes, this data was compared with the Standards Criteria and Guidance values (SCGs) applicable to each medium sampled, and included:

- Soil: NYSDEC's 6 NYCRR Part 375 Environmental Remediation Programs: Part 375-6.8: UR SCOs, PGW SCOs, and RR SCOs and NYSDEC's April 2023 *Sampling, Analysis, and*

Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs.

- Groundwater: NYSDEC's June 1998 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations in the TOGS 1.1.1 and NYSDEC's April 2023 *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs.*

- Soil Vapor: NYSDOH's October 2006 Final Guidance for Evaluating Soil vapor Intrusion in the State of New York.

Consistent with NYSDEC guidelines, the ASP Category B deliverables are not presented as appendices to the RI Report. The data has been transmitted electronically to the NYSDEC in a format consistent with the EDD Manual. The associated DUSR is included in **Appendix F**.

4.3.1 Surface Soil

A total of 16 surface soil samples were collected across the Site to assess conditions in the vicinity of the building debris, to delineate lead impacts observed in the northern portion of the Site during the Phase II ESA, and to provide spatial representation across the Site. The analytical results are summarized in **Table 2** and **Figure 6** shows the sampling locations and results. **Table 4-2** below summarizes the analytes that exceeded the SCOs in surface soil, including the lowest and highest exceedance concentrations.

Table 4-2: Surface Soil – Summary of Exceedances

Analyte	Samples with Detections above SCOs			UR SCO (ppm)	RR SCO (ppm)	PGW SCO (ppm)	Low Concentration (ppm)	High Concentration (ppm)
	UR	RR	PGW					
VOCs								
Acetone	1		1	0.05	100	0.05	0.054	0.054
SVOCs								
Benzo(a)anthracene		8	8	1	1	1	1	6.2
Benzo(a)pyrene		8		1	1	22	1	6
Benzo(b)fluoranthene		8	5	1	1	1.7	1.3	7.8
Benzo(k)fluoranthene	3		1	0.8	3.9	1.7	1.4	2.4
Chrysene	6	1	7	1	3.9	1	1.2	5.8
Dibenzo(a,h)anthracene		3		0.33	0.33	1000	0.52	0.85
Indeno(1,2,3-cd)pyrene		8		0.5	0.5	8.2	0.64	3.6
PCBs								
No PCBs were detected at concentrations that exceeded SCOs.								
Pesticides								
4,4'-DDD	1			0.0033	13	14	0.0165	0.0165
4,4'-DDE	1			0.0033	8.9	17	0.0331	0.0331

Analyte	Samples with Detections above SCOs			UR SCO (ppm)	RR SCO (ppm)	PGW SCO (ppm)	Low Concentration (ppm)	High Concentration (ppm)
	UR	RR	PGW					
4,4'-DDT	3			0.0033	7.9	136	0.0053	0.0131
Herbicides								
No herbicides were detected at concentrations that exceeded SCOs.								
Metals								
Arsenic	1	2	2	13	16	16	13.6	34.8
Barium	1			350	400	820	351	351
Copper	2			50	270	1720	72	89.8
Lead	7			63	400	450	63.7	340
Mercury	1	1	1	0.18	0.81	0.73	0.247	1.15
Zinc	2			109	10000	2480	135	231
PFAS								
Perfluorooctanesulfonic Acid (PFOS)	2		2	0.88	44	1	1.14	1.53
Perfluorooctanoic Acid (PFOA)	1		1	0.66	33	0.8	0.93	0.93
Asbestos								
No asbestos fibers were detected in the samples submitted.								

Table Notes:

- PFAS guidance values and concentrations are displayed in parts per billion (ppb).
- Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene concentrations at SS-101 were below UR SCOs in the parent sample and above RR SCOs in the associated duplicate sample (DUP-01). Similarly, arsenic concentrations at SS-101 exceeded UR SCOs in the parent sample but exceeded RR SCOs in the associated duplicate sample (DUP-01).
- UR = Unrestricted Use SCOs
- RR = Restricted Residential Use SCOs

Surface soils were not collected during the Phase II ESAs for comparison purposes.

4.3.2 Test Pit Soil Sampling

A total of 28 samples were collected from 15 general site-wide test pit locations. Out of the 28 samples, 15 HFM samples were collected and 13 native soil samples were collected. **Table 3** summarizes the analytical results and **Figure 7a** and **Figure 7b** show the sampling locations and results.

4.3.2.1 Test Pit – HFM Sampling

A total of 15 HFM samples were collected from the 15 general site-wide test pit locations, as shown on **Figure 7a**. Each sample was analyzed for the list of analytes outlined in **Section 3.2.2.1**.

Table 4-3 below summarizes the analytes that exceeded the SCOs, including the lowest and highest exceedance concentrations. **Table 3** attached to the rear of this report summarizes the analytical results.

Table 4-3: Test Pits – HFM Summary of Exceedances

Analyte	Samples with Detections above SCOs			UR SCO (ppm)	RR SCO (ppm)	PGW SCO (ppm)	Low Concentration (ppm)	High Concentration (ppm)
	UR	RR	PGW					
VOCs								
No VOCs were detected at concentrations that exceeded SCOs.								
SVOCs								
Benzo(a)anthracene		10	10	1	1	1	1.2	12
Benzo(a)pyrene		10		1	1	22	1.2	11
Benzo(b)fluoranthene		12	8	1	1	1.7	1	14
Benzo(k)fluoranthene	7		2	0.8	3.9	1.7	0.84	3.8
Chrysene	8	2	10	1	3.9	1	1.1	12
Dibenzo(a,h)anthracene		7		0.33	0.33	1000	0.4	1.6
Indeno(1,2,3-cd)pyrene		10		0.5	0.5	8.2	0.69	7.4
PCBs								
Total PCBs	1			0.1	1	3.2	0.427	0.427
Pesticides								
4,4'-DDD	1			0.0033	13	14	0.0053	0.0053
4,4'-DDE	4			0.0033	8.9	17	0.00834	0.0329
4,4'-DDT	4			0.0033	7.9	136	0.00958	0.0463
Herbicides								
No herbicides were detected at concentrations that exceeded SCOs.								
Metals								
Arsenic	1	1	1	13	16	16	14.5	42.4
Copper	3			50	270	1720	58.4	89.2
Lead	8			63	400	450	67.1	203
Mercury	5			0.18	0.81	0.73	0.181	0.615
Zinc	6			109	10000	2480	114	157
PFAS								
Perfluorooctanesulfonic Acid (PFOS)	3		3	0.88	44	1	1.03	2.16
Perfluorooctanoic Acid (PFOA)	1		1	0.66	33	0.8	0.911	0.911
Asbestos								
No asbestos fibers were detected in the samples submitted.								

Table Notes:

- PFAS guidance values and concentrations are displayed in parts per billion (ppb).
- Arsenic concentrations at TP-105 were below Unrestricted Use SCOs in the parent sample and above UR Use SCOs in the associated duplicate sample (DUP-02).
- Table does not include Phase II ESA data
- UR = Unrestricted Use SCOs
- RR = Restricted Residential Use SCOs

The types and concentrations of SVOCs observed in the HFM during the RI were generally consistent with those observed during the Phase II ESAs. Metal concentrations observed during the Phase II ESA were generally higher than those observed during the RI. The analytical data collected during the Phase II ESAs is summarized in **Table 6** and presented on **Figure 7a**.

4.3.2.2 Test Pit – Native Soil Sampling

A total of 13 native soil samples were collected from the 15 general site-wide test pits, as shown on **Figure 7b**. Each sample was analyzed for the list of analytes outlined in **Section 3.2.2.2**.

Table 4-4 below summarizes the analytes that exceeded the SCOs, including the lowest and highest exceedance concentrations. **Table 3** summarizes the analytical results.

Table 4-4: Test Pits – Native Soil Summary of Exceedances

Analyte	Samples with Detections above SCOs			UR SCO (ppm)	RR SCO (ppm)	PGW SCO (ppm)	Low Concentration (ppm)	High Concentration (ppm)
	UR	RR	PGW					
VOCs								
No VOCs were detected at concentrations that exceeded SCOs.								
SVOCs								
No SVOCs were detected at concentrations that exceeded SCOs.								
PCBs								
No PCBs were detected at concentrations that exceeded SCOs.								
Pesticides								
No pesticides were detected at concentrations that exceeded SCOs.								
Herbicides								
No herbicides were detected at concentrations that exceeded SCOs.								
Metals								
Copper	1			50	270	1720	52.7	52.7
Lead	1			63	400	450	178	178
Mercury	1			0.18	0.81	0.73	0.345	0.345
PFAS								
Perfluorooctanesulfonic Acid (PFOS)	1		1	0.88	44	1	1.32	1.32
Asbestos								
No asbestos fibers were detected in the samples submitted.								

Table Notes:

- PFAS guidance values and concentrations are displayed in parts per billion (ppb).
- UR = Unrestricted Use SCOs
- RR = Restricted Residential Use SCOs

Native soils were not collected during the Phase II ESAs for comparison purposes.

4.3.3 Groundwater

Two groundwater sampling events took place on July 30-31, 2025 and October 21, 2025. Groundwater samples were collected from four groundwater monitoring wells installed during the RI. As previously detailed in **Section 3.3.3**Error! Reference source not found., the groundwater samples were analyzed for a combination of TCL VOCs, TCL SVOCs, pesticides, herbicides, PCBs, TAL metals, total mercury, total cyanide, 1,4-dioxane, and PFAS.

Table 4 attached to the rear of this report, summarizes the analytical results for the groundwater samples, and the locations of monitoring wells are depicted on **Figure 8**.

VOCs

VOC concentrations did not exceed TOGS standards during the first round of sampling. During the second round of sampling, the concentration of acetone (79 parts per billion [ppb]) and p-isopropyltoluene (29 ppb) in MW-103 exceeded the TOGS standards of 50 ppb and 5 ppb, respectively.

SVOCs

Benzo(a)anthracene concentrations exceeded TOGS standards at each well during the first round of sampling but were below laboratory detection limits during the second round of sampling. During the second round of sampling, concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene exceeded TOGS standards in the duplicate sample collected from MW-101 but were below laboratory detection limits in the parent sample. Each of these contaminants are subject to very low TOGS standards, either 0.002 ppb or non-detect. In each case of an exceedance, the contaminants were detected at concentrations of 0.11 ppb or less.

The concentration of phenol (1.3 ppb) marginally exceeded TOGS standards (1 ppb) at MW-103 during the second round of sampling but was below laboratory detection limits during the first round of sampling.

Pesticides

Pesticides were not detected at concentrations greater than laboratory detection limits during either round of groundwater sampling, with the exception of endrin ketone which was detected in MW-103 during the first round of sampling. The concentration was well below the TOGS standard.

Herbicides

Herbicides were not detected at concentrations greater than laboratory detection limits or TOGS standards during either round of groundwater sampling.

PCBs

PCBs were not detected at concentrations greater than laboratory detection limits or TOGS standards during either round of groundwater sampling.

Metals

Groundwater across the Site contained naturally occurring minerals including iron, magnesium, manganese, and sodium at concentrations exceeding TOGS standards. These minerals are common in groundwater across New York State and likely reflect regional conditions. Dissolved metals were only analyzed in MW-101 during the second sampling event due to groundwater turbidity exceeding 50 NTU. The concentrations of each of these are summarized below:

Table 4-5: Groundwater – Naturally-Occurring Metals Summary of Exceedances

Analyte	Wells Exceeding TOGS	Sampling Round(s)	Notes on Dissolved Fraction in MW-101 (Round 2)
Iron	All wells	Both rounds	Dissolved iron did not exceed the TOGS standard
Magnesium	MW-102, MW-103, MW-104 All wells	Round 1 Round 2	Dissolved magnesium did exceed the TOGS standard
Manganese	MW-103	Round 2	NA
Sodium	MW-103, MW-104 MW-101, MW-103, MW-104	Round 1 Round 2	Dissolved sodium did exceed the TOGS standard

PFAS

PFAS data was compared to the following guidance values:

- Perfluorooctanoic acid (PFOA) – 6.7 parts per trillion (ppt)
- Perfluorooctanesulfonic acid (PFOS) – 2.7 ppt

As a result of comparing the groundwater data to these values, the following was noted:

- PFOA and PFOS concentrations at MW-102 marginally exceeded the NYSDEC standards during the second round of sampling. The concentrations were 6.71 and 2.94 ppt, respectively.
- The PFOS concentration at MW-101 exceeded the NYSDEC standard during both rounds of sampling. The concentrations ranged from 8.1 to 8.8 ppt.

4.3.4 Soil Vapor

Six soil vapor samples and one outdoor air sample were collected. Four samples were collected from soil vapor implants to assess the potential for on-site or off-sire migration. The outdoor air sample was collected at an exterior up-wind location. Due to shallow groundwater, soil vapor implants were set two to three feet below the ground surface, with the exception of SV-105 which was set at 4.5 feet bgs. The sample collected from SV-105 could not be analyzed due to the presence of groundwater in the sample canister. The remaining samples were analyzed for VOCs. The NYSDOH document: *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (as amended), states that soil vapor sampling results should be reviewed as a whole, in combination with the results of other environmental sampling, to identify trends and variations in the data. It also indicates that, to put perspective on the data, soil vapor results should be compared to background outdoor air levels, site-related outdoor and indoor air sampling results, and the NYSDOH's guidelines for VOCs in air. NYSDOH has a very limited list of compounds with air guideline values (AGVs) that pertain to *indoor air*:

- Methylene Chloride – 60 µg/m^3
- Tetrachloroethene (PCE) – 30 µg/m^3
- Trichloroethene (TCE) - 2 µg/m^3

NYSDEC and NYSDOH do not currently have standards, criteria or guidance values for concentrations of other commonly found compounds in soil vapor or indoor air, other than those listed above. There are also no criteria which require that the detection of VOC in soil vapor automatically trigger action or no further action, and there are no available databases of background levels of VOC in soil vapor. The detection of VOC in sub-slab vapor samples does not necessarily indicate that a vapor intrusion condition exists.

As such, soil vapor intrusion (SVI) risk is evaluated on a case-by-case basis, taking into account various factors, such as:

- Human health risks (i.e., cancer and non-cancer health effects) associated with exposure to the volatile chemical in air;
- Background concentrations of the volatile chemical in air;
- Analytical capabilities currently available; and
- Attenuation factors (i.e., the ratio of indoor air to sub-slab vapor concentrations).

Although not directly applicable, there were no compounds detected in soil vapor that exceeded the corresponding NYSDOH AGV.

To provide a framework to aid in determining appropriate actions in response to SVI risk, NYSDOH has developed decision matrices to be used as a risk management tool for data assessment. They are designed to be applied on a case-by-case basis, for identifying actions that should be taken to address current and potential exposures related to SVI. These decision matrices were developed to apply to specific volatile chemicals of interest, but are also intended to be generic, and, as such, may be modified based on site-specific conditions and contaminants.

Table 4-6 indicates what actions, if any, are needed, based on the results. Since no buildings are currently present on the Site, indoor air sample could not be collected. The soil vapor results were evaluated against the lowest sub-slab tier of the applicable NYSDOH decision matrix to assess the potential for soil vapor intrusion risk.

Table 4-6: NYSDOH Decision Matrices Results

Analyte	Decision Matrix	Result	Action
Carbon Tetrachloride	A	Did not exceed lowest sub-slab tier	No Further Action
1,1-Dichloroethene		Did not exceed lowest sub-slab tier	No Further Action
Cis-1,2-Dichloroethene		Did not exceed lowest sub-slab tier	No Further Action
Trichloroethene		Did not exceed lowest sub-slab tier	No Further Action
Methylene Chloride	B	Did not exceed lowest sub-slab tier	No Further Action
Tetrachloroethene		Did not exceed lowest sub-slab tier	No Further Action
1,1,1-Trichloroethane		Did not exceed lowest sub-slab tier	No Further Action
Vinyl Chloride	C	Did not exceed lowest sub-slab tier	No Further Action
Benzene	D	Did not exceed lowest sub-slab tier	No Further Action
Ethylbenzene		Did not exceed lowest sub-slab tier	No Further Action
Cyclohexane		Did not exceed lowest sub-slab tier	No Further Action
2,2,4-Trimethylpentane		Did not exceed lowest sub-slab tier	No Further Action
1,2,4-Trimethylbenzene		Did not exceed lowest sub-slab tier	No Further Action
1,3,5-Trimethylbenzene		Did not exceed lowest sub-slab tier	No Further Action
o-Xylene		Did not exceed lowest sub-slab tier	No Further Action
p/m-Xylene	E	Did not exceed lowest sub-slab tier	No Further Action
Heptane		Did not exceed lowest sub-slab tier	No Further Action
Hexane		Did not exceed lowest sub-slab tier	No Further Action
Toluene	F	Did not exceed lowest sub-slab tier	No Further Action

Table 5 attached to the rear of this report summarizes the VOC results regulated by the NYSDOH. **Figure 10** shows the sample locations.

4.4 Community Air Monitoring Results

C&S performed air monitoring at all times when ground intrusive activities were being conducted as per the RIWP and CAMP. Community air monitoring was conducted in accordance with the CAMP provided in the approved RIWP. An updated CAMP prepared by C&S is attached as **Appendix D.** The action levels for VOCs and PM-10 (dust) were not exceeded during the course of the investigation.

Throughout the duration of the RI, Daily CAMP reports were submitted to NYSDEC and NYSDOH. Air monitoring logs were included in these reports.

4.5 Green Remediation Evaluation

Best Management Practices (BMPs) were implemented throughout the RI to best achieve the green remediation concepts described within NYSDEC DER-31. The following BMPs were identified in the RIWP for implementation:

- **Minimize Mobilizations** – All of the RI activities were completed within one mobilization to avoid transporting the backhoe / equipment trailer to and from Site multiple times.

- **No Idling of Equipment** – All equipment (backhoe, cars, trucks, etc.) was shut down when not in use.

- **On-site Waste Recycling** – Soil cuttings that did not exhibit evidence of contamination were put back in place. Soil cuttings generated during monitoring well installation also did not exhibit evidence of contamination and were spread in the general vicinity of the installed well.

- **Waste Storage Containers** – Cleaned, reclaimed 55-gallon drums were used for the collection and storage of purged groundwater. Approximately 50 gallons of purge water was generated during the RI. The water will be characterized and disposed of at an off-site facility.

- **Sustainable Laboratory Practices** – C&S utilized a lab shipping service, rather than shipping samples independently to the lab. C&S submitted samples to Pace, which implements the following sustainable practices:
  - Recycles paper products and shipping materials.
  - Uses energy-efficient lighting and other equipment.
  - Maintains a paperless reporting and invoicing program.
  - Minimizes waste through use of EPA-approved microscale methods.

- **Monitoring Equipment** – Rechargeable Battery-Powered Equipment such as CAMP equipment (PIDs, DustTraks, Thaimis Antenna), and any other battery-operated equipment was charged at the C&S facility. C&S estimated in 2024 that 28% of the electricity used at their facility is generated on-site through use of solar panels. This practice reduced the load on the electrical grid and allowed for the use of renewable energy sources, indirectly minimizing the use of fossil fuels and reducing the generation of greenhouse gas emissions.

5.0 CONTAMINANT ASSESSMENT

5.1 Nature, Extent, and Source of Contamination

5.1.1 Surface Soil

During the RI, sixteen surface soil samples were spatially distributed across the Site and were collected to assess conditions in the vicinity of the building debris, to delineate lead impacts observed in the northern portion of the Site during the Phase II ESA from 2 to 2.5 feet bgs, and to provide spatial representation across the Site. The samples were collected from 0 to 2 inches below grade. Surface soil samples were not collected during the Phase II ESAs.

Table 4-2 summarizes the contaminants that exceeded the SCOs in this soil, including the lowest and highest exceedance concentrations. **Table 2** attached to the rear of this report provides analytical results compared to SCOs for each sample and **Figure 6** show the sampling locations and results. The following table identifies the contaminants detected in soil above RR SCOs.

Table 5-1: Detected Contaminants in Surface Soil

VOCs	SVOCs	PCBs	Herbicides	Pesticides	Metals	PFAS
None	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	None	None	None	Arsenic Mercury	None

The Site contains a surficial cover of topsoil, generally less than 1.5 feet thick, underlain by HFM observed across most of the property. The HFM ranges from approximately 0.5 to 5.5 feet bgs and consists of coal, cinders, brick, concrete, slag, asphalt, wood, and other building materials.

The presence of HFM and the observed soil impacts are consistent with the Site's long history of industrial and manufacturing operations dating back to the late 1800s. Historical handling of coal, paints, varnishes, and solvents, combined with the disturbance of the natural soil profile through grading and the placement of unregulated fill materials, likely contributed to the observed contamination. Soils at the Site are classified as cut and fill land, reflecting the extensive alteration of native conditions. Multiple rail spurs historically traversed the property to support furniture manufacturing and coal delivery, and the storage and handling of coal further contributed to impacts observed in Site soils.

5.1.2 Subsurface Soil

5.1.2.1 HFM

During the RI, a total of 15 test pits were excavated and 15 HFM samples were collected from general site-wide test pit locations from 1 to 4 feet bgs. During the Benchmark Phase II ESA, a total of 19 test pits were excavated and eight HFM samples were collected from 1 to 4 feet bgs. During the GHD Phase II ESA, a total of five soil borings were advanced and three HFM samples were collected from 0 to 6 feet bgs.

Table 4-3 summarizes the contaminants that exceeded the SCOs in HFM during the RI, including the lowest and highest exceedance concentrations. **Table 3** provides analytical results compared to SCOs for each sample collected during the RI and **Table 6** provides analytical results compared to SCOs for each sample collected during the Phase II ESAs. **Figure 7a** shows the sampling locations and results. The following table identifies the contaminants detected in the soil above RR SCOs.

Table 5-2: Detected Contaminants in Sub-Surface Soil

VOCs	SVOCs	PCBs	Herbicides	Pesticides	Metals	PFAS
None	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	None	None	None	Arsenic Barium Lead Mercury	None

The Site is underlain by HFM observed across majority of the property. The HFM ranges from approximately 0.5 to 5.5 feet bgs and consists of coal, cinders, brick, concrete, slag, asphalt, wood, and other building materials.

The variability in analyte concentrations within the HFM across the Site indicates that the observed contamination is attributable to the heterogeneous nature of the fill materials, with no discrete contaminant source identified on-site or off-site. As stated in **Section 5.1.1**, the presence of HFM and the observed impacts are consistent with the Site's long history of industrial operations, including coal handling and delivery via multiple rail spurs, and the placement of unregulated fill. These historical activities are considered the primary contributors to the subsurface impacts observed across the Site.

5.1.2.2 Native Soil

During the RI, a total of 15 test pits were excavated and 13 native soil samples were collected from general site-wide test pit locations. The samples were collected from 1 to 7 feet bgs. Native soil samples were not collected during the Phase II ESAs.

Table 4-4 summarizes the contaminants that exceeded the SCOs in native soil, including the lowest and highest exceedance concentrations. **Table 3** attached to the rear of this report provides analytical results compared to SCOs for each sample and **Figure 7b** shows the sampling locations and results. No contaminants exceeded RR SCOs in the native soil. One native soil sample collected from TP-101 contained copper, lead, mercury, and PFOS at concentrations that exceeded UR SCOs.

Native soil consisted of reddish brown lean clay encountered at depths of approximately 2 to 6 feet bgs. Below this layer, a hard gravelly lean clay was observed and was interpreted to be glacial till or highly weathered bedrock. Based on the analytical results, native soil is generally unimpacted by contaminants across the Site.

5.1.3 Groundwater

During the RI, two rounds of groundwater sampling were conducted for the four groundwater monitoring wells. All samples were analyzed for total metals but only the sample collected from MW-101 during the second round of sampling was analyzed for dissolved metals (due to groundwater turbidity being above 50 NTU). The groundwater sample for dissolved metals analysis was not field filtered but instead filtered by the laboratory.

Section 4.3.3 summarizes the contaminants that exceeded TOGS standards. **Table 4** provides analytical results compared to TOGS standards for each sample and **Figure 8** show the sampling locations and results. **Table 5-3** identifies the contaminants detected in the groundwater above TOGS standards.

Table 5-3: Detected Contaminants in Groundwater

VOCs	SVOCs	PCBs	Herbicides	Pesticides	Metals	PFAS
Acetone p-isopropyltoluene	Phenol Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Indeno(1,2,3-cd)pyrene	None	None	None	Iron[1] Magnesium[2] Manganese Sodium[2]	PFOA PFOS

1. Total iron exceeded TOGS standards in MW-101 but dissolved concentrations did not.
2. Both total and dissolved magnesium and sodium exceeded TOGS standards in MW-101.

Exceedances of acetone, p-isopropyltoluene, and phenol were observed at MW-103 during the second round of sampling. The detection of these analytes along with the hydrogen sulfide odor observed at MW-103 suggest reducing / anoxic conditions exist in the groundwater in this area. Under these conditions, the detected analytes can be produced by microbial breakdown of natural organic matter or they can represent residual / weathered constituents from coal-tar, creosote, or petroleum.

PAH groundwater contamination exists across the Site with exceedances of benzo(a)anthracene observed in all wells during the first round of sampling and exceedances of six PAHs observed in the duplicate sample collected from MW-101 during the second round of sampling. In each case, the concentrations were a fraction of a ppb (maximum of 0.11 ppb and majority below 0.1 ppb) and the corresponding TOGS limit is very low (either 0.002 or non-detect).

Exceedances of iron, magnesium, manganese, and sodium were observed across the Site during both rounds of sampling. These metals are typically related to “hard water,” are naturally occurring, and in this setting are likely unrelated to site activities.

The concentration of PFOS in MW-101 was 8.1 ppt during the first round of sampling and 8.8 ppt during the second round of sampling (exceeding the limit of 2.7 ppt). The concentration of PFOA and PFOS in MW-102 was 6.71 and 2.94 ppt, respectively, during the second round of sampling only. PFAS was not detected in the equipment blank during the first round of sampling; however, PFOS was detected in the equipment blank during the second round of sampling below standards. MW-101 and MW-102 are located on the western side of the Site and are hydraulically upgradient / cross-gradient of the other on-site monitoring wells. The likely reason for the presence PFAS is not currently understood. Existing groundwater gradient data indicates a northeasterly groundwater flow direction, placing MW-101 and MW-102 hydraulically downgradient of the Canastota Volunteer Fire Department, which may represent a potential off-site source.

5.1.4 Soil Vapor

Although indoor air samples were not collected during the RI, the analytical results from the soil vapor sampling indicate that no further action is required based on the NYSDOH decision matrices.

5.2 Contaminant Fate and Transport

The probable fate and transport of contaminants detected on the Site is a function of the properties of the individual contaminants and available pathways for the contaminants to migrate. The Site is currently unoccupied; therefore, the degree to which and the route by which contaminants migrate is dependent on the physical characteristics of the site and the type and distribution of contaminants. The following sections discuss the probable fate and transport of contaminants in the different types of media at the Site.

Contaminants of concern at the Site are primarily associated with HFM and include SVOCs and metals, found in both surface soils and shallow subsurface soils. Additionally, VOCs, SVOCs, metals associated with "hard water" (iron, magnesium, sodium), and PFOS exceeded TOGS standards.

Acetone and p-isopropyltoluene are present in the groundwater at MW-103. VOCs are not strongly sorbed to soil and will transport through the soil into saturated zones. Due to chemical properties of VOCs, a portion of the VOCs will solubilize in water, while the rest will move upward through the water column and soil until to be released as a vapor. The presence of VOCs in the Site groundwater appear to be associated with the microbial breakdown of natural organic matter or residual / weathered constituents from coal-tar, creosote, or petroleum.

The PAHs detected are characterized by low water solubilities and, therefore, have a tendency to adsorb onto soil particles. Because of their low vapor pressures, compounds with five or more aromatic rings, which include a majority of the detected PAHs, will exist mainly adsorbed to airborne particulate matter, such as fly ash and soot. Those with four or fewer rings, such as benzo(a)anthracene, will occur both in the vapor phase and adsorbed to particles. The detected compounds have relatively low vapor pressures and are expected to remain in a solid or liquid state and undergo degradation via naturally occurring microbes. Due to the low solubility, these contaminants are not expected to impact groundwater quality or migrate substantially into the subsurface. This is supported by the low concentrations of these compounds in the on-site groundwater.

Heavy metals, such as arsenic and mercury, are non-biodegradable pollutants that are generally transported through anthropogenic activities. In contaminated soils, they tend to persist for many years in the surface layers of soil. In aquatic systems, heavy metals may become blocked as sinks in bottom sediments, where they may remain for many years. Metals can be remobilized in water if the pH falls increasing heavy metal solubility increases. Due to the low solubility, these contaminants are not expected to impact groundwater quality or migrate substantially into the subsurface. This is supported by the low concentrations of these compounds in the on-site groundwater. Other metals were present in the groundwater that did exceed groundwater guidance values; these include naturally occurring metals such as iron, magnesium, and sodium. The metals detected at concentrations above the groundwater standards and guidance values appear to be representative of local groundwater quality. Metals do not readily break down and will persist in the environment.

PFAS includes a large group of compounds that vary in molecular weight, structures, and functional groups. They typically repel oil and water, resist extreme temperatures, and reduce friction. Most PFAS detected in the environment, including PFOS and PFOA, have a hydrophobic and lipophobic tail while the head is polar and hydrophilic. As a result, these compounds are relatively mobile in groundwater while also associating with the organic carbon fraction in soil or sediment. PFAS transport processes include advection, dispersion, diffusion, atmospheric deposition, and leaching. Many PFAS form films at the air-water interface which influences aerosol-based transport, deposition, vadose zone transport, and aqueous phase transport. At high concentrations, some PFAS can form micelles which could enhance or reduce adsorption in the environment. Most PFAS are resistant to biotic and abiotic degradation. PFOS and PFOA were detected in groundwater at concentrations that exceed applicable standards along the western portion of the Site. PFOS and PFOA are mobile, persistent, bioaccumulate, and are not known to degrade in the environment.

5.3 Evaluation of Potential Receptors

The Site is located in a mixed-use industrial and residential area in proximity to the Erie Canal, approximately 5.5 miles south of Oneida Lake. The Site is bounded to the north by the Erie Canal, to the south by industrial and residential properties, to the east by a mixture of vacant parcels and light industrial uses, and to the west by additional industrial and residential development.

The Site is approximately 2.56 acres and is currently vacant and undeveloped. No standing buildings remain on the parcel. The southern portion of the Site contains a large debris pile consisting of brick, wood, metal, and suspect asbestos-containing materials, a remnant of the emergency demolition of a former multi-story industrial building. Additional debris and fill materials, including brick and concrete, are present in mounded piles north of the building debris. Concrete slabs associated with former building foundations remain in the central portion of the Site, and a walkway with a concrete curb extends north from the former building area. The northern portion of the Site is heavily overgrown with vegetation. Groundwater monitoring wells have been installed as part of the ongoing BCP RI.

The Site is not secured by fencing or gates, and no formal access restrictions are in place. Although the combination of overgrown vegetation and scattered building debris provides some physical limitation to movement across the property, the Site remains generally accessible to the public.

Under current conditions, potential human receptors include persons trespassing on the Site; persons living and working in the area surrounding the Site; and persons involved in utility work on and adjacent to the Site. In addition, potential environmental receptors include wildlife living on and migrating through the Site (e.g., rodents, birds, etc.).

The planned future use of the Site is for a mixed use commercial and residential development. The redevelopment of the Site will need to be controlled through the implementation of engineering and institutional controls due to Track 4 cleanup.

5.4 Potential Exposure Pathways

5.4.1 Surface Soil

Under the current use, persons living and working in the vicinity of the Site and / or persons trespassing on the Site could be exposed to SVOCs and metals in the surface soil via inhalation of airborne particles, incidental ingestion of, or dermal contact with the contaminated media.

Construction workers, site visitors and persons living, working and traveling through the area near the project site could be exposed to the SVOCs and metals in the surface soil during excavation of the contaminated soil in connection with site redevelopment. Potential exposure routes for these receptors include inhalation of contaminated dust and incidental ingestion of, and/or dermal contact with the contaminated soil / HFM. However, the use of appropriate personal protective equipment, dust suppression techniques and personal/air monitoring, and the development and implementation of a Site-Specific Health and Safety Plan (HASP) would minimize the risk of exposure during this stage of the project. A HASP was provided in the approved RIWP. An updated HASP prepared by C&S is attached as **Appendix G**.

Under current conditions an exposure pathway exists, however, this could be mitigated through engineering controls (i.e., site cover system) and institutional controls (i.e., Site Management Plan, Deed Restrictions) under the post-remediation scenario.

5.4.2 Subsurface Soil / HFM

The presence of elevated concentrations of SVOCs and metals in subsurface soil / HFM is not interpreted to represent a human or environmental exposure risk because no complete exposure pathways were identified under the current use scenario for the Site. This is a function of the subsurface disposition of the contamination, which effectively minimizes the potential for the incidental ingestion of, or dermal contact with the contaminated media. These factors also reduce the potential for the emission of vapors and particulates that could pose an exposure risk via inhalation. This applies to persons living, working and traveling through the area surrounding the Site, as well as persons visiting, working or trespassing on the Site.

During excavation of the contaminated soil / HFM in connection with site redevelopment activities, environmental receptors, construction workers, site visitors and persons living, working and traveling through the project site could be exposed to SVOCs and metals in the subsurface soil / HFM. Potential exposure routes for these receptors include inhalation of contaminated dust and incidental ingestion of and / or dermal contact with the contaminated soil / HFM. However, the use of appropriate personal protective equipment, dust suppression techniques and personal / air monitoring, and the development of a HASP would minimize the risk of exposure during this stage of the project.

5.4.3 Groundwater

Groundwater is not considered a relevant mechanism for exposure due to the municipal water servicing the Site and requirement for an Environmental Easement that will restrict the use of groundwater.

There is not a ban on groundwater use as a public drinking water supply in Village of Canastota. However, groundwater in the vicinity of the project site is not known to be utilized as a source of potable water.

5.4.4 Soil Vapor

The RI sampling results did not indicate a soil vapor intrusion concern. Therefore, the vapor intrusion pathway is not relevant under current conditions.

5.4.5 Exposure Assessment Summary

The human health exposure assessment identified exposure scenarios for the Site.

- Exposed soil / HFM during construction presents a potential route of exposure to construction or remediation workers via contact, fugitive dust and surface water. Upon completion of planned construction activities, the Site will be covered by buildings, paved parking lots, as well as a graded grass cover system. The proposed structures / features will prevent direct human exposure to any materials that may be left in place.

- Groundwater is not considered a relevant mechanism for exposure due to the municipal water servicing the Site and requirement for an Environmental Easement that will restrict the use of groundwater. There is not a ban on groundwater use as a public drinking water supply in Village of Canastota. However, groundwater in the vicinity of the Site is not known to be utilized as a source of potable water. In addition, the depth of the groundwater (3 to 5 feet below grade) reasonably precludes human contact.

5.5 Qualitative Human and Fish / Wildlife Resources Exposure Assessment

The Site is proposed to be used for mixed use commercial and residential purposes in an urban area with limited wildlife exposure. Humans living or working near or on the Site could be exposed to contamination in the surface soil. However, this could be mitigated through engineering controls and institutional controls under the post-remediation scenario.

Due to the reasons listed above, contaminated groundwater and soil vapor intrusion are not considered a relevant mechanism for exposure on the Site.

The Site and surrounding area consists of cut and fill land. A review of information concerning endangered and threatened species in the Village of Canastota, available via the NYSDEC Environmental Resource Mapper, indicates that rare plants and animals are mapped in the broader Madison County area, although no records are documented for the Site itself or within the immediate vicinity (within approximately 0.5 mile). Wildlife that could potentially be present at the Site was determined using the NYSDEC Nature Explorer. The information in New York Nature Explorer was prepared by the New York State Department of Environmental Conservation using the data currently available. In addition, the species and locations reported by the online tool are not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, and of all significant natural communities. According to the NYSDEC Nature Explorer, this generalized area contains species of conservation concern but no federally listed endangered or threatened species have been confirmed within or immediately adjacent to the

Site. The Site is not located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL and 6 NYCRR 617, nor are any state or federally designated wetlands mapped on or directly adjacent to the project site.

Based upon the information summarized above, there are no ecological resources present on or in the vicinity of the site and, consequently, no fish and wildlife resource impacts have been identified.

6.0 REFERENCES

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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, as amended, NYSDEC, 1998.

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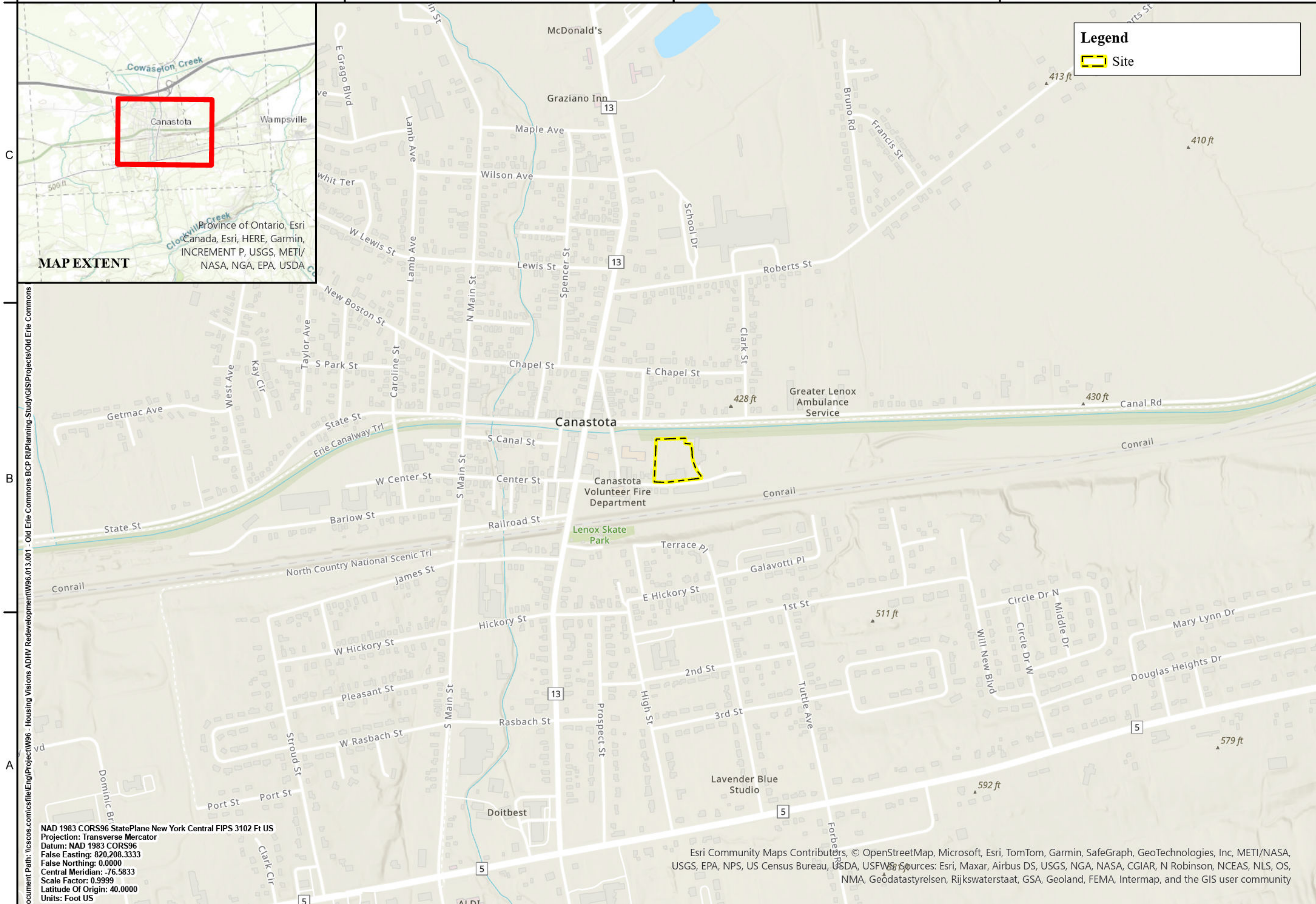
Figures



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N

0 750 Feet

1 inch equals 750 feet

Remedial Investigation Report
Old Erie Commons (BCP Site No. C727015)
160 Center Street, Canastota, New York

PROJECT NO:	W96.013.001
DATE:	November 2025
SCALE:	AS SHOWN
DRAWN BY:	CND
DESIGNED BY:	CND
CHECKED BY:	MLW

Modified: 11/7/2025 @ 10:21 AM

SITE LOCATION

Figure 1

C&S COMPANIES®
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Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

N

0 70 Feet

1 inch equals 70 feet

Remedial Investigation Report
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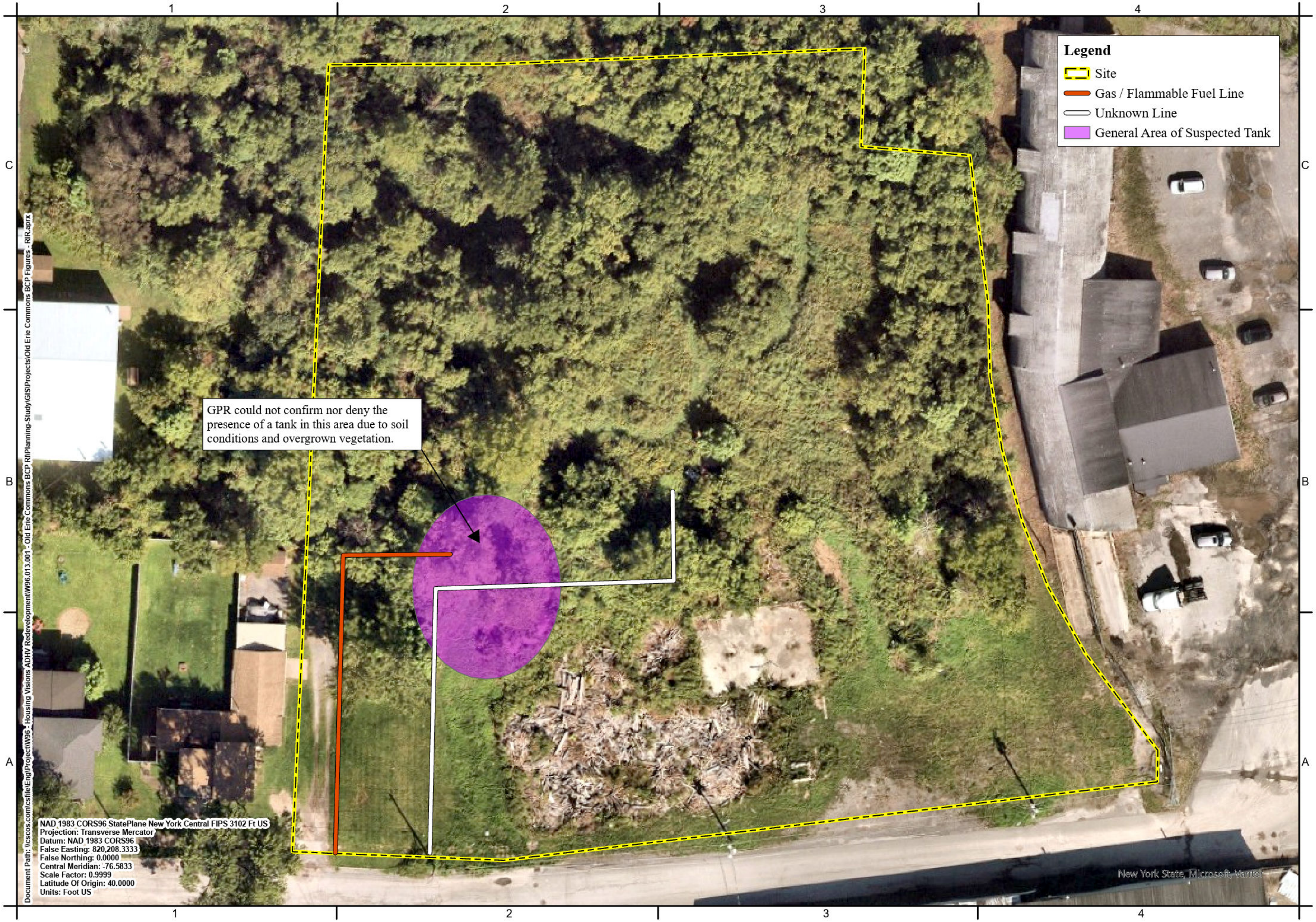
SITE DETAIL

Figure 2



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1 inch equals 40 feet

Remedial Investigation Report
Old Erie Commons (BCP Site No. C727015)
160 Center Street, Canastota, New York

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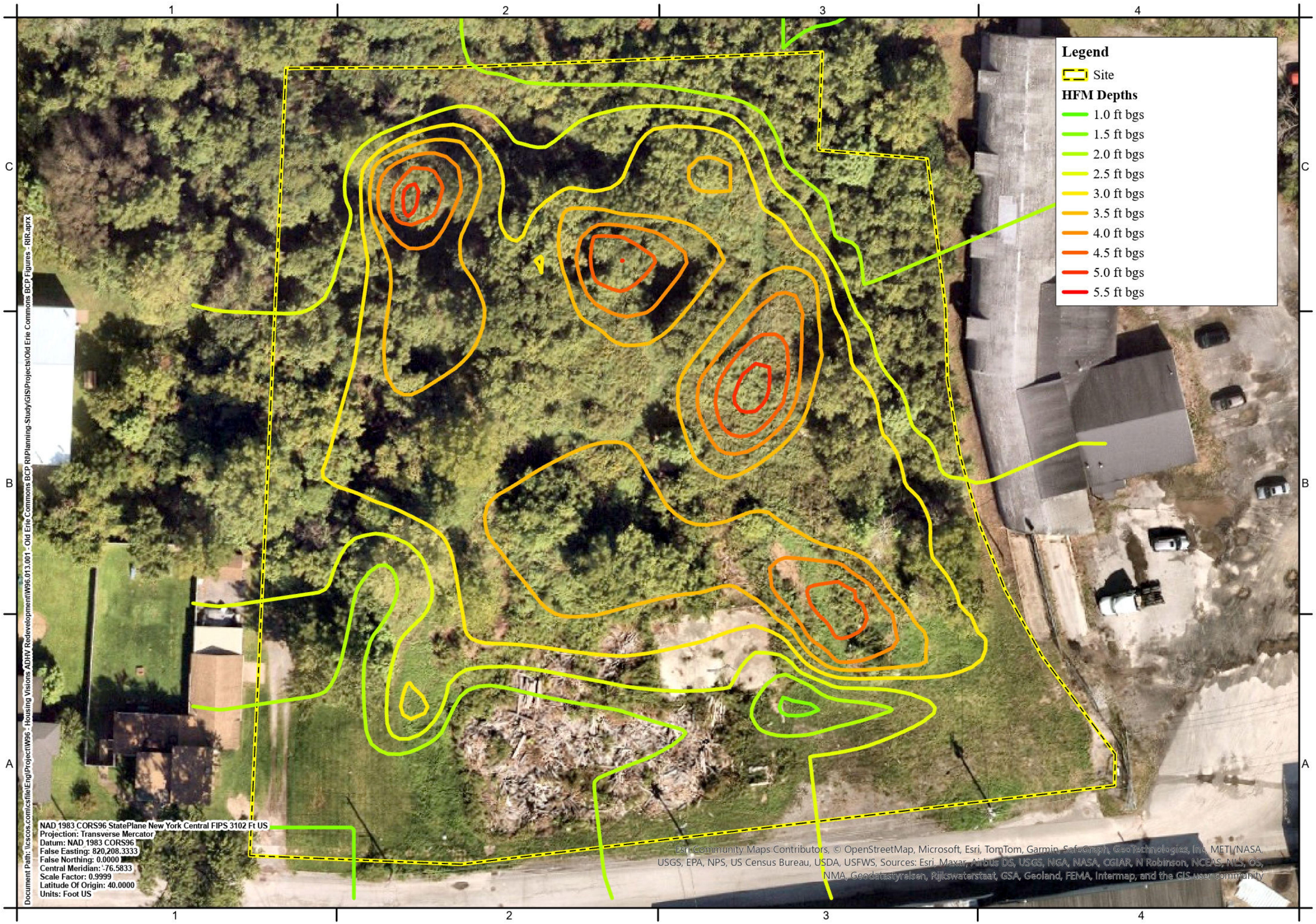
GEOPHYSICAL STUDY RESULTS

Figure 3



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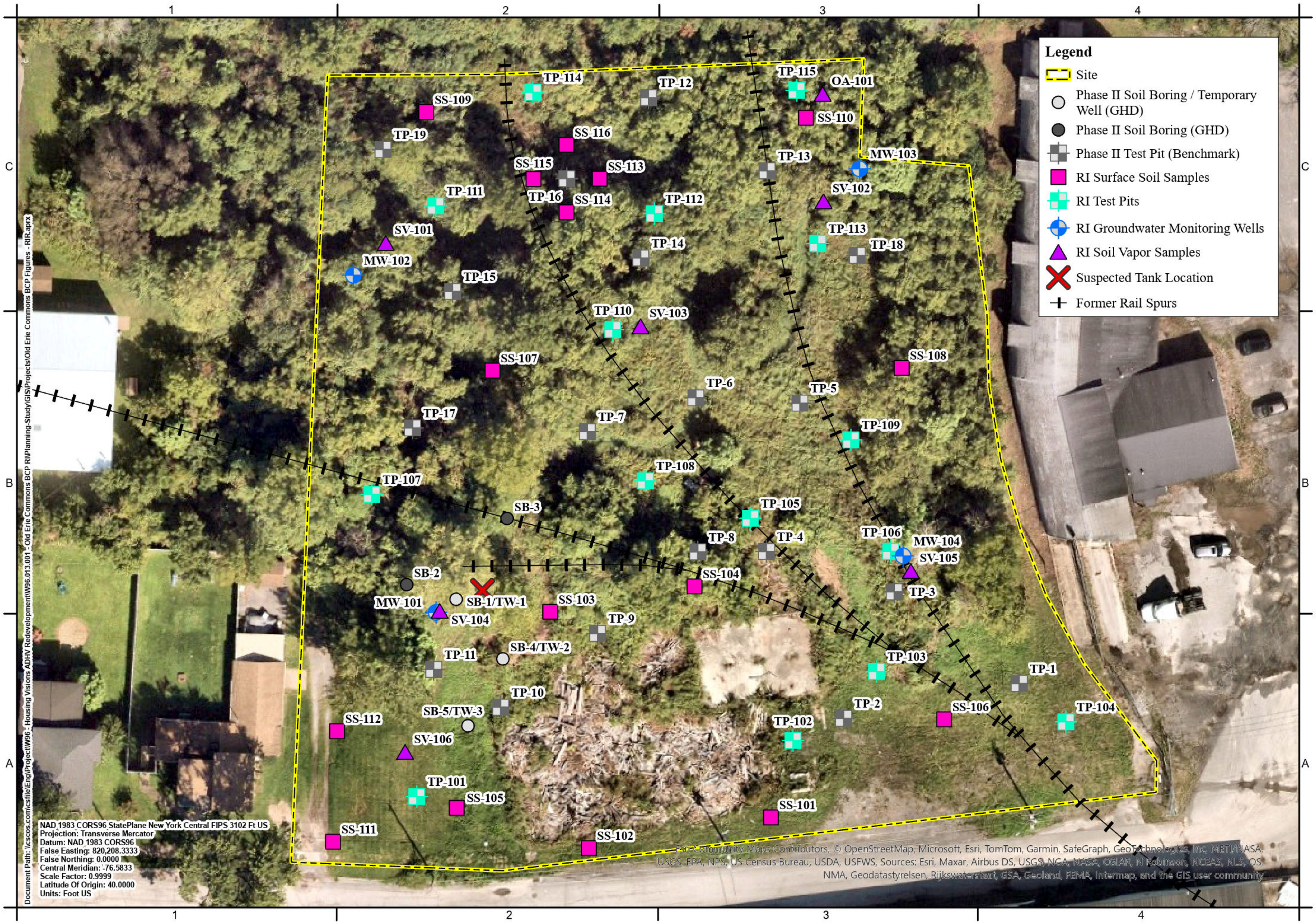
FILL DEPTHS

Figure 4



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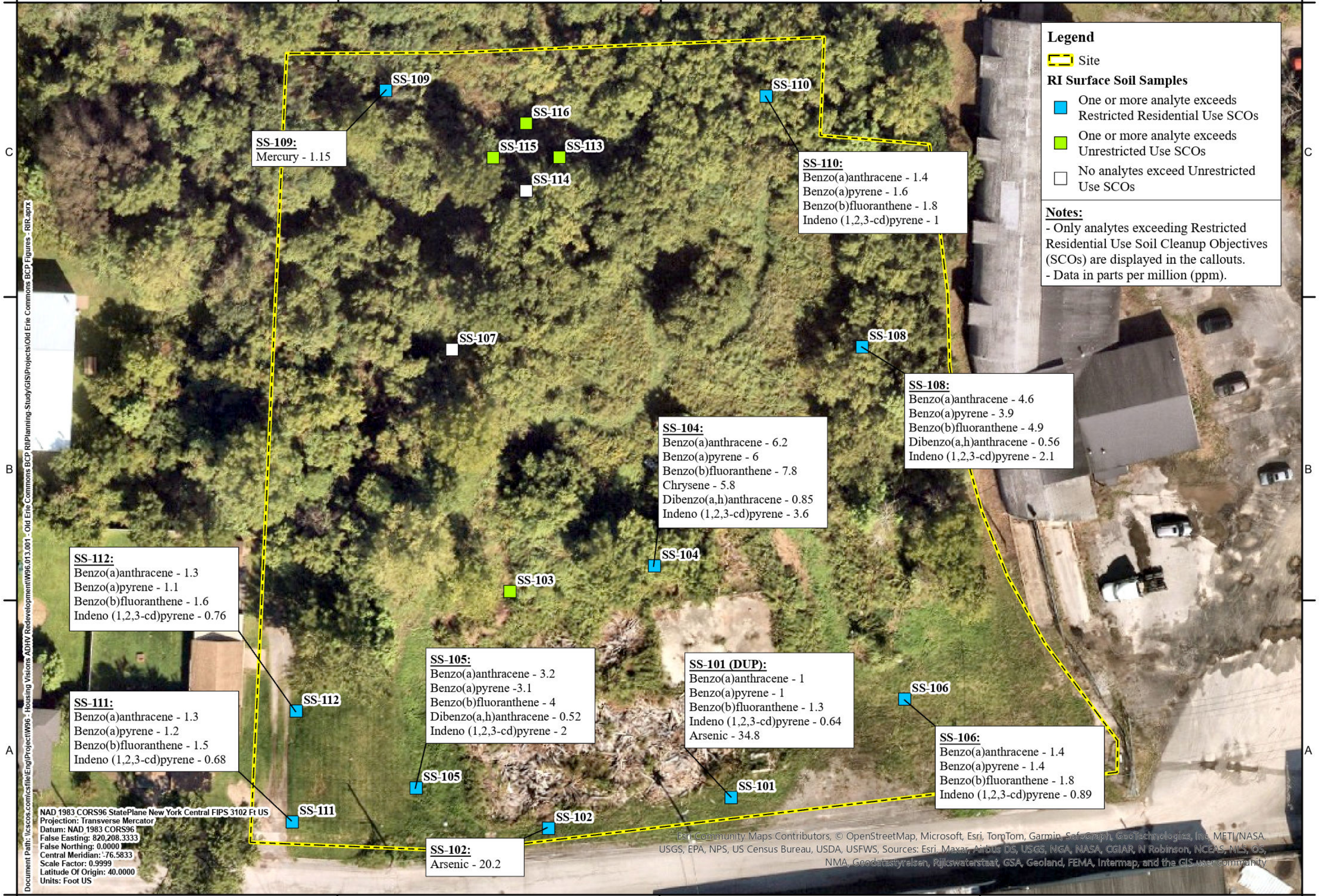
SAMPLE LOCATION MAP

Figure 5



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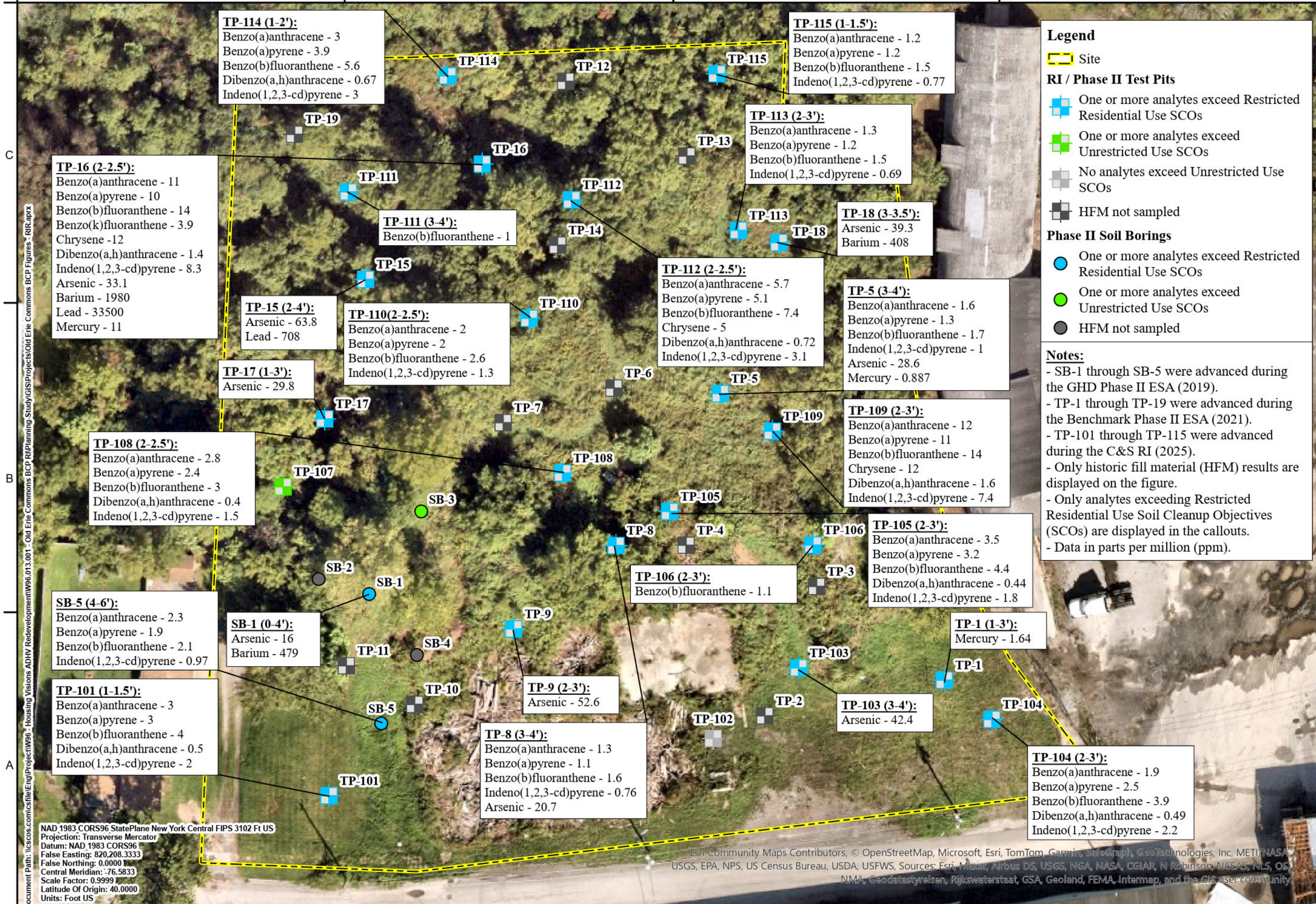
SURFACE SOIL SAMPLE RESULTS

Figure 6



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HFM SAMPLE RESULTS

Figure 7A

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SUBSURFACE NATIVE SOIL SAMPLE RESULTS

Figure 7B

LOCATION	MW-103 ROUND 1	MW-103 ROUND 2
SAMPLING DATE	7/30/2025	10/21/2025
Acetone	15	79
p-Isopropyltoluene	ND (2.5)	29
Phenol	ND (5)	1.3J
Benzo(a)anthracene	0.04J	ND (0.1)
Iron, Total	2310	3160
Magnesium, Total	63900	65700
Manganese, Total	117.7	423.1
Sodium, Total	22200	26500

LOCATION	MW-102 ROUND 1	MW-102 ROUND 2
SAMPLING DATE	7/31/2025	10/21/2025
Benzo(a)anthracene	0.04J	ND (0.1)
Iron, Total	2720	2970
Magnesium, Total	58600	67700
Perfluorooctanesulfonic Acid (PFOS)	1.82	2.94
Perfluorooctanoic Acid (PFOA)	5.51	6.71

LOCATION	MW-104 ROUND 1	DUPLICATE	MW-104 ROUND 2
SAMPLING DATE	7/30/2025	7/30/2025	10/21/2025
Benzo(a)anthracene	0.04J	0.03J	ND (0.1)
Iron, Total	1960	2000	2540
Magnesium, Total	35300	36000	44300
Sodium, Total	32400	33000	27000

LOCATION	MW-101 ROUND 1	MW-101 ROUND 2	DUPLICATE
SAMPLING DATE	7/31/2025	10/21/2025	10/21/2025
Benzo(a)anthracene	0.04J	ND (0.1)	0.11
Benzo(a)pyrene	ND (0.1)	ND (0.1)	0.06J
Benzo(b)fluoranthene	ND (0.1)	ND (0.1)	0.11
Benzo(k)fluoranthene	ND (0.1)	ND (0.1)	0.06J
Chrysene	ND (0.1)	ND (0.1)	0.1J
Indeno(1,2,3-cd)pyrene	ND (0.1)	ND (0.1)	0.06J
Iron, Total	2260	2300	2160
Magnesium, Total	34100	38100	36500
Sodium, Total	19300	23200	21600
Magnesium, Dissolved	-	37900	37900
Sodium, Dissolved	-	22600	21900
Perfluorooctanesulfonic Acid (PFOS)	8.1	8.8	8.89

Legend

Site

RI Monitoring Wells

Notes:
- Only analytes that exceeded TOGS 1.1.1 Ambient Water Quality Standards (AWQS) during at least one sampling event are displayed in the tables.
- Exceedances of TOGS 1.1.1 AWQS are highlighted yellow.
- Iron, magnesium, and sodium are common hard water elements.
- All units in parts per billion (ppb), except PFAS which is in parts per trillion (ppt).

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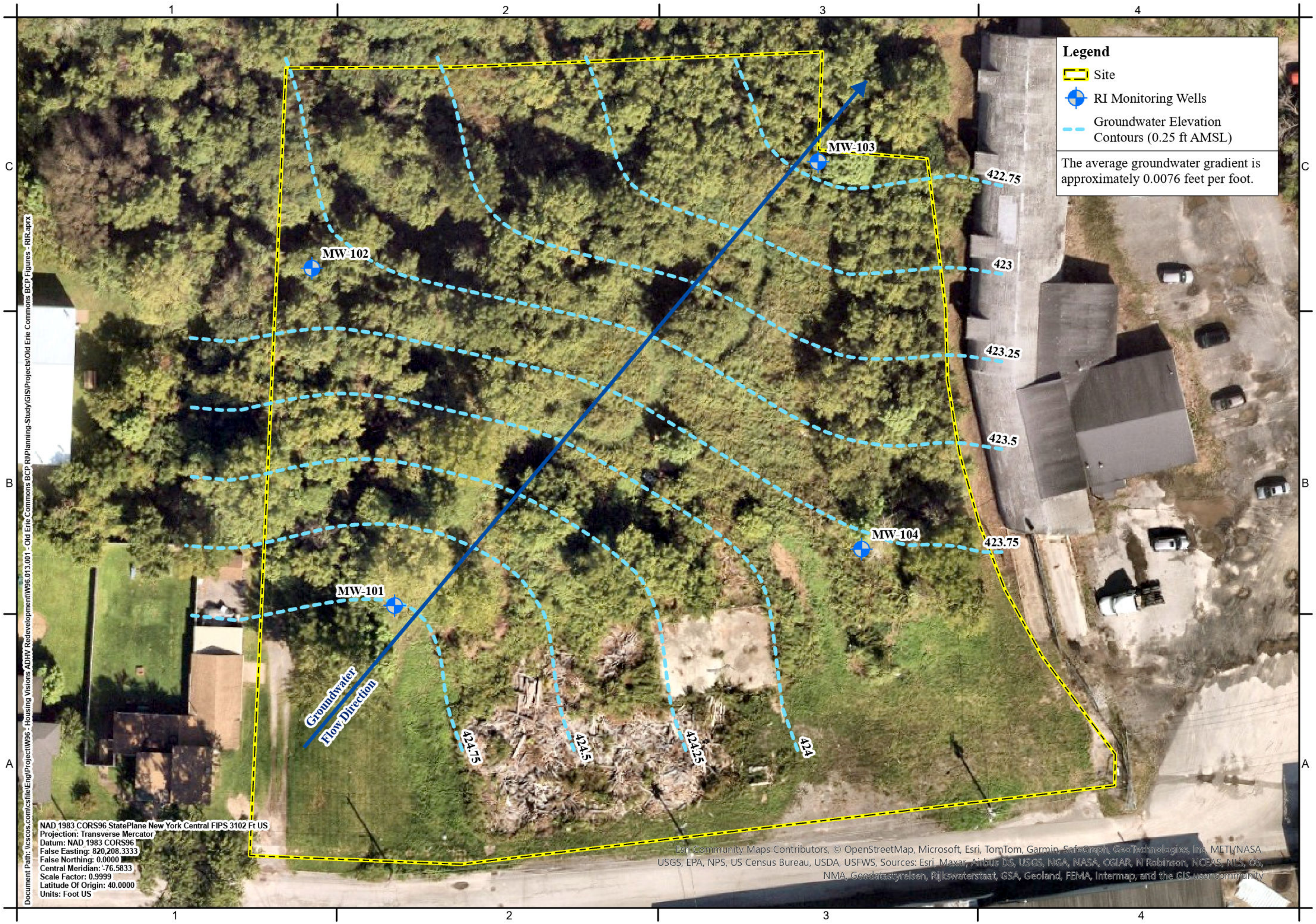
GROUNDWATER SAMPLE RESULTS

Figure 8



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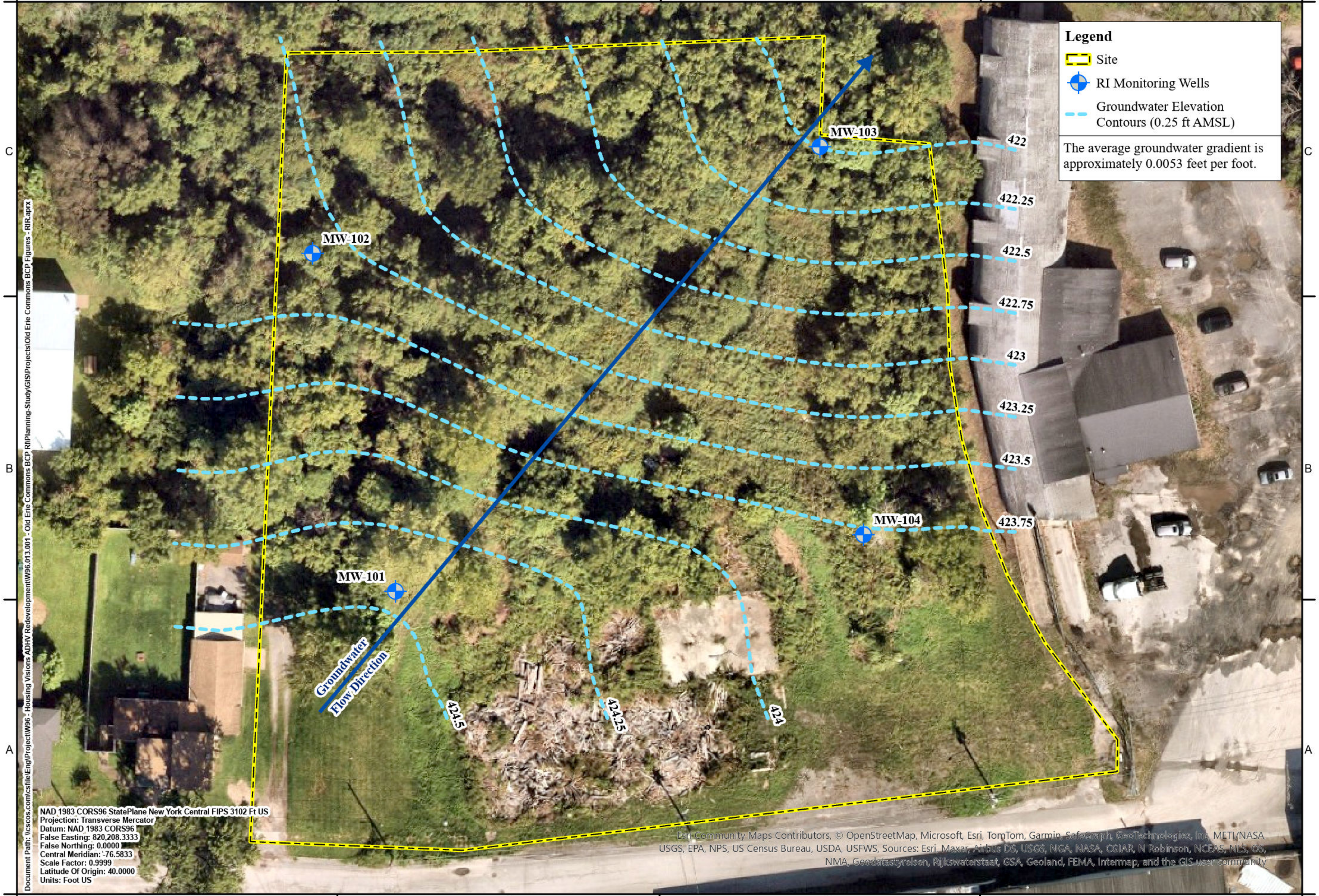
GROUNDWATER CONTOUR MAP - JULY 2025

Figure 9A



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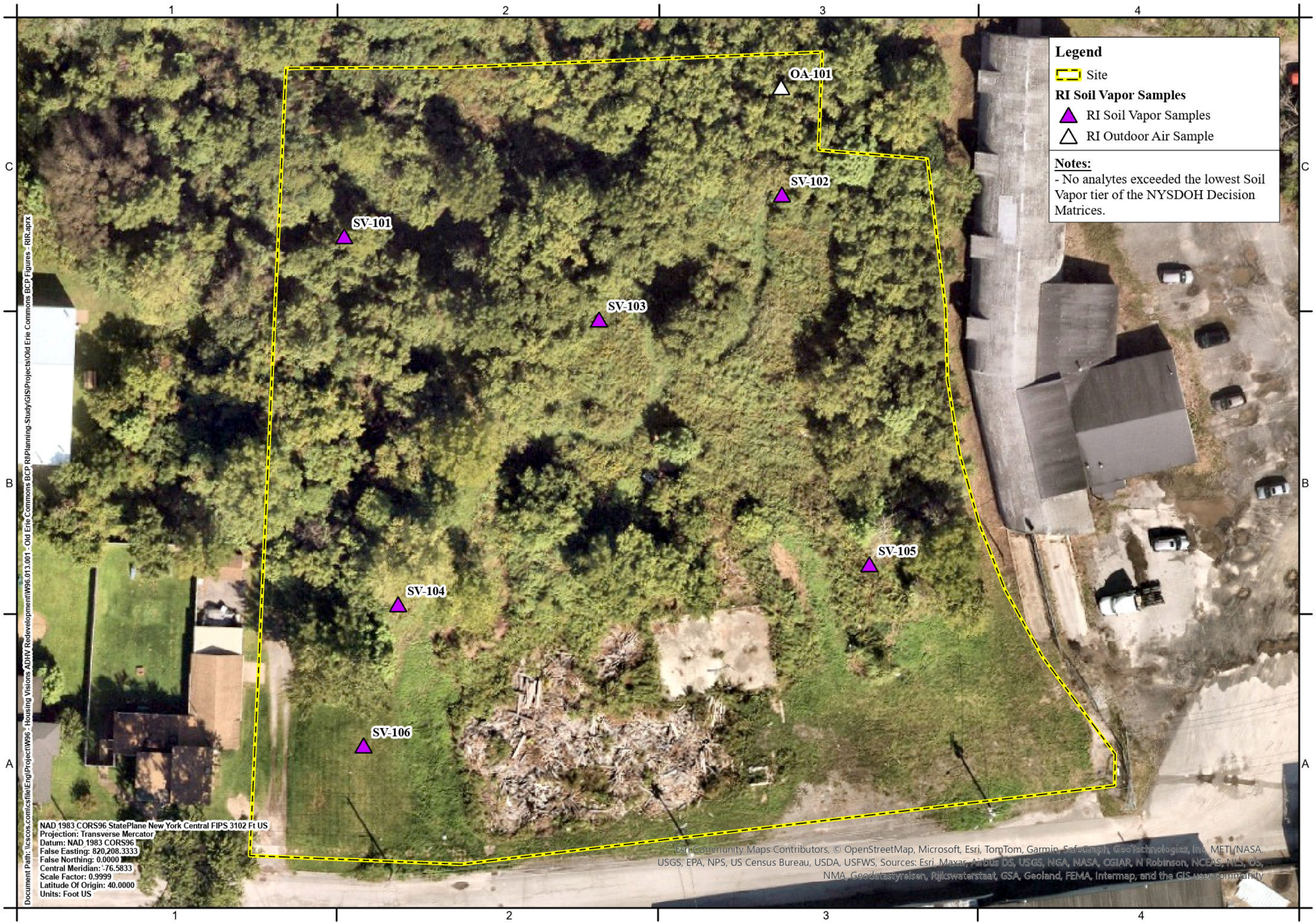
GROUNDWATER CONTOUR MAP - OCTOBER 2025

Figure 9B



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SOIL VAPOR SAMPLE RESULTS

Figure 10

Tables

Table 1
Old Erie Commons - Remedial Investigation
Master Sample Log

Lab Report #	Sample ID	Investigation	Date	Time	Matrix	Sample Type SS - Surface Soil SB - Soil Boring TP - Test Pit SV - Soil Vapor OA - Outdoor Air W - Groundwater	Depth (ft)	VOCs	SVOCs	Metals	Asbestos	PCBs	Pesticides	Herbicides	1,4-Dioxane	PFAS	MS	MSD	DUP
480-161635-1	SB-1	Phase II ESA (GHD)	10/25/19	12:20	SOIL	SB	0-4	X	X	X		X							
	SB-3	Phase II ESA (GHD)	10/25/19	12:40	SOIL	SB	0-4	X	X	X		X							
	SB-5	Phase II ESA (GHD)	10/25/19	13:00	SOIL	SB	4-6	X	X	X		X							
L2115023	TP-1 1-3 ft	Phase II ESA (Benchmark)	03/24/21	9:30	SOIL	TP	1-3		X	X									
	TP-5 3-4 ft	Phase II ESA (Benchmark)	03/24/21	11:00	SOIL	TP	3-4		X	X									
	TP-8 3-4 ft	Phase II ESA (Benchmark)	03/24/21	12:45	SOIL	TP	3-4		X	X									
	TP-9 2-3 ft	Phase II ESA (Benchmark)	03/24/21	13:00	SOIL	TP	2-3		X	X									
L2157533	TP-15	Phase II ESA (Benchmark)	10/20/21	10:00	SOIL	TP	2-4		X	X									
	TP-16	Phase II ESA (Benchmark)	10/20/21	10:30	SOIL	TP	2-2.5		X	X									
	TP-17	Phase II ESA (Benchmark)	10/20/21	11:00	SOIL	TP	1-3		X	X									
	TP-18	Phase II ESA (Benchmark)	10/20/21	11:30	SOIL	TP	3-3.5		X	X									
L2543652 634914	SS-101	RI	07/11/25	9:10	SOIL	SS	0-2 in	X	X	X	X	X	X	X	X	X	X	X	X
	SS-102	RI	07/11/25	9:30	SOIL	SS	0-2 in	X	X	X	X								
	SS-103	RI	07/11/25	9:50	SOIL	SS	0-2 in	X	X	X	X	X	X	X	X	X			
	SS-104	RI	07/11/25	10:20	SOIL	SS	0-2 in	X	X	X	X								
	SS-106	RI	07/11/25	9:00	SOIL	SS	0-2 in	X	X	X									
	SS-107	RI	07/11/25	12:30	SOIL	SS	0-2 in	X	X	X		X	X	X	X	X			
	SS-108	RI	07/11/25	11:15	SOIL	SS	0-2 in	X	X	X		X	X	X	X	X			
	SS-109	RI	07/11/25	11:40	SOIL	SS	0-2 in	X	X	X		X	X	X	X	X			
	SS-110	RI	07/11/25	12:00	SOIL	SS	0-2 in	X	X	X									
L2547832	SS-105	RI	07/30/25	10:00	SOIL	SS	0-2 in	X	X	X					X				
	SS-111	RI	07/30/25	9:40	SOIL	SS	0-2 in	X	X	X					X				
	SS-112	RI	07/30/25	9:50	SOIL	SS	0-2 in	X	X	X					X				
L2547833	SS-113	RI	07/30/25	10:15	SOIL	SS	0-2 in			X - Pb only									
	SS-114	RI	07/30/25	10:20	SOIL	SS	0-2 in												
	SS-115	RI	07/30/25	10:25	SOIL	SS	0-2 in												
	SS-116	RI	07/30/25	10:30	SOIL	SS	0-2 in												
L2547174 637838	TP-102 FILL	RI	07/28/25	11:40	SOIL	TP	1.5-2		X	X	X				X				
	TP-102 NATIVE	RI	07/28/25	11:50	SOIL	TP	3-3.5		X	X	X				X				
	TP-103 FILL	RI	07/28/25	11:05	SOIL	TP	3-4		X	X		X	X	X	X	X			
	TP-103 NATIVE	RI	07/28/25	11:10	SOIL	TP	6-7		X	X		X	X	X	X	X			
	TP-104 FILL	RI	07/28/25	12:00	SOIL	TP	2-3		X	X					X				
	TP-104 NATIVE	RI	07/28/25	12:15	SOIL	TP	6-6.5		X	X					X				
	TP-106 FILL	RI	07/28/25	10:20	SOIL	TP	2-3	X	X	X		X	X	X	X	X			
	TP-106 NATIVE	RI	07/28/25	10:30	SOIL	TP	6-7	X	X	X		X	X	X	X	X			
	TP-109 FILL	RI	07/28/25	13:30	SOIL	TP	2-3		X	X		X	X	X	X	X			
	TP-109 NATIVE	RI	07/28/25	13:35	SOIL	TP	5-6		X	X		X	X	X	X	X			
	TP-113 FILL	RI	07/28/25	14:00	SOIL	TP	2-3	X	X	X					X				
	TP-113 NATIVE	RI	07/28/25	14:10	SOIL	TP	5-5.5	X	X	X					X				

Table 1
Old Erie Commons - Remedial Investigation
Master Sample Log

Lab Report #	Sample ID	Investigation	Date	Time	Matrix	Sample Type SS - Surface Soil SB - Soil Boring TP - Test Pit SV - Soil Vapor OA - Outdoor Air W - Groundwater	Depth (ft)	VOCs	SVOCs	Metals	Asbestos	PCBs	Pesticides	Herbicides	1,4-Dioxane	PFAS	MS	MSD	DUP
L2547432	TP-101 FILL	RI	07/29/25	14:20	SOIL	TP	1-1.5	X	X	X		X	X	X	X	X			
	TP-101 NATIVE	RI	07/29/25	14:30	SOIL	TP	2.5-3	X	X	X		X	X	X	X	X			
	TP-105 FILL	RI	07/29/25	13:40	SOIL	TP	2.-3	X	X	X		X	X	X	X	X	X	X	X
	TP-105 NATIVE	RI	07/29/25	13:50	SOIL	TP	6-6.5	X	X	X		X	X	X	X	X			
	TP-107 FILL	RI	07/29/25	14:05	SOIL	TP	2-3		X	X									
	TP-108 FILL	RI	07/29/25	11:20	SOIL	TP	2-2.5		X	X		X	X	X	X	X			
	TP-108 NATIVE[1]	RI	07/29/25	11:30	SOIL	TP	5.5-6		X	X		X	X	X	X	X			
	TP-110 FILL	RI	07/29/25	11:00	SOIL	TP	2-2.5		X	X		X	X	X	X	X			
	TP-110 NATIVE	RI	07/29/25	11:05	SOIL	TP	5.5-6		X	X		X	X	X	X	X			
	TP-111 FILL	RI	07/29/25	10:30	SOIL	TP	3-4	X	X	X		X	X	X	X	X			
	TP-112 FILL	RI	07/29/25	9:05	SOIL	TP	2-2.5		X	X		X	X	X	X	X			
	TP-112 NATIVE	RI	07/29/25	9:15	SOIL	TP	4-4.5		X	X		X	X	X	X	X			
	TP-114 NATIVE	RI	07/29/25	9:45	SOIL	TP	1-2	X	X	X		X	X	X	X	X			
	TP-114 FILL	RI	07/29/25	9:55	SOIL	TP	3-4	X	X	X		X	X	X	X	X			
	TP-115 FILL	RI	07/29/25	8:45	SOIL	TP	1-1.5	X	X	X		X	X	X	X	X			
	TP-115 NATIVE	RI	07/29/25	8:50	SOIL	TP	5-5.5	X	X	X		X	X	X	X	X			
L2547831	MW-103	RI	07/30/25	14:40	WATER	W	12	X	X	X		X	X	X	X	X			
	MW-104	RI	07/30/25	10:21	WATER	W	15	X	X	X		X	X	X	X	X			X
	TRIP BLANK	RI	07/30/25	--	WATER	W	-	X											
L2548090	MW-101	RI	07/31/25	10:20	WATER	W	12	X	X	X		X	X	X	X	X	X	X	
	MW-102	RI	07/31/25	13:05	WATER	W	11	X	X	X		X	X	X	X	X			
	TRIP BLANK	RI	07/31/25	--	WATER	W	-	X											
	EQUIPMENT BLANK	RI	07/31/25	--	WATER	W	-	X								X			
L2566646	MW-101[2]	RI	10/21/25	10:35	WATER	W	12	X	X	X		X	X	X	X	X	X	X	X
	MW-102	RI	10/21/25	12:45	WATER	W	11	X	X	X		X	X	X	X	X			
	MW-103	RI	10/21/25	13:45	WATER	W	12	X	X	X		X	X	X	X	X			
	MW-104	RI	10/21/25	15:15	WATER	W	15	X	X	X		X	X	X	X	X			
	TRIP BLANK	RI	10/21/25	--	WATER	W	-	X											
	EQUIPMENT BLANK	RI	10/21/25	--	WATER	W	-	X								X			
L2548247	SV-101	RI	07/31/25	13:12	SOIL VAPOR	SV	2	X											
	SV-102	RI	07/31/25	13:17	SOIL VAPOR	SV	3	X											
	SV-103	RI	07/31/25	13:14	SOIL VAPOR	SV	2	X											
	SV-104	RI	07/31/25	13:05	SOIL VAPOR	SV	2	X											
	SV-105[3]	RI	07/31/25	14:00	SOIL VAPOR	SV	4.5	X											
	SV-106	RI	07/31/25	13:40	SOIL VAPOR	SV	2	X											
	OA-101	RI	07/31/25	13:20	OUTDOOR AIR	OA	-	X											

1. Native material from TP-108 was sampled instead of native material from TP-111. This change was made in the field because no native material was encountered in TP-111.
2. MW-101 was above 50 NTU during the second round of sampling so the sample was analyzed for dissolved metals in addition to total metals.
3. SV-105 could not be analyzed because the sample was impacted by groundwater.

Table 2
Old Erie Commons - Remedial Investigation
Surface Soil Data Summary

LOCATION				SS-101		DUP-01		SS-102		SS-103		SS-104		SS-105		SS-106		SS-107		SS-108	
SAMPLING DATE				7/11/2025		7/11/2025		7/11/2025		7/11/2025		7/11/2025		7/30/2025		7/11/2025		7/11/2025		7/11/2025	
LAB SAMPLE ID				L2543652-01		L2543652-10		L2543652-02		L2543652-03		L2543652-04		L2547832-03		L2543652-05		L2543652-06		L2543652-07	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (in.)				0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by EPA 5035																					
1,1,1-Trichloroethane	0.68	100	0.68	0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
1,1,2,2-Tetrachloroethane				0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
1,1,2-Trichloroethane				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,1-Dichloroethane	0.27	26	0.27	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,1-Dichloroethene	0.33	100	0.33	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,2,4-Trichlorobenzene				0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
1,2,4-Trimethylbenzene	3.6	52	3.6	**0.00062**	J	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
1,2-Dibromo-3-chloropropane				0.0043	U	0.0039	U	0.0047	U	0.0046	U	0.005	U	0.003	U	0.0099	U	0.0033	U	0.0042	U
1,2-Dibromoethane				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,2-Dichlorobenzene	1.1	100	1.1	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
1,2-Dichloroethane	0.02	3.1	0.02	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,2-Dichloropropane				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
1,3,5-Trimethylbenzene	8.4	52	8.4	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
1,3-Dichlorobenzene	2.4	49	2.4	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
1,4-Dichlorobenzene	1.8	13	1.8	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
2-Butanone	0.12	100	0.12	**0.0071**	J	**0.003**	J	**0.012**	J	0.015	U	0.017	U	**0.0065**	J	0.033	U	0.011	U	0.014	U
2-Hexanone				0.014	U	0.013	U	0.016	U	0.015	U	0.017	U	0.01	U	0.033	U	0.011	U	0.014	U
4-Methyl-2-pentanone				0.014	U	0.013	U	0.016	U	0.015	U	0.017	U	0.01	U	0.033	U	0.011	U	0.014	U
Acetone	0.05	100	0.05	**0.054**		**0.013**		**0.016**		0.015	U	0.017	U	**0.011**		0.033	U	0.011	U	0.014	U
Benzene	0.06	4.8	0.06	0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Bromodichloromethane				0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Bromoform				0.0058	U	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
Bromomethane				0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
Carbon disulfide				0.014	U	0.013	U	0.016	U	0.015	U	0.017	U	0.01	U	0.033	U	0.011	U	0.014	U
Carbon tetrachloride	0.76	2.4	0.76	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Chlorobenzene	1.1	100	1.1	0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Chloroethane				0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
Chloroform	0.37	49	0.37	0.0022	U	0.002	U	0.0023	U	0.0023	U	0.0025	U	0.0015	U	0.005	U	0.0016	U	0.0021	U
Chloromethane				0.0058	U	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
cis-1,2-Dichloroethene	0.25	100	0.25	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
cis-1,3-Dichloropropene				0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Cyclohexane				0.014	U	0.013	U	0.016	U	0.015	U	0.017	U	0.01	U	0.033	U	0.011	U	0.014	U
Dibromochloromethane				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Dichlorodifluoromethane				0.014	U	0.013	U	0.016	U	0.015	U	0.017	U	0.01	U	0.033	U	0.011	U	0.014	U
Ethylbenzene	1	41	1	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Freon-113				0.0058	U	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
Isopropylbenzene				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Methyl Acetate				**0.086**		0.0052	U	**0.011**		0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
Methyl cyclohexane				0.0058	U	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
Methyl tert butyl ether	0.93	100	0.93	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
Methylene chloride	0.05	100	0.05	0.0072	U	0.0066	U	0.0078	U	0.0077	U	0.0084	U	0.005	U	0.016	U	0.0055	U	0.0069	U
n-Butylbenzene	12	100	12	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
n-Propylbenzene	3.9	100	3.9	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Naphthalene	12	100	12	**0.0011**	J	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
o-Xylene				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
p-Isopropyltoluene				**0.00093**	J	**0.00056**	J	**0.00071**	J	0.0015	U	0.0017	U	0.001	U	**0.0021**	J	0.0011	U	0.0014	U
p/m-Xylene				0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
sec-Butylbenzene	11	100	11	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Styrene				**0.00096**	J	**0.0023**	J	**0.00091**	J	0.0015	U	**0.00097**	J	0.001	U	**0.0019**	J	0.0011	U	**0.00079**	J
tert-Butylbenzene	5.9	100	5.9	0.0029	U	0.0026	U	0.0031	U	0.0031	U	0.0033	U	0.002	U	0.0066	U	0.0022	U	0.0028	U
Tetrachloroethene	1.3	19	1.3	0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Toluene	0.7	100	0.7	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
trans-1,2-Dichloroethene	0.19	100	0.19	0.0022	U	0.002	U	0.0023	U	0.0023	U	0.0025	U	0.0015	U	0.005	U	0.0016	U	0.0021	U
trans-1,3-Dichloropropene				0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U
Trichloroethene	0.47	21	0.47	0.00072	U	0.00066	U	0.00078	U	0.00077	U	0.00084	U	0.0005	U	0.0016	U	0.00055	U	0.00069	U
Trichlorofluoromethane				0.0058	U	0.0052	U	0.0062	U	0.0062	U	0.0067	U	0.004	U	0.013	U	0.0044	U	0.0056	U
Vinyl chloride	0.02	0.9	0.02	0.0014	U	0.0013	U	0.0016	U	0.0015	U	0.0017	U	0.001	U	0.0033	U	0.0011	U	0.0014	U

Table 2
Old Erie Commons - Remedial Investigation
Surface Soil Data Summary

LOCATION				**SS-101**		**DUP-01**		**SS-102**		**SS-103**		**SS-104**		**SS-105**		**SS-106**		**SS-107**		**SS-108**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**	
LAB SAMPLE ID				**L2543652-01**		**L2543652-10**		**L2543652-02**		**L2543652-03**		**L2543652-04**		**L2547832-03**		**L2543652-05**		**L2543652-06**		**L2543652-07**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Semivolatile Organics by GC/MS																					
1,2,4,5-Tetrachlorobenzene				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
1,4-Dioxane	0.1	13	0.1	0.03	U	0.028	U	-	-	0.033	U	-	-	0.026	U	-	-	0.029	U	0.031	U
2,3,4,6-Tetrachlorophenol				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2,4,5-Trichlorophenol				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2,4,6-Trichlorophenol				0.12	U	0.11	U	0.12	U	0.13	U	0.13	U	0.1	U	0.11	U	0.12	U	0.12	U
2,4-Dichlorophenol				0.18	U	0.17	U	0.18	U	0.2	U	0.2	U	0.15	U	0.17	U	0.18	U	0.18	U
2,4-Dimethylphenol				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2,4-Dinitrophenol				0.98	U	0.9	U	0.98	U	1.1	U	1	U	0.82	U	0.91	U	0.94	U	0.98	U
2,4-Dinitrotoluene				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2,6-Dinitrotoluene				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2-Chloronaphthalene				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2-Chlorophenol				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2-Methylnaphthalene				**0.034**	J	**0.067**	J	**0.082**	J	**0.04**	J	**0.46**		**0.29**		**0.94**		0.23	U	**0.34**	
2-Methylphenol	0.33	100	0.33	0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2-Nitroaniline				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
2-Nitrophenol				0.44	U	0.41	U	0.44	U	0.48	U	0.47	U	0.37	U	0.41	U	0.42	U	0.44	U
3,3'-Dichlorobenzidine				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
3-Methylphenol/4-Methylphenol	0.33	100	0.33	0.29	U	0.27	U	0.3	U	0.32	U	**0.069**	J	**0.11**	J	0.27	U	0.28	U	0.29	U
3-Nitroaniline				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
4,6-Dinitro-o-cresol				0.53	U	0.49	U	0.53	U	0.58	U	0.57	U	0.44	U	0.49	U	0.51	U	0.53	U
4-Bromophenyl phenyl ether				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
4-Chloroaniline				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
4-Chlorophenyl phenyl ether				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
4-Nitroaniline				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
4-Nitrophenol				0.28	U	0.26	U	0.29	U	0.31	U	0.31	U	0.24	U	0.26	U	0.27	U	0.28	U
Acenaphthene	20	100	98	**0.1**	J	**0.17**		**0.022**	J	**0.12**	J	**0.97**		**0.09**	J	**0.28**		0.16	U	**0.66**	
Acenaphthylene	100	100	107	**0.046**	J	**0.11**	J	0.16	U	**0.041**	J	**0.49**		**1.6**		**0.16**		0.16	U	**0.56**	
Acetophenone				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	**0.096**	J	0.2	U	0.2	U
Anthracene	100	100	1000	**0.25**		**0.48**		**0.069**	J	**0.28**		**2.5**		**1.2**		**0.62**		0.12	U	**2.2**	
Atrazine				0.16	U	0.15	U	0.16	U	0.18	U	0.18	U	0.14	U	0.15	U	0.16	U	0.16	U
Benzaldehyde				0.27	U	0.25	U	**0.068**	J	0.29	U	**0.12**	J	**0.048**	J	**0.27**		0.26	U	0.27	U
Benzo(a)anthracene	1	1	1	**0.5**		**1**		**0.22**		**0.64**		**6.2**		**3.2**		**1.4**		0.12	U	**4.6**	
Benzo(a)pyrene	1	1	22	**0.47**		**1**		**0.22**		**0.59**		**6**		**3.1**		**1.4**		0.16	U	**3.9**	
Benzo(b)fluoranthene	1	1	1.7	**0.57**		**1.3**		**0.3**		**0.75**		**7.8**		**4**		**1.8**		0.12	U	**4.9**	
Benzo(ghi)perylene	100	100	1000	**0.26**		**0.58**		**0.14**	J	**0.34**		**3.1**		**2**		**0.78**		0.16	U	**1.8**	
Benzo(k)fluoranthene	0.8	3.9	1.7	**0.21**		**0.45**		**0.086**	J	**0.25**		**2.4**		**1.4**		**0.61**		0.12	U	**1.6**	
Biphenyl				0.46	U	0.43	U	0.47	U	0.51	U	**0.089**	J	**0.052**	J	**0.1**	J	0.44	U	**0.036**	J
Bis(2-chloroethoxy)methane				0.22	U	0.2	U	0.22	U	0.24	U	0.24	U	0.18	U	0.2	U	0.21	U	0.22	U
Bis(2-chloroethyl)ether				0.18	U	0.17	U	0.18	U	0.2	U	0.2	U	0.15	U	0.17	U	0.18	U	0.18	U
Bis(2-chloroisopropyl)ether				0.24	U	0.23	U	0.25	U	0.27	U	0.26	U	0.2	U	0.23	U	0.23	U	0.24	U
Bis(2-ethylhexyl)phthalate				0.2	U	0.19	U	0.2	U	0.22	U	**0.082**	J	0.17	U	**0.15**	J	0.2	U	0.2	U
Butyl benzyl phthalate				**0.13**	J	**0.094**	J	0.2	U	**0.12**	J	0.22	U	0.17	U	**0.097**	J	0.2	U	**0.1**	J
Caprolactam				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Carbazole				**0.11**	J	**0.23**		**0.03**	J	**0.11**	J	**1**		**0.14**	J	**0.31**		0.2	U	**0.23**	
Chrysene	1	3.9	1	**0.45**		**0.98**		**0.25**		**0.61**		**5.8**		**2.8**		**1.3**		0.12	U	**3.8**	
Di-n-butylphthalate				0.2	U	**0.042**	J	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Di-n-octylphthalate				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Dibenzo(a,h)anthracene	0.33	0.33	1000	**0.065**	J	**0.14**		**0.04**	J	**0.085**	J	**0.85**		**0.52**		**0.2**		0.12	U	**0.56**	
Dibenzofuran	7	59	210	**0.062**	J	**0.12**	J	**0.025**	J	**0.06**	J	**0.6**		**0.16**	J	**0.35**		0.2	U	**0.46**	
Diethyl phthalate				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Dimethyl phthalate				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Fluoranthene	100	100	1000	**1.1**		**2.2**		**0.41**		**1.3**		**15**		**3.4**		**2.8**		0.12	U	**7.1**	
Fluorene	30	100	386	**0.11**	J	**0.19**		**0.033**	J	**0.12**	J	**0.96**		**0.2**		**0.3**		0.2	U	**0.74**	
Hexachlorobenzene	0.33	1.2	3.2	0.12	U	0.11	U	0.12	U	0.13	U	0.13	U	0.1	U	0.11	U	0.12	U	0.12	U
Hexachlorobutadiene				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Hexachlorocyclopentadiene				0.58	U	0.54	U	0.59	U	0.64	U	0.63	U	0.49	U	0.54	U	0.56	U	0.58	U
Hexachloroethane				0.16	U	0.15	U	0.16	U	0.18	U	0.18	U	0.14	U	0.15	U	0.16	U	0.16	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	8.2	**0.28**		**0.64**		**0.14**	J	**0.37**		**3.6**		**2**		**0.89**		0.16	U	**2.1**	
Isophorone				0.18	U	0.17	U	0.18	U	0.2	U	0.2	U	0.15	U	0.17	U	0.18	U	0.18	U
n-Nitrosodi-n-propylamine				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U
Naphthalene	12	100	12	**0.065**	J	**0.15**	J	**0.055**	J	**0.05**	J	**0.78**		**0.89**		**0.76**		0.2	U	**0.11**	J
NDPA/DPA				0.16	U	0.15	U	0.16	U	0.18	U	0.18	U	0.14	U	0.15	U	0.16	U	0.16	U
Nitrobenzene				0.18	U	0.17	U	0.18	U	0.2	U	0.2	U	0.15	U	0.17	U	0.18	U	0.18	U
p-Chloro-m-cresol				0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	0.17	U	0.19	U	0.2	U	0.2	U

Table 2
Old Erie Commons - Remedial Investigation
Surface Soil Data Summary

LOCATION				**SS-101**		**DUP-01**		**SS-102**		**SS-103**		**SS-104**		**SS-105**		**SS-106**		**SS-107**		**SS-108**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**	
LAB SAMPLE ID				**L2543652-01**		**L2543652-10**		**L2543652-02**		**L2543652-03**		**L2543652-04**		**L2547832-03**		**L2543652-05**		**L2543652-06**		**L2543652-07**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Pentachlorophenol	0.8	6.7	0.8	0.16	U	0.15	U	0.16	U	0.18	U	0.18	U	0.14	U	0.15	U	0.16	U	0.16	U
Phenanthrene	100	100	1000	**0.93**		**1.8**		**0.36**		**1.1**		**10**		**1.2**		**2.5**		0.12	U	**6**	
Phenol	0.33	100	0.33	0.2	U	0.19	U	0.2	U	0.22	U	0.22	U	**0.059**	J	0.19	U	0.2	U	0.2	U
Pyrene	100	100	1000	**0.85**		**1.8**		**0.34**		**1.1**		**12**		**3.1**		**2.1**		0.12	U	**5.6**	
Polychlorinated Biphenyls by GC																					
Aroclor 1016	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1221	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1232	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1242	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1248	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1254	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1260	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1262	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Aroclor 1268	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
PCBs, Total	0.1	1	3.2	0.0589	U	0.0535	U	- -		0.0636	U	- -		- -		- -		0.0565	U	0.06	U
Organochlorine Pesticides by GC																					
4,4'-DDD	0.0033	13	14	0.00186	U	0.00178	U	- -		**0.0165**		- -		- -		- -		0.00183	U	0.00194	U
4,4'-DDE	0.0033	8.9	17	**0.00247**		**0.00199**		- -		**0.0331**		- -		- -		- -		0.00183	U	**0.00229**	
4,4'-DDT	0.0033	7.9	136	**0.00696**		**0.0053**		- -		**0.0131**		- -		- -		- -		0.00183	U	**0.00814**	
Aldrin	0.005	0.097	0.19	0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Alpha-BHC	0.02	0.48	0.02	0.000777	U	0.000742	U	- -		0.000873	U	- -		- -		- -		0.000762	U	0.000811	U
Beta-BHC	0.036	0.36	0.09	0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Chlordane				**0.0777**		**0.0492**		- -		0.0175	U	- -		- -		- -		0.0152	U	0.0162	U
cis-Chlordane	0.094	4.2	2.9	**0.0102**	IP	**0.00751**	IP	- -		0.00262	U	- -		- -		- -		0.00228	U	0.00243	U
Delta-BHC	0.04	100	0.25	0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Dieldrin	0.005	0.2	0.1	0.00116	U	0.00111	U	- -		0.00131	U	- -		- -		- -		0.00114	U	0.00122	U
Endosulfan I	2.4	24	102	0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Endosulfan II	2.4	24	102	0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Endosulfan sulfate	2.4	24	1000	0.000777	U	0.000742	U	- -		0.000873	U	- -		- -		- -		0.000762	U	0.000811	U
Endrin	0.014	11	0.06	0.000777	U	0.000742	U	- -		0.000873	U	- -		- -		- -		0.000762	U	0.000811	U
Endrin aldehyde				0.00233	U	0.00222	U	- -		0.00262	U	- -		- -		- -		0.00228	U	0.00243	U
Endrin ketone				0.00186	U	0.00178	U	- -		0.0021	U	- -		- -		- -		0.00183	U	0.00194	U
Heptachlor	0.042	2.1	0.38	0.000932	U	0.00089	U	- -		0.00105	U	- -		- -		- -		0.000914	U	0.000973	U
Heptachlor epoxide				0.0035	U	0.00334	U	- -		0.00393	U	- -		- -		- -		0.00343	U	0.00365	U
Lindane	0.1	1.3	0.1	0.000777	U	0.000742	U	- -		0.000873	U	- -		- -		- -		0.000762	U	0.000811	U
Methoxychlor				0.0035	U	0.00334	U	- -		0.00393	U	- -		- -		- -		0.00343	U	0.00365	U
Toxaphene				0.035	U	0.0334	U	- -		0.0393	U	- -		- -		- -		0.0343	U	0.0365	U
trans-Chlordane				**0.01**		**0.00584**		- -		0.00262	U	- -		- -		- -		0.00228	U	0.00243	U
Chlorinated Herbicides by GC																					
2,4,5-T				0.2	U	0.188	U	- -		0.222	U	- -		- -		- -		0.199	U	0.2	U
2,4,5-TP (Silvex)	3.8	100	3.8	0.2	U	0.188	U	- -		0.222	U	- -		- -		- -		0.199	U	0.2	U
2,4-D				0.2	U	0.188	U	- -		0.222	U	- -		- -		- -		0.199	U	0.2	U
Total Metals																					
Aluminum, Total				**3420**		**3710**		**5250**		**5600**		**3400**		**2880**		**2300**		**6620**		**4740**	
Antimony, Total				23.6	U	22.5	U	4.84	U	5.42	U	50.4	U	19.8	U	45.7	U	4.7	U	23.6	U
Arsenic, Total	13	16	16	**14.1**		**34.8**		**20.2**		**13.6**		**8.97**	J	**3.72**	J	**8.42**	J	**4.52**		**5.82**	
Barium, Total	350	400	820	**40.4**		**44.2**		**351**		**76.5**		**57.6**		**36.6**		**31.6**		**142**		**72.8**	
Beryllium, Total	7.2	72	47	2.36	U	2.25	U	**0.549**		**0.362**	J	5.04	U	1.98	U	4.57	U	**0.444**	J	**0.318**	J
Cadmium, Total	2.5	4.3	7.5	4.72	U	4.5	U	**0.391**	J	**0.168**	J	10.1	U	3.97	U	9.14	U	0.94	U	4.73	U
Calcium, Total				**217000**		**124000**		**19900**		**25800**		**150000**		**150000**		**208000**		**2940**		**112000**	
Chromium, Total				**7.39**		**8.71**		**12.2**		**11.5**		10.1	U	**5.1**		9.14	U	**12.7**		**9.06**	
Cobalt, Total				**4.51**	J	**4.56**	J	**4.58**		**6.53**		**4.14**	J	**2.86**	J	**4.18**	J	**5.53**		**5.26**	J
Copper, Total	50	270	1720	**37.1**		**21.8**		**37**		**33.5**		**28.3**		**27.8**		**20.2**		**4.83**		**15.5**	
Cyanide, Total	27	27	40	1.2	U	1.1	U	1.2	U	1.3	U	1.3	U	1	U	1.1	U	1.1	U	1.2	U
Iron, Total				**8220**		**9670**		**11000**		**12500**		**8840**		**6220**		**7280**		**17600**		**11300**	
Lead, Total	63	400	450	**73.4**		**86**		**340**		**58.9**		**58.3**		**42.2**		**51.2**		**11.4**		**31**	
Magnesium, Total				**18400**		**17300**		**2480**		**5950**		**7030**		**15200**		**12800**		**3460**		**14600**	
Manganese, Total	1600	2000	2000	**381**		**298**		**252**		**293**		**225**		**260**		**254**		**127**		**355**	
Mercury, Total	0.18	0.81	0.73	**0.065**	J	**0.051**	J	**0.247**		**0.116**		**0.121**		**0.076**		0.077	U	0.082	U	**0.085**	J
Nickel, Total	30	310	130	**9.85**	J	**12.7**		**9.54**		**18.4**		**11.7**	J	**6.91**	J	**8.86**	J	**21.8**		**17.8**	
Potassium, Total				**569**	J	**485**	J	**688**		**1050**		**700**	J	**348**	J	2280	U	**980**		**1010**	J
Selenium, Total	3.9	180	4	9.45	U	**2.73**	J	**0.516**	J	**0.602**	J	20.2	U	7.94	U	18.3	U	1.88	U	**2.76**	J
Silver, Total	2	180	8.3	2.36	U	2.25	U	0.484	U	0.542	U	5.04	U	1.98	U	4.57	U	0.47	U	2.36	U
Sodium, Total				945	U	901	U	**246**		217	U	2020	U	794	U	1830	U	188	U	945	U
Thallium, Total				9.45	U	9.01	U	1.94	U	2.17	U	20.2	U	7.94	U	18.3	U	1.88	U	9.45	U
Vanadium, Total				**11.5**		**10.6**		**16.7**		**13.1**		**9.47**	J	**8.64**		**10.5**		**14.2**		**10.8**	
Zinc, Total	109	10000	2480	**74.7**		**73**		**135**		**93.9**		**90.6**		**38.3**		**69.2**		**23.4**		**39.4**	

LOCATION				**SS-101**		**DUP-01**		**SS-102**		**SS-103**		**SS-104**		**SS-105**		**SS-106**		**SS-107**		**SS-108**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/11/2025**		**7/11/2025**		**7/11/2025**	
LAB SAMPLE ID				**L2543652-01**		**L2543652-10**		**L2543652-02**		**L2543652-03**		**L2543652-04**		**L2547832-03**		**L2543652-05**		**L2543652-06**		**L2543652-07**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Perfluorinated Alkyl Acids by EPA 1633																					
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)				4.99	U	5	U	- -		4.98	U	- -		- -		- -		4.98	U	5	U
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)				4.99	U	5	U	- -		4.98	U	- -		- -		- -		4.98	U	5	U
3-Perfluoropropyl Propanoic Acid (3:3FTCA)				0.998	U	1	U	- -		0.996	U	- -		- -		- -		0.996	U	1	U
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				0.798	U	0.8	U	- -		0.796	U	- -		- -		- -		0.797	U	0.8	U
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)				2	U	2	U	- -		1.99	U	- -		- -		- -		1.99	U	2	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)				2	U	2	U	- -		1.99	U	- -		- -		- -		1.99	U	2	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)				0.399	U	0.4	U	- -		0.398	U	- -		- -		- -		0.398	U	0.4	U
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)				0.399	U	0.4	U	- -		0.398	U	- -		- -		- -		0.398	U	0.4	U
Perfluoro-3-Methoxypropanoic Acid (PFMPA)				0.399	U	0.4	U	- -		0.398	U	- -		- -		- -		0.398	U	0.4	U
Perfluoro-4-Methoxybutanoic Acid (PFMBA)				0.399	U	0.4	U	- -		0.398	U	- -		- -		- -		0.398	U	0.4	U
Perfluorobutanesulfonic Acid (PFBS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluorobutanoic Acid (PFBA)				**0.082**	J	**0.088**	J	- -		**0.342**	J	- -		- -		- -		**0.129**	J	**0.17**	J
Perfluorodecanesulfonic Acid (PFDS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluorodecanoic Acid (PFDA)				**0.065**	J	**0.046**	J	- -		**0.454**		- -		- -		- -		0.199	U	**0.053**	J
Perfluorododecanesulfonic Acid (PFDoS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluorododecanoic Acid (PFDoA)				0.2	U	0.2	U	- -		**0.169**	J	- -		- -		- -		0.199	U	**0.034**	J
Perfluoroheptanesulfonic Acid (PFHpS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluoroheptanoic Acid (PFHpA)				**0.043**	J	**0.048**	J	- -		**0.212**		- -		- -		- -		**0.045**	J	**0.082**	J
Perfluorohexanesulfonic Acid (PFHxS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	**0.042**	J
Perfluorohexanoic Acid (PFHxA)				**0.03**	JF	0.2	U	- -		**0.112**	J	- -		- -		- -		0.199	U	**0.046**	J
Perfluorononanesulfonic Acid (PFNS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluorononanoic Acid (PFNA)				**0.054**	J	**0.066**	J	- -		**0.427**		- -		- -		- -		**0.052**	J	**0.152**	J
Perfluorooctanesulfonamide (PFOSA)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	1	**0.26**		**0.31**		- -		**1.14**		- -		- -		- -		**0.108**	J	**0.239**	
Perfluorooctanoic Acid (PFOA)	0.66	33	0.8	**0.052**	J	**0.045**	J	- -		**0.567**		- -		- -		- -		**0.096**	J	**0.112**	J
Perfluoropentanesulfonic Acid (PFPeS)				0.2	U	0.2	U	- -		0.199	U	- -		- -		- -		0.199	U	0.2	U
Perfluoropentanoic Acid (PFPeA)				0.399	U	0.4	U	- -		**0.121**	J	- -		- -		- -		0.398	U	**0.047**	J
Perfluorotetradecanoic Acid (PFTeDA)				0.2	U	0.2	U	- -		**0.049**	J	- -		- -		- -		0.199	U	0.2	U
Perfluorotridecanoic Acid (PFTrDA)				0.2	U	0.2	U	- -		**0.096**	JF	- -		- -		- -		0.199	U	0.2	U
Perfluoroundecanoic Acid (PFUnA)				**0.058**	J	**0.054**	J	- -		**0.288**		- -		- -		- -		0.199	U	**0.074**	J
Asbestos in Bulk																					
Asbestos Fibers				ND		- -		ND		ND		ND		- -		- -		- -		- -	

Notes:
- Analytical data compared to NYSDEC Part 375-6.
- Results and soil cleanup objectives (SCO) in parts per million (ppm), except for PFAS which is in parts per billion (ppb).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates the respective use SCO(s) exceeded. Use type SCOs are listed from left to right from most restrictive to least restrictive.
- Blank space indicates that a SCO does not exist.
- Duplicate sample shown to the right of the parent sample.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "F" indicates the ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- "I" indicates the lower value for the two columns has been reported due to obvious interference.
- "P" indicates the RPD between the results for the two columns exceeds the method-specified criteria.
- "ND" indicates that asbestos was not detected in the respective sample.
- "-" indicates that sample was not anlayzed for that parameter.

LOCATION				**SS-109**		**SS-110**		**SS-111**		**SS-112**		**SS-113**		**SS-114**		**SS-115**		**SS-116**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**	
LAB SAMPLE ID				**L2543652-08**		**L2543652-09**		**L2547832-01**		**L2547832-02**		**L2547833-01**		**L2547833-02**		**L2547833-03**		**L2547833-04**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organics by EPA 5035																			
1,1,1-Trichloroethane	0.68	100	0.68	0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane				0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,1-Dichloroethane	0.27	26	0.27	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.33	100	0.33	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene				0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane				0.0056	U	0.0041	U	0.0034	U	0.0046	U	-	-	-	-	-	-	-	-
1,2-Dibromoethane				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	1.1	100	1.1	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.02	3.1	0.02	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,2-Dichloropropane				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	8.4	52	8.4	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	2.4	49	2.4	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	1.8	13	1.8	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
2-Butanone	0.12	100	0.12	0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
2-Hexanone				0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone				0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
Acetone	0.05	100	0.05	**0.013**	J	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
Benzene	0.06	4.8	0.06	0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Bromodichloromethane				0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Bromoform				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
Bromomethane				0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
Carbon disulfide				0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
Carbon tetrachloride	0.76	2.4	0.76	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Chlorobenzene	1.1	100	1.1	0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Chloroethane				0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
Chloroform	0.37	49	0.37	0.0028	U	0.002	U	0.0017	U	0.0023	U	-	-	-	-	-	-	-	-
Chloromethane				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	0.25	100	0.25	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene				0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Cyclohexane				0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
Dibromochloromethane				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Dichlorodifluoromethane				0.019	U	0.014	U	0.011	U	0.015	U	-	-	-	-	-	-	-	-
Ethylbenzene	1	41	1	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Freon-113				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
Isopropylbenzene				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Methyl Acetate				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
Methyl cyclohexane				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
Methyl tert butyl ether	0.93	100	0.93	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
Methylene chloride	0.05	100	0.05	0.0093	U	0.0068	U	0.0057	U	0.0077	U	-	-	-	-	-	-	-	-
n-Butylbenzene	12	100	12	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
n-Propylbenzene	3.9	100	3.9	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Naphthalene	12	100	12	0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
o-Xylene				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
p-Isopropyltoluene				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
p/m-Xylene				0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
sec-Butylbenzene	11	100	11	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Styrene				0.0019	U	**0.00078**	J	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
tert-Butylbenzene	5.9	100	5.9	0.0037	U	0.0027	U	0.0023	U	0.0031	U	-	-	-	-	-	-	-	-
Tetrachloroethene	1.3	19	1.3	0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Toluene	0.7	100	0.7	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	0.19	100	0.19	0.0028	U	0.002	U	0.0017	U	0.0023	U	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene				0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-
Trichloroethene	0.47	21	0.47	0.00093	U	0.00068	U	0.00057	U	0.00077	U	-	-	-	-	-	-	-	-
Trichlorofluoromethane				0.0074	U	0.0055	U	0.0046	U	0.0061	U	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	0.9	0.02	0.0019	U	0.0014	U	0.0011	U	0.0015	U	-	-	-	-	-	-	-	-

LOCATION				SS-109		SS-110		SS-111		SS-112		SS-113		SS-114		SS-115		SS-116	
SAMPLING DATE				7/11/2025		7/11/2025		7/30/2025		7/30/2025		7/30/2025		7/30/2025		7/30/2025		7/30/2025	
LAB SAMPLE ID				L2543652-08		L2543652-09		L2547832-01		L2547832-02		L2547833-01		L2547833-02		L2547833-03		L2547833-04	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (in.)				0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS																			
1,2,4,5-Tetrachlorobenzene				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
1,4-Dioxane	0.1	13	0.1	0.036	U	- -		0.026	U	0.028	U	- -		- -		- -		-	-
2,3,4,6-Tetrachlorophenol				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2,4,5-Trichlorophenol				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2,4,6-Trichlorophenol				0.14	U	0.13	U	0.1	U	0.11	U	- -		- -		- -		-	-
2,4-Dichlorophenol				0.22	U	0.2	U	0.16	U	0.17	U	- -		- -		- -		-	-
2,4-Dimethylphenol				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2,4-Dinitrophenol				1.2	U	1.1	U	0.83	U	0.89	U	- -		- -		- -		-	-
2,4-Dinitrotoluene				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2,6-Dinitrotoluene				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2-Chloronaphthalene				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2-Chlorophenol				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2-Methylnaphthalene				0.29	U	**0.059**	J	**0.1**	J	**0.12**	J	- -		- -		- -		-	-
2-Methylphenol	0.33	100	0.33	0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2-Nitroaniline				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
2-Nitrophenol				0.52	U	0.48	U	0.37	U	0.4	U	- -		- -		- -		-	-
3,3'-Dichlorobenzidine				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
3-Methylphenol/4-Methylphenol	0.33	100	0.33	0.35	U	0.32	U	**0.032**	J	0.27	U	- -		- -		- -		-	-
3-Nitroaniline				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
4,6-Dinitro-o-cresol				0.63	U	0.58	U	0.45	U	0.48	U	- -		- -		- -		-	-
4-Bromophenyl phenyl ether				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
4-Chloroaniline				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
4-Chlorophenyl phenyl ether				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
4-Nitroaniline				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
4-Nitrophenol				0.34	U	0.31	U	0.24	U	0.26	U	- -		- -		- -		-	-
Acenaphthene	20	100	98	0.19	U	**0.091**	J	**0.3**		**0.17**		- -		- -		- -		-	-
Acenaphthylene	100	100	107	**0.064**	J	**0.1**	J	**0.24**		**0.23**		- -		- -		- -		-	-
Acetophenone				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Anthracene	100	100	1000	**0.068**	J	**0.46**		**0.72**		**0.55**		- -		- -		- -		-	-
Atrazine				0.19	U	0.18	U	0.14	U	0.15	U	- -		- -		- -		-	-
Benzaldehyde				0.32	U	0.29	U	0.23	U	**0.085**	J	- -		- -		- -		-	-
Benzo(a)anthracene	1	1	1	**0.3**		**1.4**		**1.3**		**1.3**		- -		- -		- -		-	-
Benzo(a)pyrene	1	1	22	**0.34**		**1.6**		**1.2**		**1.1**		- -		- -		- -		-	-
Benzo(b)fluoranthene	1	1	1.7	**0.49**		**1.8**		**1.5**		**1.6**		- -		- -		- -		-	-
Benzo(ghi)perylene	100	100	1000	**0.22**		**0.96**		**0.69**		**0.77**		- -		- -		- -		-	-
Benzo(k)fluoranthene	0.8	3.9	1.7	**0.15**		**0.63**		**0.49**		**0.44**		- -		- -		- -		-	-
Biphenyl				0.55	U	0.5	U	**0.029**	J	**0.026**	J	- -		- -		- -		-	-
Bis(2-chloroethoxy)methane				0.26	U	0.24	U	0.19	U	0.2	U	- -		- -		- -		-	-
Bis(2-chloroethyl)ether				0.22	U	0.2	U	0.16	U	0.17	U	- -		- -		- -		-	-
Bis(2-chloroisopropyl)ether				0.29	U	0.26	U	0.21	U	0.22	U	- -		- -		- -		-	-
Bis(2-ethylhexyl)phthalate				0.24	U	0.22	U	0.17	U	0.075	J	- -		- -		- -		-	-
Butyl benzyl phthalate				0.24	U	**0.1**	J	0.17	U	0.18	U	- -		- -		- -		-	-
Caprolactam				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Carbazole				**0.093**	J	**0.11**	J	**0.3**		**0.2**		- -		- -		- -		-	-
Chrysene	1	3.9	1	**0.37**		**1.3**		**1.2**		**1.2**		- -		- -		- -		-	-
Di-n-butylphthalate				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Di-n-octylphthalate				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Dibenzo(a,h)anthracene	0.33	0.33	1000	**0.05**	J	**0.23**		**0.18**		**0.21**		- -		- -		- -		-	-
Dibenzofuran	7	59	210	**0.031**	J	**0.076**	J	**0.2**		**0.14**	J	- -		- -		- -		-	-
Diethyl phthalate				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Dimethyl phthalate				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Fluoranthene	100	100	1000	**0.88**		**2.6**		**2.5**		**2.3**		- -		- -		- -		-	-
Fluorene	30	100	386	**0.035**	J	**0.14**	J	**0.35**		**0.2**		- -		- -		- -		-	-
Hexachlorobenzene	0.33	1.2	3.2	0.14	U	0.13	U	0.1	U	0.11	U	- -		- -		- -		-	-
Hexachlorobutadiene				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Hexachlorocyclopentadiene				0.7	U	0.63	U	0.49	U	0.53	U	- -		- -		- -		-	-
Hexachloroethane				0.19	U	0.18	U	0.14	U	0.15	U	- -		- -		- -		-	-
Indeno(1,2,3-cd)pyrene	0.5	0.5	8.2	**0.24**		**1**		**0.68**		**0.76**		- -		- -		- -		-	-
Isophorone				0.22	U	0.2	U	0.16	U	0.17	U	- -		- -		- -		-	-
n-Nitrosodi-n-propylamine				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Naphthalene	12	100	12	**0.04**	J	**0.11**	J	**0.28**		**0.21**		- -		- -		- -		-	-
NDPA/DPA				0.19	U	0.18	U	0.14	U	0.15	U	- -		- -		- -		-	-
Nitrobenzene				0.22	U	0.2	U	0.16	U	0.17	U	- -		- -		- -		-	-
p-Chloro-m-cresol				0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-

LOCATION				**SS-109**		**SS-110**		**SS-111**		**SS-112**		**SS-113**		**SS-114**		**SS-115**		**SS-116**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**	
LAB SAMPLE ID				**L2543652-08**		**L2543652-09**		**L2547832-01**		**L2547832-02**		**L2547833-01**		**L2547833-02**		**L2547833-03**		**L2547833-04**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Pentachlorophenol	0.8	6.7	0.8	0.19	U	0.18	U	0.14	U	0.15	U	- -		- -		- -		-	-
Phenanthrene	100	100	1000	**0.64**		**1.4**		**2.3**		**1.7**		- -		- -		- -		-	-
Phenol	0.33	100	0.33	0.24	U	0.22	U	0.17	U	0.18	U	- -		- -		- -		-	-
Pyrene	100	100	1000	**0.71**		**2.1**		**1.9**		**1.9**		- -		- -		- -		-	-
Polychlorinated Biphenyls by GC																			
Aroclor 1016	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1221	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1232	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1242	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1248	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1254	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1260	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1262	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Aroclor 1268	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
PCBs, Total	0.1	1	3.2	0.0684	U	- -		-	-	- -		- -		- -		- -		-	-
Organochlorine Pesticides by GC																			
4,4'-DDD	0.0033	13	14	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
4,4'-DDE	0.0033	8.9	17	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
4,4'-DDT	0.0033	7.9	136	0.00199	J	- -		-	-	- -		- -		- -		- -		-	-
Aldrin	0.005	0.097	0.19	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Alpha-BHC	0.02	0.48	0.02	0.000944	U	- -		-	-	- -		- -		- -		- -		-	-
Beta-BHC	0.036	0.36	0.09	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Chlordane				0.0189	U	- -		-	-	- -		- -		- -		- -		-	-
cis-Chlordane	0.094	4.2	2.9	0.00283	U	- -		-	-	- -		- -		- -		- -		-	-
Delta-BHC	0.04	100	0.25	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Dieldrin	0.005	0.2	0.1	0.00142	U	- -		-	-	- -		- -		- -		- -		-	-
Endosulfan I	2.4	24	102	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Endosulfan II	2.4	24	102	0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Endosulfan sulfate	2.4	24	1000	0.000944	U	- -		-	-	- -		- -		- -		- -		-	-
Endrin	0.014	11	0.06	0.000944	U	- -		-	-	- -		- -		- -		- -		-	-
Endrin aldehyde				0.00283	U	- -		-	-	- -		- -		- -		- -		-	-
Endrin ketone				0.00227	U	- -		-	-	- -		- -		- -		- -		-	-
Heptachlor	0.042	2.1	0.38	0.00113	U	- -		-	-	- -		- -		- -		- -		-	-
Heptachlor epoxide				0.00425	U	- -		-	-	- -		- -		- -		- -		-	-
Lindane	0.1	1.3	0.1	0.000944	U	- -		-	-	- -		- -		- -		- -		-	-
Methoxychlor				0.00425	U	- -		-	-	- -		- -		- -		- -		-	-
Toxaphene				0.0425	U	- -		-	-	- -		- -		- -		- -		-	-
trans-Chlordane				0.00283	U	- -		-	-	- -		- -		- -		- -		-	-
Chlorinated Herbicides by GC																			
2,4,5-T				0.242	U	- -		-	-	- -		- -		- -		- -		-	-
2,4,5-TP (Silvex)	3.8	100	3.8	0.242	U	- -		-	-	- -		- -		- -		- -		-	-
2,4-D				0.242	U	- -		-	-	- -		- -		- -		- -		-	-
Total Metals																			
Aluminum, Total				**6690**		**4600**		**1240**		**5230**		- -		- -		- -		-	-
Antimony, Total				5.92	U	5.3	U	41.1	U	4.22	U	- -		- -		- -		-	-
Arsenic, Total	13	16	16	**7.85**		**4.91**		8.23	U	**6.49**		- -		- -		- -		-	-
Barium, Total	350	400	820	**103**		**67.5**		**17.5**		**85.8**		- -		- -		- -		-	-
Beryllium, Total	7.2	72	47	**0.441**	J	**0.265**	J	4.11	U	**0.34**	J	- -		- -		- -		-	-
Cadmium, Total	2.5	4.3	7.5	**0.482**	J	1.06	U	8.23	U	**0.245**	J	- -		- -		- -		-	-
Calcium, Total				**14200**		**23400**		**270000**		**40800**		- -		- -		- -		-	-
Chromium, Total				**14.3**		**9.21**		8.23	U	**8.5**		- -		- -		- -		-	-
Cobalt, Total				**6.47**		**5.09**		16.4	U	**7.89**		- -		- -		- -		-	-
Copper, Total	50	270	1720	**72**		**14.4**		**7.7**	J	**89.8**		- -		- -		- -		-	-
Cyanide, Total	27	27	40	1.4	U	**0.31**	J	1	U	1.1	U	- -		- -		- -		-	-
Iron, Total				**17200**		**10300**		**3210**		**11400**		- -		- -		- -		-	-
Lead, Total	63	400	450	**190**		**33.8**		**18.6**	J	**92.5**		**81.9**		**33.1**		**63.7**		**212**	
Magnesium, Total				**5700**		**9290**		**6600**		**11900**		- -		- -		- -		-	-
Manganese, Total	1600	2000	2000	**396**		**311**		**137**		**302**		- -		- -		- -		-	-
Mercury, Total	0.18	0.81	0.73	**1.15**		**0.11**		**0.147**		**0.106**		- -		- -		- -		-	-
Nickel, Total	30	310	130	**15.9**		**15.3**		20.6	U	**14.1**		- -		- -		- -		-	-
Potassium, Total				**1100**		**941**		2060	U	**572**		- -		- -		- -		-	-
Selenium, Total	3.9	180	4	**0.896**	J	2.12	U	16.4	U	1.69	U	- -		- -		- -		-	-
Silver, Total	2	180	8.3	0.592	U	**0.809**		4.11	U	0.422	U	- -		- -		- -		-	-
Sodium, Total				237	U	212	U	1640	U	**176**		- -		- -		- -		-	-
Thallium, Total				2.37	U	2.12	U	16.4	U	1.69	U	- -		- -		- -		-	-
Vanadium, Total				**16.3**		**10.2**		**4**	J	**11.9**		- -		- -		- -		-	-
Zinc, Total	109	10000	2480	**231**		**46.8**		**19**	J	**77**		- -		- -		- -		-	-

Table 2
Old Erie Commons - Remedial Investigation
Surface Soil Data Summary

LOCATION				**SS-109**		**SS-110**		**SS-111**		**SS-112**		**SS-113**		**SS-114**		**SS-115**		**SS-116**	
SAMPLING DATE				**7/11/2025**		**7/11/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**		**7/30/2025**	
LAB SAMPLE ID				**L2543652-08**		**L2543652-09**		**L2547832-01**		**L2547832-02**		**L2547833-01**		**L2547833-02**		**L2547833-03**		**L2547833-04**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (in.)				**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**		**0-2**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Perfluorinated Alkyl Acids by EPA 1633																			
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)				4.98	U	- -		-	-	- -		- -		- -		- -		-	-
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)				4.98	U	- -		-	-	- -		- -		- -		- -		-	-
3-Perfluoropropyl Propanoic Acid (3:3FTCA)				0.997	U	- -		-	-	- -		- -		- -		- -		-	-
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				0.798	U	- -		-	-	- -		- -		- -		- -		-	-
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)				1.99	U	- -		-	-	- -		- -		- -		- -		-	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)				1.99	U	- -		-	-	- -		- -		- -		- -		-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)				0.399	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)				0.399	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluoro-3-Methoxypropanoic Acid (PFMPA)				0.399	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluoro-4-Methoxybutanoic Acid (PFMBA)				0.399	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorobutanesulfonic Acid (PFBS)				**0.057**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluorobutanoic Acid (PFBA)				**0.56**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluorodecanesulfonic Acid (PFDS)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorodecanoic Acid (PFDA)				**0.144**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluorododecanesulfonic Acid (PFDoS)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorododecanoic Acid (PFDoA)				**0.049**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluoroheptanesulfonic Acid (PFHpS)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluoroheptanoic Acid (PFHpA)				**0.283**		- -		-	-	- -		- -		- -		- -		-	-
Perfluorohexanesulfonic Acid (PFHxS)				**0.056**	JF	- -		-	-	- -		- -		- -		- -		-	-
Perfluorohexanoic Acid (PFHxA)				**0.196**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluorononanesulfonic Acid (PFNS)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorononanoic Acid (PFNA)				**0.436**		- -		-	-	- -		- -		- -		- -		-	-
Perfluorooctanesulfonamide (PFOSA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	1	**1.53**		- -		-	-	- -		- -		- -		- -		-	-
Perfluorooctanoic Acid (PFOA)	0.66	33	0.8	**0.93**		- -		-	-	- -		- -		- -		- -		-	-
Perfluoropentanesulfonic Acid (PFPeS)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluoropentanoic Acid (PFPeA)				**0.19**	J	- -		-	-	- -		- -		- -		- -		-	-
Perfluorotetradecanoic Acid (PFTeDA)				0.199	U	- -		-	-	- -		- -		- -		- -		-	-
Perfluorotridecanoic Acid (PFTrDA)				**0.053**	JF	- -		-	-	- -		- -		- -		- -		-	-
Perfluoroundecanoic Acid (PFUnA)				**0.182**	J	- -		-	-	- -		- -		- -		- -		-	-
Asbestos in Bulk																			
Asbestos Fibers				- -		- -		-	-	- -		- -		- -		- -		-	-

Notes:

- Analytical data compared to NYSDEC Part 375-6.
- Results and soil cleanup objectives (SCO) in parts per million (ppm), except for PFAS which is in parts per billion (ppb).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates the respective use SCO(s) exceeded. Use type SCOs are listed from left to right from most restrictive to least restrictive.
- Blank space indicates that a SCO does not exist.
- Duplicate sample shown to the right of the parent sample.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "F" indicates the ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- "I" indicates the lower value for the two columns has been reported due to obvious interference.
- "P" indicates the RPD between the results for the two columns exceeds the method-specified criteria.
- "ND" indicates that asbestos was not detected in the respective sample.
- "-" indicates that sample was not anlayzed for that parameter.

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				TP-101 FILL		TP-101 NATIVE		TP-102 FILL		TP-102 NATIVE		TP-103 FILL		TP-103 NATIVE		TP-104 FILL		TP-104 NATIVE		TP-105 FILL		DUP-02	
SAMPLING DATE				7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-01		L2547432-02		L2547174-01		L2547174-02		L2547174-03		L2547174-04		L2547174-05		L2547174-06		L2547432-15		L2547432-17	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				1-1.5		2.5-3		1.5-2		3-3.5		3-4		6-7		2-3		6-6.5		2-3		2-3	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by EPA 5035																							
1,1,1-Trichloroethane	0.68	100	0.68	0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
1,1,2,2-Tetrachloroethane				0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
1,1,2-Trichloroethane				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,1-Dichloroethane	0.27	26	0.27	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,1-Dichloroethene	0.33	100	0.33	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,2,4-Trichlorobenzene				0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
1,2-Dibromo-3-chloropropane				0.0036	U	0.0032	U	- -		- -		- -		- -		- -		- -		0.0051	U	0.005	U
1,2-Dibromoethane				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,2-Dichlorobenzene	1.1	100	1.1	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,2-Dichloropropane				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
1,3,5-Trimethylbenzene	8.4	52	8.4	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
1,3-Dichlorobenzene	2.4	49	2.4	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
1,4-Dichlorobenzene	1.8	13	1.8	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
2-Butanone	0.12	100	0.12	0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
2-Hexanone				0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
4-Methyl-2-pentanone				0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
Acetone	0.05	100	0.05	0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
Benzene	0.06	4.8	0.06	0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Bromodichloromethane				0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Bromoform				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
Bromomethane				0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
Carbon disulfide				0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
Carbon tetrachloride	0.76	2.4	0.76	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Chlorobenzene	1.1	100	1.1	0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Chloroethane				0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
Chloroform	0.37	49	0.37	0.0018	U	0.0016	U	- -		- -		- -		- -		- -		- -		0.0025	U	0.0025	U
Chloromethane				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
cis-1,2-Dichloroethene	0.25	100	0.25	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
cis-1,3-Dichloropropene				0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Cyclohexane				0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
Dibromochloromethane				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Dichlorodifluoromethane				0.012	U	0.01	U	- -		- -		- -		- -		- -		- -		0.017	U	0.016	U
Ethylbenzene	1	41	1	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Freon-113				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
Isopropylbenzene				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Methyl Acetate				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
Methyl cyclohexane				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
Methyl tert butyl ether	0.93	100	0.93	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
Methylene chloride	0.05	100	0.05	0.006	U	0.0053	U	- -		- -		- -		- -		- -		- -		0.0085	U	0.0083	U
n-Butylbenzene	12	100	12	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
n-Propylbenzene	3.9	100	3.9	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Naphthalene	12	100	12	**0.0013**	J	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
o-Xylene				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
p-Isopropyltoluene				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
p/m-Xylene				0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
sec-Butylbenzene	11	100	11	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Styrene				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
tert-Butylbenzene	5.9	100	5.9	0.0024	U	0.0021	U	- -		- -		- -		- -		- -		- -		0.0034	U	0.0033	U
Tetrachloroethene	1.3	19	1.3	0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Toluene	0.7	100	0.7	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
trans-1,2-Dichloroethene	0.19	100	0.19	0.0018	U	0.0016	U	- -		- -		- -		- -		- -		- -		0.0025	U	0.0025	U
trans-1,3-Dichloropropene				0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U
Trichloroethene	0.47	21	0.47	0.0006	U	0.00053	U	- -		- -		- -		- -		- -		- -		0.00085	U	0.00083	U
Trichlorofluoromethane				0.0048	U	0.0042	U	- -		- -		- -		- -		- -		- -		0.0068	U	0.0066	U
Vinyl chloride	0.02	0.9	0.02	0.0012	U	0.001	U	- -		- -		- -		- -		- -		- -		0.0017	U	0.0016	U

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				**TP-101 FILL**		**TP-101 NATIVE**		**TP-102 FILL**		**TP-102 NATIVE**		**TP-103 FILL**		**TP-103 NATIVE**		**TP-104 FILL**		**TP-104 NATIVE**		**TP-105 FILL**		**DUP-02**	
SAMPLING DATE				**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-01**		**L2547432-02**		**L2547174-01**		**L2547174-02**		**L2547174-03**		**L2547174-04**		**L2547174-05**		**L2547174-06**		**L2547432-15**		**L2547432-17**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**1-1.5**		**2.5-3**		**1.5-2**		**3-3.5**		**3-4**		**6-7**		**2-3**		**6-6.5**		**2-3**		**2-3**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Semivolatile Organics by GC/MS																							
1,2,4,5-Tetrachlorobenzene				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
1,4-Dioxane	0.1	13	0.1	0.027	U	0.031	U	0.028	U	0.032	U	0.034	U	0.029	U	0.16	U	0.029	U	0.033	U	0.033	U
2,3,4,6-Tetrachlorophenol				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2,4,5-Trichlorophenol				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2,4,6-Trichlorophenol				0.11	U	0.12	U	0.11	U	0.13	U	0.14	U	0.12	U	0.64	U	0.12	U	0.13	U	0.13	U
2,4-Dichlorophenol				0.16	U	0.19	U	0.17	U	0.19	U	0.2	U	0.18	U	0.96	U	0.18	U	0.2	U	0.2	U
2,4-Dimethylphenol				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2,4-Dinitrophenol				0.87	U	1	U	0.9	U	1	U	1.1	U	0.94	U	5.1	U	0.94	U	1	U	1	U
2,4-Dinitrotoluene				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2,6-Dinitrotoluene				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2-Chloronaphthalene				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	**0.024**	J	0.22	U
2-Chlorophenol				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2-Methylnaphthalene				**0.16**	J	0.25	U	0.22	U	0.26	U	**0.062**	J	0.24	U	**0.74**	J	0.23	U	**0.52**		**0.34**	
2-Methylphenol	0.33	100	0.33	0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2-Nitroaniline				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
2-Nitrophenol				0.39	U	0.45	U	0.4	U	0.46	U	0.49	U	0.42	U	2.3	U	0.42	U	0.47	U	0.48	U
3,3'-Dichlorobenzidine				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
3-Methylphenol/4-Methylphenol	0.33	100	0.33	**0.045**	J	0.3	U	0.27	U	0.31	U	0.32	U	0.28	U	1.5	U	0.28	U	**0.074**	J	**0.07**	J
3-Nitroaniline				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
4,6-Dinitro-o-cresol				0.47	U	0.54	U	0.48	U	0.56	U	0.58	U	0.51	U	2.8	U	0.51	U	0.57	U	0.57	U
4-Bromophenyl phenyl ether				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
4-Chloroaniline				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
4-Chlorophenyl phenyl ether				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
4-Nitroaniline				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
4-Nitrophenol				0.26	U	0.29	U	0.26	U	0.3	U	0.32	U	0.28	U	1.5	U	0.27	U	0.3	U	0.31	U
Acenaphthene	20	100	98	**0.18**		0.17	U	0.15	U	0.17	U	**0.075**	J	0.16	U	0.86	U	0.16	U	**0.87**		**0.52**	
Acenaphthylene	100	100	107	**1**		**0.12**	J	0.15	U	0.17	U	**0.22**		0.16	U	**1.2**		0.16	U	**0.14**	J	**0.15**	J
Acetophenone				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	**0.035**	J	0.22	U
Anthracene	100	100	1000	**0.96**		**0.094**	J	0.11	U	0.13	U	**0.29**		0.12	U	**0.56**	J	0.12	U	**1.6**		**1**	
Atrazine				0.14	U	0.17	U	0.15	U	0.17	U	0.18	U	0.16	U	0.86	U	0.16	U	0.17	U	0.18	U
Benzaldehyde				0.24	U	0.28	U	0.25	U	0.28	U	0.3	U	0.26	U	1.4	U	0.26	U	**0.11**	J	**0.086**	J
Benzo(a)anthracene	1	1	1	**3**		**0.34**		**0.073**	J	0.13	U	**0.67**		0.12	U	**1.9**		0.12	U	**3.5**		**2.4**	
Benzo(a)pyrene	1	1	22	**3**		**0.31**		**0.066**	J	0.17	U	**0.61**		0.16	U	**2.5**		0.16	U	**3.2**		**2.2**	
Benzo(b)fluoranthene	1	1	1.7	**4**		**0.39**		**0.088**	J	0.13	U	**0.81**		0.12	U	**3.9**		0.12	U	**4.4**		**3**	
Benzo(ghi)perylene	100	100	1000	**1.8**		**0.17**		**0.058**	J	0.17	U	**0.42**		0.16	U	**1.9**		0.16	U	**1.6**		**1**	
Benzo(k)fluoranthene	0.8	3.9	1.7	**1**		**0.13**		0.11	U	0.13	U	**0.21**		0.12	U	**1**		0.12	U	**1.1**		**0.84**	
Biphenyl				**0.033**	J	0.48	U	0.42	U	0.49	U	0.51	U	0.45	U	2.4	U	0.45	U	**0.095**	J	**0.064**	J
Bis(2-chloroethoxy)methane				0.2	U	0.22	U	0.2	U	0.23	U	0.24	U	0.21	U	1.2	U	0.21	U	0.24	U	0.24	U
Bis(2-chloroethyl)ether				0.16	U	0.19	U	0.17	U	0.19	U	0.2	U	0.18	U	0.96	U	0.18	U	0.2	U	0.2	U
Bis(2-chloroisopropyl)ether				0.22	U	0.25	U	0.22	U	0.26	U	0.27	U	0.24	U	1.3	U	0.23	U	0.26	U	0.26	U
Bis(2-ethylhexyl)phthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Butyl benzyl phthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Caprolactam				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Carbazole				**0.21**		0.21	U	0.19	U	0.21	U	**0.15**	J	0.2	U	**0.73**	J	0.2	U	**0.8**		**0.49**	
Chrysene	1	3.9	1	**2.4**		**0.3**		**0.075**	J	0.13	U	**0.71**		0.12	U	**2.7**		0.12	U	**3.1**		**2.2**	
Di-n-butylphthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	**0.22**	J	0.2	U	0.22	U	0.22	U
Di-n-octylphthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Dibenzo(a,h)anthracene	0.33	0.33	1000	**0.5**		**0.051**	J	0.11	U	0.13	U	**0.1**	J	0.12	U	**0.49**	J	0.12	U	**0.44**		**0.28**	
Dibenzofuran	7	59	210	0.14	J	0.21	U	0.19	U	0.21	U	**0.063**	J	0.2	U	**0.46**	J	0.2	U	**0.55**		**0.34**	
Diethyl phthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Dimethyl phthalate				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Fluoranthene	100	100	1000	**3.9**		**0.52**		**0.17**		0.13	U	**1.3**		0.12	U	**4.7**		0.12	U	**6**		**4**	
Fluorene	30	100	386	**0.25**		**0.026**	J	0.19	U	0.21	U	**0.1**	J	0.2	U	**0.34**	J	0.2	U	**0.8**		**0.44**	
Hexachlorobenzene	0.33	1.2	3.2	0.11	U	0.12	U	0.11	U	0.13	U	0.14	U	0.12	U	0.64	U	0.12	U	0.13	U	0.13	U
Hexachlorobutadiene				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Hexachlorocyclopentadiene				0.52	U	0.6	U	0.53	U	0.61	U	0.64	U	0.56	U	3.1	U	0.56	U	0.62	U	0.63	U
Hexachloroethane				0.14	U	0.17	U	0.15	U	0.17	U	0.18	U	0.16	U	0.86	U	0.16	U	0.17	U	0.18	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	8.2	**2**		**0.18**		**0.044**	J	0.17	U	**0.42**		0.16	U	**2.2**		0.16	U	**1.8**		**1.2**	
Isophorone				0.16	U	0.19	U	0.17	U	0.19	U	0.2	U	0.18	U	0.96	U	0.18	U	0.2	U	0.2	U
n-Nitrosodi-n-propylamine				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Naphthalene	12	100	12	**0.28**		**0.033**	J	0.19	U	0.21	U	**0.11**	J	0.2	U	**0.55**	J	0.2	U	**0.96**		**0.64**	
NDPA/DPA				0.14	U	0.17	U	0.15	U	0.17	U	0.18	U	0.16	U	0.86	U	0.16	U	0.17	U	0.18	U
Nitrobenzene				0.16	U	0.19	U	0.17	U	0.19	U	0.2	U	0.18	U	0.96	U	0.18	U	0.2	U	0.2	U

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				TP-101 FILL		TP-101 NATIVE		TP-102 FILL		TP-102 NATIVE		TP-103 FILL		TP-103 NATIVE		TP-104 FILL		TP-104 NATIVE		TP-105 FILL		DUP-02	
SAMPLING DATE				7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-01		L2547432-02		L2547174-01		L2547174-02		L2547174-03		L2547174-04		L2547174-05		L2547174-06		L2547432-15		L2547432-17	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				1-1.5		2.5-3		1.5-2		3-3.5		3-4		6-7		2-3		6-6.5		2-3		2-3	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
p-Chloro-m-cresol				0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Pentachlorophenol	0.8	6.7	0.8	0.14	U	0.17	U	0.15	U	0.17	U	0.18	U	0.16	U	0.86	U	0.16	U	0.17	U	0.18	U
Phenanthrene	100	100	1000	**1.9**		**0.2**		**0.16**		0.13	U	**1.1**		0.12	U	**2.7**		0.12	U	**5.9**		**3.5**	
Phenol	0.33	100	0.33	0.18	U	0.21	U	0.19	U	0.21	U	0.22	U	0.2	U	1.1	U	0.2	U	0.22	U	0.22	U
Pyrene	100	100	1000	**3.4**		**0.45**		**0.14**		0.13	U	**1.2**		0.12	U	**3.7**		0.12	U	**4.8**		**3.3**	
Polychlorinated Biphenyls by GC																							
Aroclor 1016	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1221	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1232	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1242	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1248	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1254	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1260	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1262	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Aroclor 1268	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
PCBs, Total	0.1	1	3.2	0.053	U	0.0584	U	- -		- -		0.0654	U	0.058	U	- -		- -		0.064	U	0.0642	U
Organochlorine Pesticides by GC																							
4,4'-DDD	0.0033	13	14	**0.00188**	IP	**0.00073**	JIP	- -		- -		0.00215	U	0.00185	U	- -		- -		**0.000969**	JIP	0.0021	U
4,4'-DDE	0.0033	8.9	17	**0.00246**		**0.000974**	J	- -		- -		0.00215	U	0.00185	U	- -		- -		**0.00326**		0.0021	U
4,4'-DDT	0.0033	7.9	136	**0.00958**		**0.00292**		- -		- -		0.00215	U	0.00185	U	- -		- -		**0.00324**	IP	0.0021	U
Aldrin	0.005	0.097	0.19	0.00174	U	0.00201	U	- -		- -		0.00215	U	0.00185	U	- -		- -		0.00204	U	0.0021	U
Alpha-BHC	0.02	0.48	0.02	0.000725	U	0.000839	U	- -		- -		0.000898	U	0.000772	U	- -		- -		0.000848	U	0.000873	U
Beta-BHC	0.036	0.36	0.09	0.00174	U	0.00201	U	- -		- -		0.00215	U	0.00185	U	- -		- -		0.00204	U	0.0021	U
cis-Chlordane	0.094	4.2	2.9	**0.0148**	IP	**0.00948**		- -		- -		0.00269	U	0.00231	U	- -		- -		0.00254	U	**0.000773**	JIP
Delta-BHC	0.04	100	0.25	0.00174	U	0.00201	U	- -		- -		0.00215	U	0.00185	U	- -		- -		0.00204	U	0.0021	U
Dieldrin	0.005	0.2	0.1	0.00109	U	0.00126	U	- -		- -		0.00135	U	0.00116	U	- -		- -		0.00127	U	0.00131	U
Endosulfan I	2.4	24	102	0.00174	U	0.00201	U	- -		- -		0.00215	U	0.00185	U	- -		- -		0.00204	U	0.0021	U
Endosulfan II	2.4	24	102	0.00174	U	0.00201	U	- -		- -		0.00215	U	0.00185	U	- -		- -		0.00204	U	0.0021	U
Endosulfan sulfate	2.4	24	1000	0.000725	U	0.000839	U	- -		- -		0.000898	U	0.000772	U	- -		- -		0.000848	U	0.000873	U
Endrin	0.014	11	0.06	0.000725	U	0.000839	U	- -		- -		0.000898	U	0.000772	U	- -		- -		0.000848	U	0.000873	U
Heptachlor	0.042	2.1	0.38	0.00087	U	0.00101	U	- -		- -		0.00108	U	0.000926	U	- -		- -		0.00102	U	0.00105	U
Lindane	0.1	1.3	0.1	0.000725	U	0.000839	U	- -		- -		0.000898	U	0.000772	U	- -		- -		0.000848	U	0.000873	U
Chlorinated Herbicides by GC																							
2,4,5-TP (Silvex)	3.8	100	3.8	0.186	U	0.211	U	- -		- -		0.227	U	0.2	U	- -		- -		0.216	U	0.217	U
Total Metals																							
Aluminum, Total				**1020**		**6750**		**2680**		**2460**		**7500**		**6180**		**2760**		**5610**		**3030**		**5510**	
Antimony, Total				4.35	U	4.87	U	4.3	U	26.1	U	5.29	U	4.74	U	4.96	U	4.67	U	5.15	U	5.17	U
Arsenic, Total	13	16	16	**3.02**		**3.88**		**12.6**		**3.14**	J	**42.4**		**4.16**		**9.8**		**3.66**		**12.4**		**14.5**	
Barium, Total	350	400	820	**68.3**		**52.4**		**29.6**		**70.1**		**104**		**69.7**		**92.3**		**105**		**139**		**167**	
Beryllium, Total	7.2	72	47	**0.075**	J	**0.348**	J	**0.169**	J	2.61	U	**0.463**	J	**0.358**	J	**0.474**	J	**0.334**	J	**0.652**		**1.16**	
Cadmium, Total	2.5	4.3	7.5	**0.14**	J	**0.202**	J	0.86	U	5.22	U	**0.068**	J	0.949	U	**0.184**	J	0.933	U	**0.474**	J	**0.529**	J
Calcium, Total				**31900**		**23300**		**12300**		**194000**		**30600**		**19500**		**13600**		**2140**		**14800**		**22100**	
Chromium, Total				**2.66**		**10.8**		**5.38**		**4.97**	J	**12.4**		**10.6**		**6.75**		**11.5**		**7.69**		**9.82**	
Cobalt, Total				**1.14**	J	**6.62**		**4.01**		**2.06**	J	**7.24**		**6.09**		**4.99**		**5.2**		**4.58**		**5.89**	
Copper, Total	50	270	1720	**13.8**		**52.7**		**40.1**		**2.8**	J	**14.3**		**1.01**		**71.6**		**1.24**		**30**		**43.6**	
Cyanide, Total	27	27	40	1.1	U	1.2	U	1.1	U	1.3	U	1.3	U	1.1	U	**0.36**	J	1.1	U	1.2	U	1.2	U
Iron, Total				**2830**		**14700**		**6710**		**8790**		**19900**		**17000**		**11500**		**12300**		**11400**		**11300**	
Lead, Total	63	400	450	**51.6**		**178**		**44.6**		**17.5**	J	**67.1**		**2.66**	J	**128**		**1.96**	J	**118**		**203**	
Magnesium, Total				**4150**		**14200**		**11300**		**6840**		**8290**		**6460**		**2340**		**4140**		**6580**		**4380**	
Manganese, Total	1600	2000	2000	**102**		**341**		**215**		**1130**		**468**		**335**		**160**		**111**		**223**		**226**	
Mercury, Total	0.18	0.81	0.73	**0.162**		**0.345**		0.075	U	0.105	U	**0.069**	J	0.088	U	**0.131**		0.076	U	**0.089**		**0.172**	
Nickel, Total	30	310	130	**2.79**		**17**		**8.2**		**6.86**	J	**14.4**		**23.2**		**10.8**		**22.1**		**9.16**		**12.9**	
Potassium, Total				**189**	J	**664**		**384**		**615**	J	**856**		**1240**		**368**		**1250**		**427**		**725**	
Selenium, Total	3.9	180	4	1.74	U	1.95	U	1.72	U	10.4	U	**0.547**	J	1.9	U	**0.847**	J	1.87	U	**0.569**	J	**0.539**	J
Silver, Total	2	180	8.3	0.435	U	0.487	U	0.43	U	2.61	U	0.529	U	0.474	U	0.496	U	0.467	U	0.515	U	0.517	U
Sodium, Total				174	U	195	U	172	U	1040	U	212	U	190	U	199	U	187	U	206	U	**162**	J
Thallium, Total				1.74	U	1.95	U	1.72	U	10.4	U	2.12	U	1.9	U	1.99	U	1.87	U	2.06	U	2.07	U
Vanadium, Total				**3.09**		**11.5**		**10.5**		**6.42**		**20**		**12.8**		**13.8**		**11.7**		**20.9**		**18.6**	
Zinc, Total	109	10000	2480	**41.6**		**95.9**		**30.4**		**9.4**	J	**67.6**		**18.9**		**138**		**18.8**		**114**		**157**	

LOCATION				**TP-101 FILL**		**TP-101 NATIVE**		**TP-102 FILL**		**TP-102 NATIVE**		**TP-103 FILL**		**TP-103 NATIVE**		**TP-104 FILL**		**TP-104 NATIVE**		**TP-105 FILL**		**DUP-02**	
SAMPLING DATE				**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-01**		**L2547432-02**		**L2547174-01**		**L2547174-02**		**L2547174-03**		**L2547174-04**		**L2547174-05**		**L2547174-06**		**L2547432-15**		**L2547432-17**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**1-1.5**		**2.5-3**		**1.5-2**		**3-3.5**		**3-4**		**6-7**		**2-3**		**6-6.5**		**2-3**		**2-3**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Perfluorinated Alkyl Acids by EPA 1633																							
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	**0.238**	J
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)				5.6	U	6.38	U	- -		- -		5	U	5	U	- -		- -		6.61	U	6.68	U
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)				5.6	U	6.38	U	- -		- -		5	U	5	U	- -		- -		6.61	U	6.68	U
3-Perfluoropropyl Propanoic Acid (3:3FTCA)				1.12	U	1.28	U	- -		- -		1	U	0.999	U	- -		- -		1.32	U	1.34	U
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				0.896	U	1.02	U	- -		- -		0.8	U	0.799	U	- -		- -		1.06	U	1.07	U
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)				2.24	U	2.55	U	- -		- -		2	U	2	U	- -		- -		2.64	U	2.67	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)				2.24	U	2.55	U	- -		- -		2	U	2	U	- -		- -		2.64	U	2.67	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)				0.448	U	0.51	U	- -		- -		0.4	U	0.4	U	- -		- -		0.529	U	0.534	U
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)				0.448	U	0.51	U	- -		- -		0.4	U	0.4	U	- -		- -		0.529	U	0.534	U
Perfluoro-3-Methoxypropanoic Acid (PFMPA)				0.448	U	0.51	U	- -		- -		0.4	U	0.4	U	- -		- -		0.529	U	0.534	U
Perfluoro-4-Methoxybutanoic Acid (PFMBA)				0.448	U	0.51	U	- -		- -		0.4	U	0.4	U	- -		- -		0.529	U	0.534	U
Perfluorobutanesulfonic Acid (PFBS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorobutanoic Acid (PFBA)				**0.138**	J	**0.053**	J	- -		- -		**0.049**	J	0.799	U	- -		- -		**0.202**	J	**0.176**	J
Perfluorodecanesulfonic Acid (PFDS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorodecanoic Acid (PFDA)				**0.124**	J	**0.056**	J	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorododecanesulfonic Acid (PFDoS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorododecanoic Acid (PFDoA)				**0.049**	J	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluoroheptanesulfonic Acid (PFHpS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluoroheptanoic Acid (PFHpA)				**0.09**	J	**0.089**	J	- -		- -		0.2	U	0.2	U	- -		- -		**0.085**	J	**0.141**	J
Perfluorohexanesulfonic Acid (PFHxS)				**0.05**	J	**0.12**	J	- -		- -		0.2	U	0.2	U	- -		- -		**0.075**	J	**0.036**	J
Perfluorohexanoic Acid (PFHxA)				**0.082**	J	**0.079**	J	- -		- -		0.2	U	0.2	U	- -		- -		**0.089**	J	**0.104**	J
Perfluorononanesulfonic Acid (PFNS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorononanoic Acid (PFNA)				**0.093**	J	**0.156**	J	- -		- -		0.2	U	0.2	U	- -		- -		**0.04**	J	**0.098**	J
Perfluorooctanesulfonamide (PFOSA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	1	**1.03**		**1.32**		- -		- -		**0.06**	J	0.2	U	- -		- -		**0.251**	J	**0.287**	
Perfluorooctanoic Acid (PFOA)	0.66	33	0.8	**0.254**		**0.424**		- -		- -		**0.054**	J	0.2	U	- -		- -		**0.261**	J	**0.363**	
Perfluoropentanesulfonic Acid (PFPeS)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluoropentanoic Acid (PFPeA)				**0.093**	J	**0.06**	J	- -		- -		0.4	U	0.4	U	- -		- -		**0.08**	J	**0.079**	J
Perfluorotetradecanoic Acid (PFTeDA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluorotridecanoic Acid (PFTrDA)				0.224	U	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	0.267	U
Perfluoroundecanoic Acid (PFUnA)				**0.039**	JF	0.255	U	- -		- -		0.2	U	0.2	U	- -		- -		0.264	U	**0.033**	J
Asbestos in Bulk																							
Asbestos Fibers				- -		- -		ND		ND		- -		- -		- -		- -		- -		- -	

Notes:
- Analytical data compared to NYSDEC Part 375-6.
- Results and soil cleanup objectives (SCO) in parts per million (ppm), except for PFAS which is in parts per billion (ppb).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates the respective use SCO(s) exceeded. Use type SCOs are listed from left to right from most restrictive to least restrictive.
- Blank space indicates that a SCO does not exist.
- Duplicate sample results are located to the right of the parent sample results.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "F" indicates the ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- "I" indicates the lower value for the two columns has been reported due to obvious interference.
- "P" indicates the RPD between the results for the two columns exceeds the method-specified criteria.
- "ND" indicates that asbestos was not detected in the respective sample.
- "-" indicates that sample was not anlayzed for that parameter.

LOCATION				**TP-105 NATIVE**		**TP-106 FILL**		**TP-106 NATIVE**		**TP-107 FILL**		**TP-108 FILL**		**TP-108 NATIVE**		**TP-109 FILL**		**TP-109 NATIVE**		**TP-110 FILL**		**TP-110 NATIVE**	
SAMPLING DATE				**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-16**		**L2547174-07**		**L2547174-08**		**L2547432-03**		**L2547432-04**		**L2547432-05**		**L2547174-09**		**L2547174-10**		**L2547432-06**		**L2547432-07**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**6-6.5**		**2-3**		**6-7**		**2-3**		**2-2.5**		**5.5-6**		**2-3**		**5-6**		**2-2.5**		**5.5-6**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organics by EPA 5035																							
1,1,1-Trichloroethane	0.68	100	0.68	0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
1,1,2,2-Tetrachloroethane				0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
1,1,2-Trichloroethane				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,1-Dichloroethane	0.27	26	0.27	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,1-Dichloroethene	0.33	100	0.33	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,2,4-Trichlorobenzene				0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
1,2,4-Trimethylbenzene	3.6	52	3.6	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
1,2-Dibromo-3-chloropropane				0.0031	U	0.0054	U	0.0041	U	- -		- -		- -		- -		- -		- -		- -	
1,2-Dibromoethane				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,2-Dichlorobenzene	1.1	100	1.1	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
1,2-Dichloroethane	0.02	3.1	0.02	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,2-Dichloropropane				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
1,3,5-Trimethylbenzene	8.4	52	8.4	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
1,3-Dichlorobenzene	2.4	49	2.4	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
1,4-Dichlorobenzene	1.8	13	1.8	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
2-Butanone	0.12	100	0.12	0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
2-Hexanone				0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
4-Methyl-2-pentanone				0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
Acetone	0.05	100	0.05	0.01	U	0.018	U	**0.0097**	J	- -		- -		- -		- -		- -		- -		- -	
Benzene	0.06	4.8	0.06	0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Bromodichloromethane				0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Bromoform				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
Bromomethane				0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
Carbon disulfide				0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
Carbon tetrachloride	0.76	2.4	0.76	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Chlorobenzene	1.1	100	1.1	0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Chloroethane				0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
Chloroform	0.37	49	0.37	0.0015	U	0.0027	U	0.002	U	- -		- -		- -		- -		- -		- -		- -	
Chloromethane				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
cis-1,2-Dichloroethene	0.25	100	0.25	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
cis-1,3-Dichloropropene				0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Cyclohexane				0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
Dibromochloromethane				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Dichlorodifluoromethane				0.01	U	0.018	U	0.014	U	- -		- -		- -		- -		- -		- -		- -	
Ethylbenzene	1	41	1	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Freon-113				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
Isopropylbenzene				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Methyl Acetate				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
Methyl cyclohexane				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
Methyl tert butyl ether	0.93	100	0.93	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
Methylene chloride	0.05	100	0.05	0.0051	U	0.0091	U	0.0069	U	- -		- -		- -		- -		- -		- -		- -	
n-Butylbenzene	12	100	12	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
n-Propylbenzene	3.9	100	3.9	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Naphthalene	12	100	12	0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
o-Xylene				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
p-Isopropyltoluene				0.001	U	**0.00051**	J	**0.00037**	J	- -		- -		- -		- -		- -		- -		- -	
p/m-Xylene				0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
sec-Butylbenzene	11	100	11	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Styrene				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
tert-Butylbenzene	5.9	100	5.9	0.002	U	0.0036	U	0.0027	U	- -		- -		- -		- -		- -		- -		- -	
Tetrachloroethene	1.3	19	1.3	0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Toluene	0.7	100	0.7	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
trans-1,2-Dichloroethene	0.19	100	0.19	0.0015	U	0.0027	U	0.002	U	- -		- -		- -		- -		- -		- -		- -	
trans-1,3-Dichloropropene				0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	
Trichloroethene	0.47	21	0.47	0.00051	U	0.00091	U	0.00069	U	- -		- -		- -		- -		- -		- -		- -	
Trichlorofluoromethane				0.0041	U	0.0072	U	0.0055	U	- -		- -		- -		- -		- -		- -		- -	
Vinyl chloride	0.02	0.9	0.02	0.001	U	0.0018	U	0.0014	U	- -		- -		- -		- -		- -		- -		- -	

LOCATION				**TP-105 NATIVE**		**TP-106 FILL**		**TP-106 NATIVE**		**TP-107 FILL**		**TP-108 FILL**		**TP-108 NATIVE**		**TP-109 FILL**		**TP-109 NATIVE**		**TP-110 FILL**		**TP-110 NATIVE**	
SAMPLING DATE				**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-16**		**L2547174-07**		**L2547174-08**		**L2547432-03**		**L2547432-04**		**L2547432-05**		**L2547174-09**		**L2547174-10**		**L2547432-06**		**L2547432-07**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**6-6.5**		**2-3**		**6-7**		**2-3**		**2-2.5**		**5.5-6**		**2-3**		**5-6**		**2-2.5**		**5.5-6**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Semivolatile Organics by GC/MS																							
1,2,4,5-Tetrachlorobenzene				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
1,4-Dioxane	0.1	13	0.1	0.028	U	0.03	U	0.028	U	- -		0.031	U	0.028	U	0.16	U	0.03	U	0.027	U	0.029	U
2,3,4,6-Tetrachlorophenol				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2,4,5-Trichlorophenol				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2,4,6-Trichlorophenol				0.11	U	0.12	U	0.11	U	0.12	U	0.12	U	0.11	U	0.63	U	0.12	U	0.11	U	0.12	U
2,4-Dichlorophenol				0.17	U	0.18	U	0.17	U	0.18	U	0.19	U	0.17	U	0.94	U	0.18	U	0.16	U	0.17	U
2,4-Dimethylphenol				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2,4-Dinitrophenol				0.89	U	0.95	U	0.9	U	0.95	U	0.99	U	0.91	U	5	U	0.96	U	0.86	U	0.92	U
2,4-Dinitrotoluene				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2,6-Dinitrotoluene				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2-Chloronaphthalene				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2-Chlorophenol				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2-Methylnaphthalene				0.22	U	**0.11**	J	0.22	U	**0.069**	J	**0.43**		0.23	U	**0.84**	J	0.24	U	**0.1**	J	0.23	U
2-Methylphenol	0.33	100	0.33	0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2-Nitroaniline				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
2-Nitrophenol				0.4	U	0.43	U	0.4	U	0.43	U	0.45	U	0.41	U	2.2	U	0.43	U	0.38	U	0.41	U
3,3'-Dichlorobenzidine				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
3-Methylphenol/4-Methylphenol	0.33	100	0.33	0.27	U	0.28	U	0.27	U	0.29	U	**0.04**	J	0.27	U	1.5	U	0.29	U	0.26	U	0.28	U
3-Nitroaniline				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
4,6-Dinitro-o-cresol				0.48	U	0.51	U	0.49	U	0.52	U	0.54	U	0.49	U	2.7	U	0.52	U	0.46	U	0.5	U
4-Bromophenyl phenyl ether				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
4-Chloroaniline				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
4-Chlorophenyl phenyl ether				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
4-Nitroaniline				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
4-Nitrophenol				0.26	U	0.28	U	0.26	U	0.28	U	0.29	U	0.27	U	1.5	U	0.28	U	0.25	U	0.27	U
Acenaphthene	20	100	98	0.15	U	**0.11**	J	0.15	U	0.16	U	**0.37**		0.15	U	**2.6**		0.16	U	**0.095**	J	0.15	U
Acenaphthylene	100	100	107	0.15	U	**0.15**	J	0.15	U	0.16	U	**0.53**		0.15	U	**0.59**	J	0.16	U	**0.12**	J	0.15	U
Acetophenone				0.19	U	0.2	U	0.19	U	0.2	U	**0.051**	J	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Anthracene	100	100	1000	0.11	U	**0.37**		0.11	U	**0.04**	J	**1**		0.11	U	**6.5**		0.12	U	**0.51**		0.12	U
Atrazine				0.15	U	0.16	U	0.15	U	0.16	U	0.16	U	0.15	U	0.84	U	0.16	U	0.14	U	0.15	U
Benzaldehyde				0.24	U	**0.075**	J	0.25	U	0.26	U	**0.18**	J	0.25	U	1.4	U	0.26	U	0.24	U	0.25	U
Benzo(a)anthracene	1	1	1	0.11	U	**0.9**		**0.026**	J	**0.26**		**2.8**		0.11	U	**12**		0.12	U	**2**		0.12	U
Benzo(a)pyrene	1	1	22	0.15	U	**0.81**		0.15	U	**0.26**		**2.4**		0.15	U	**11**		0.16	U	**2**		0.15	U
Benzo(b)fluoranthene	1	1	1.7	0.11	U	**1.1**		0.11	U	**0.36**		**3**		0.11	U	**14**		0.12	U	**2.6**		0.12	U
Benzo(ghi)perylene	100	100	1000	0.15	U	**0.48**		0.15	U	**0.16**		**1.5**		0.15	U	**6.5**		0.16	U	**1.2**		0.15	U
Benzo(k)fluoranthene	0.8	3.9	1.7	0.11	U	**0.3**		0.11	U	**0.11**	J	**1.2**		0.11	U	**3.8**		0.12	U	**0.79**		0.12	U
Biphenyl				0.42	U	0.45	U	0.43	U	0.45	U	**0.071**	J	0.43	U	**0.2**	J	0.46	U	0.41	U	0.44	U
Bis(2-chloroethoxy)methane				0.2	U	0.21	U	0.2	U	0.21	U	0.22	U	0.2	U	1.1	U	0.22	U	0.19	U	0.21	U
Bis(2-chloroethyl)ether				0.17	U	0.18	U	0.17	U	0.18	U	0.19	U	0.17	U	0.94	U	0.18	U	0.16	U	0.17	U
Bis(2-chloroisopropyl)ether				0.22	U	0.24	U	0.22	U	0.24	U	0.25	U	0.23	U	1.2	U	0.24	U	0.21	U	0.23	U
Bis(2-ethylhexyl)phthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Butyl benzyl phthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Caprolactam				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Carbazole				0.19	U	**0.12**	J	0.19	U	**0.04**	J	**0.46**		0.19	U	**1.6**		0.2	U	**0.06**	J	0.19	U
Chrysene	1	3.9	1	0.11	U	**0.82**		**0.028**	J	**0.29**		**2.8**		0.11	U	**12**		0.12	U	**1.7**		0.12	U
Di-n-butylphthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Di-n-octylphthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Dibenzo(a,h)anthracene	0.33	0.33	1000	0.11	U	**0.1**	J	0.11	U	**0.044**	J	**0.4**		0.11	U	**1.6**		0.12	U	**0.26**		0.12	U
Dibenzofuran	7	59	210	0.19	U	**0.09**	J	0.19	U	**0.023**	J	**0.31**		0.19	U	**1.8**		0.2	U	**0.093**	J	0.19	U
Diethyl phthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Dimethyl phthalate				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Fluoranthene	100	100	1000	0.11	U	**1.7**		**0.025**	J	**0.46**		**4.6**		0.11	U	**27**		0.12	U	**3.5**		0.12	U
Fluorene	30	100	386	0.19	U	**0.14**	J	0.19	U	0.2	U	**0.4**		0.19	U	**3.2**		0.2	U	**0.12**	J	0.19	U
Hexachlorobenzene	0.33	1.2	3.2	0.11	U	0.12	U	0.11	U	0.12	U	0.12	U	0.11	U	0.63	U	0.12	U	0.11	U	0.12	U
Hexachlorobutadiene				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Hexachlorocyclopentadiene				0.53	U	0.56	U	0.54	U	0.57	U	0.59	U	0.54	U	3	U	0.57	U	0.51	U	0.55	U
Hexachloroethane				0.15	U	0.16	U	0.15	U	0.16	U	0.16	U	0.15	U	0.84	U	0.16	U	0.14	U	0.15	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	8.2	0.15	U	**0.46**		0.15	U	**0.17**		**1.5**		0.15	U	**7.4**		0.16	U	**1.3**		0.15	U
Isophorone				0.17	U	0.18	U	0.17	U	0.18	U	0.19	U	0.17	U	0.94	U	0.18	U	0.16	U	0.17	U
n-Nitrosodi-n-propylamine				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Naphthalene	12	100	12	0.19	U	**0.19**	J	0.19	U	**0.04**	J	**0.51**		0.19	U	**1.1**		0.2	U	**0.17**	J	0.19	U
NDPA/DPA				0.15	U	0.16	U	0.15	U	0.16	U	0.16	U	0.15	U	0.84	U	0.16	U	0.14	U	0.15	U
Nitrobenzene				0.17	U	0.18	U	0.17	U	0.18	U	0.19	U	0.17	U	0.94	U	0.18	U	0.16	U	0.17	U

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				TP-105 NATIVE		TP-106 FILL		TP-106 NATIVE		TP-107 FILL		TP-108 FILL		TP-108 NATIVE		TP-109 FILL		TP-109 NATIVE		TP-110 FILL		TP-110 NATIVE	
SAMPLING DATE				7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-16		L2547174-07		L2547174-08		L2547432-03		L2547432-04		L2547432-05		L2547174-09		L2547174-10		L2547432-06		L2547432-07	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				6-6.5		2-3		6-7		2-3		2-2.5		5.5-6		2-3		5-6		2-2.5		5.5-6	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
p-Chloro-m-cresol				0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Pentachlorophenol	0.8	6.7	0.8	0.15	U	0.16	U	0.15	U	0.16	U	0.16	U	0.15	U	0.84	U	0.16	U	0.14	U	0.15	U
Phenanthrene	100	100	1000	0.11	U	**1.4**		0.11	U	**0.25**		**3.9**		0.11	U	**22**		**0.028**	J	**1.5**		0.12	U
Phenol	0.33	100	0.33	0.19	U	0.2	U	0.19	U	0.2	U	0.21	U	0.19	U	1	U	0.2	U	0.18	U	0.19	U
Pyrene	100	100	1000	0.11	U	**1.5**		**0.029**	J	**0.39**		**0.25**		0.11	U	**22**		0.12	U	**3**		0.12	U
Polychlorinated Biphenyls by GC																							
Aroclor 1016	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1221	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1232	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1242	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1248	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1254	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1260	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1262	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Aroclor 1268	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
PCBs, Total	0.1	1	3.2	0.0524	U	0.057	U	0.0535	U	- -		0.0622	U	0.0567	U	0.0608	U	0.0556	U	0.0539	U	0.0559	U
Organochlorine Pesticides by GC																							
4,4'-DDD	0.0033	13	14	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	**0.0053**		0.0018	U
4,4'-DDE	0.0033	8.9	17	0.00172	U	**0.001**	J	0.00177	U	- -		**0.00171**	JIP	0.00181	U	**0.00102**	JIP	0.00189	U	**0.00834**		0.0018	U
4,4'-DDT	0.0033	7.9	136	0.00172	U	0.00188	U	0.00177	U	- -		**0.00204**		0.00181	U	**0.00161**	J	0.00189	U	**0.00304**		0.0018	U
Aldrin	0.005	0.097	0.19	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	0.00175	U	0.0018	U
Alpha-BHC	0.02	0.48	0.02	0.000718	U	0.000785	U	0.000738	U	- -		0.00081	U	0.000756	U	0.000808	U	0.000788	U	0.000728	U	0.000749	U
Beta-BHC	0.036	0.36	0.09	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	0.00175	U	0.0018	U
cis-Chlordane	0.094	4.2	2.9	0.00215	U	0.00235	U	0.00221	U	- -		0.00243	U	0.00227	U	**0.000736**	JIP	0.00236	U	0.00218	U	0.00225	U
Delta-BHC	0.04	100	0.25	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	0.00175	U	0.0018	U
Dieldrin	0.005	0.2	0.1	0.00108	U	0.00118	U	0.00111	U	- -		0.00122	U	0.00113	U	0.00121	U	0.00118	U	0.00109	U	0.00112	U
Endosulfan I	2.4	24	102	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	0.00175	U	0.0018	U
Endosulfan II	2.4	24	102	0.00172	U	0.00188	U	0.00177	U	- -		0.00194	U	0.00181	U	0.00194	U	0.00189	U	0.00175	U	0.0018	U
Endosulfan sulfate	2.4	24	1000	0.000718	U	0.000785	U	0.000738	U	- -		0.00081	U	0.000756	U	0.000808	U	0.000788	U	0.000728	U	0.000749	U
Endrin	0.014	11	0.06	0.000718	U	0.000785	U	0.000738	U	- -		0.00081	U	0.000756	U	0.000808	U	0.000788	U	0.000728	U	0.000749	U
Heptachlor	0.042	2.1	0.38	0.000861	U	0.000942	U	0.000886	U	- -		0.000973	U	0.000907	U	**0.000591**	J	0.000945	U	0.000874	U	0.000899	U
Lindane	0.1	1.3	0.1	0.000718	U	0.000785	U	0.000738	U	- -		0.00081	U	0.000756	U	0.000808	U	0.000788	U	0.000728	U	0.000749	U
Chlorinated Herbicides by GC																							
2,4,5-TP (Silvex)	3.8	100	3.8	0.187	U	0.195	U	0.184	U	- -		0.205	U	0.191	U	0.21	U	0.199	U	0.183	U	0.196	U
Total Metals																							
Aluminum, Total				**5120**		**795**		**4160**		**4760**		**3990**		**5750**		**3120**		**5880**		**2220**		**5010**	
Antimony, Total				4.26	U	4.68	U	4.3	U	4.6	U	4.86	U	4.55	U	5.01	U	4.63	U	4.2	U	4.45	U
Arsenic, Total	13	16	16	**0.508**	J	**4.17**		**2.83**		**10.1**		**6.24**		**2.79**		**9.02**		**2.07**		**2.74**		**1.71**	
Barium, Total	350	400	820	**38**		**27.5**		**28.6**		**153**		**83.2**		**52.9**		**50.5**		**52.5**		**25.6**		**57.7**	
Beryllium, Total	7.2	72	47	**0.298**	J	**0.158**	J	**0.269**	J	**0.561**		**0.323**	J	**0.337**	J	**0.319**	J	**0.349**	J	**0.131**	J	**0.3**	J
Cadmium, Total	2.5	4.3	7.5	0.853	U	0.935	U	0.861	U	**0.475**	J	**0.211**	J	**0.059**	J	**0.166**	J	0.925	U	**0.092**	J	0.89	U
Calcium, Total				**12000**		**41800**		**12200**		**11500**		**17400**		**1840**		**16900**		**1590**		**14500**		**12300**	
Chromium, Total				**8.01**		**2.03**		**6.49**		**8.5**		**4.68**		**9.98**		**5.23**		**9.47**		**3.5**		**9.19**	
Cobalt, Total				**4.71**		**2.23**		**4.2**		**5.12**		**2.18**		**7.8**		**3.23**		**5.22**		**4.12**		**4.12**	
Copper, Total	50	270	1720	**1.44**		**14.1**		**0.767**	J	**58.4**		**15.2**		**2.52**		**19.3**		**2.51**		**26.7**		**1.53**	
Cyanide, Total	27	27	40	1	U	**0.26**	J	1.1	U	1.1	U	1.2	U	1.1	U	1.2	U	1.2	U	1	U	**1.8**	
Iron, Total				**9830**		**5410**		**10100**		**11700**		**7210**		**17300**		**9940**		**16900**		**5250**		**10300**	
Lead, Total	63	400	450	**0.746**	J	**12.5**		**2.82**	J	**136**		**48.7**		**1.3**	J	**54**		**1.16**	J	**18.6**		**3.29**	J
Magnesium, Total				**8760**		**2510**		**9290**		**5690**		**3240**		**4080**		**3410**		**3630**		**3710**		**9880**	
Manganese, Total	1600	2000	2000	**194**		**72.7**		**265**		**228**		**123**		**539**		**190**		**121**		**204**		**161**	
Mercury, Total	0.18	0.81	0.73	0.074	U	0.083	U	0.075	U	**0.303**		**0.134**		0.079	U	0.095	U	0.091	U	**0.102**		0.087	U
Nickel, Total	30	310	130	**19.3**		**3.37**		**16.7**		**14.5**		**6.08**		**24.9**		**9.6**		**20.5**		**5.37**		**18**	
Potassium, Total				**1140**		**142**	J	**998**		**683**		**609**		**953**		**426**		**964**		**252**		**1140**	
Selenium, Total	3.9	180	4	1.71	U	**0.917**	J	1.72	U	1.84	U	**0.418**	J	1.82	U	**0.498**	J	1.85	U	1.68	U	1.78	U
Silver, Total	2	180	8.3	0.426	U	0.468	U	0.43	U	0.46	U	0.486	U	0.455	U	0.501	U	0.463	U	0.42	U	0.445	U
Sodium, Total				171	U	187	U	172	U	184	U	**124**	J	182	U	200	U	185	U	168	U	178	U
Thallium, Total				1.71	U	1.87	U	1.72	U	1.84	U	1.94	U	1.82	U	2	U	1.85	U	1.68	U	1.78	U
Vanadium, Total				**7.68**		**7.04**		**6.11**		**12.8**		**8.2**		**9.81**		**11.5**		**9.95**		**4.6**		**7.37**	
Zinc, Total	109	10000	2480	**16.7**		**24.8**		**14**		**154**		**40.6**		**18.2**		**72.4**		**23.3**		**25.4**		**16.2**	

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				TP-105 NATIVE		TP-106 FILL		TP-106 NATIVE		TP-107 FILL		TP-108 FILL		TP-108 NATIVE		TP-109 FILL		TP-109 NATIVE		TP-110 FILL		TP-110 NATIVE	
SAMPLING DATE				7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-16		L2547174-07		L2547174-08		L2547432-03		L2547432-04		L2547432-05		L2547174-09		L2547174-10		L2547432-06		L2547432-07	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				6-6.5		2-3		6-7		2-3		2-2.5		5.5-6		2-3		5-6		2-2.5		5.5-6	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Perfluorinated Alkyl Acids by EPA 1633																							
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)				5.64	U	4.99	U	4.99	U	- -		6.27	U	5.82	U	4.99	U	5	U	5.51	U	5.9	U
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)				5.64	U	4.99	U	4.99	U	- -		6.27	U	5.82	U	4.99	U	5	U	5.51	U	5.9	U
3-Perfluoropropyl Propanoic Acid (3:3FTCA)				1.13	U	0.999	U	0.998	U	- -		1.25	U	1.16	U	0.998	U	1	U	1.1	U	1.18	U
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				0.903	U	0.799	U	0.799	U	- -		1	U	0.931	U	0.798	U	0.8	U	0.881	U	0.943	U
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)				2.26	U	2	U	2	U	- -		2.51	U	2.33	U	2	U	2	U	2.2	U	2.36	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)				2.26	U	2	U	2	U	- -		2.51	U	2.33	U	2	U	2	U	2.2	U	2.36	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)				0.451	U	0.399	U	0.399	U	- -		0.502	U	0.466	U	0.399	U	0.4	U	0.44	U	0.472	U
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)				0.451	U	0.399	U	0.399	U	- -		0.502	U	0.466	U	0.399	U	0.4	U	0.44	U	0.472	U
Perfluoro-3-Methoxypropanoic Acid (PFMPA)				0.451	U	0.399	U	0.399	U	- -		0.502	U	0.466	U	0.399	U	0.4	U	0.44	U	0.472	U
Perfluoro-4-Methoxybutanoic Acid (PFMBA)				0.451	U	0.399	U	0.399	U	- -		0.502	U	0.466	U	0.399	U	0.4	U	0.44	U	0.472	U
Perfluorobutanesulfonic Acid (PFBS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorobutanoic Acid (PFBA)				0.903	U	**0.063**	J	0.799	U	- -		**0.144**	J	0.931	U	**0.089**	J	0.8	U	**0.18**	J	0.943	U
Perfluorodecanesulfonic Acid (PFDS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorodecanoic Acid (PFDA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	**0.035**	J	0.2	U	0.22	U	0.236	U
Perfluorododecanesulfonic Acid (PFDoS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorododecanoic Acid (PFDoA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluoroheptanesulfonic Acid (PFHpS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluoroheptanoic Acid (PFHpA)				0.226	U	**0.029**	J	0.2	U	- -		**0.114**	J	0.233	U	**0.049**	J	0.2	U	**0.056**	J	0.236	U
Perfluorohexanesulfonic Acid (PFHxS)				0.226	U	**0.045**	J	0.2	U	- -		**0.058**	J	**0.03**	J	**0.051**	J	0.2	U	**0.085**	J	0.236	U
Perfluorohexanoic Acid (PFHxA)				0.226	U	**0.031**	J	0.2	U	- -		**0.09**	J	0.233	U	0.041	J	0.2	U	**0.1**	J	0.236	U
Perfluorononanesulfonic Acid (PFNS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorononanoic Acid (PFNA)				0.226	U	**0.037**	J	0.2	U	- -		**0.088**	J	0.233	U	**0.082**	J	0.2	U	**0.063**	J	0.236	U
Perfluorooctanesulfonamide (PFOSA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	1	**0.039**	J	**0.327**		**0.034**	J	- -		**0.412**		0.233	U	**0.457**		0.2	U	**0.283**		0.049	J
Perfluorooctanoic Acid (PFOA)	0.66	33	0.8	0.226	U	**0.113**	J	0.2	U	- -		**0.412**		0.233	U	**0.162**	J	0.2	U	**0.248**		0.236	U
Perfluoropentanesulfonic Acid (PFPeS)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluoropentanoic Acid (PFPeA)				0.451	U	0.399	U	0.399	U	- -		**0.066**	J	0.466	U	0.399	U	0.4	U	**0.085**	J	0.472	U
Perfluorotetradecanoic Acid (PFTeDA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluorotridecanoic Acid (PFTrDA)				0.226	U	0.2	U	0.2	U	- -		0.251	U	0.233	U	0.2	U	0.2	U	0.22	U	0.236	U
Perfluoroundecanoic Acid (PFUnA)				0.226	U	0.2	U	0.2	U	- -		**0.028**	J	0.233	U	**0.03**	J	0.2	U	0.22	U	0.236	U
Asbestos in Bulk																							
Asbestos Fibers				- -		- -		- -		- -		- -		- -		- -		- -		- -		- -	

Notes:
- Analytical data compared to NYSDEC Part 375-6.
- Results and soil cleanup objectives (SCO) in parts per million (ppm), except for PFAS which is in parts per billion (ppb).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates the respective use SCO(s) exceeded. Use type SCOs are listed from left to right from most restrictive to least restrictive.
- Blank space indicates that a SCO does not exist.
- Duplicate sample results are located to the right of the parent sample results.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "F" indicates the ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- "I" indicates the lower value for the two columns has been reported due to obvious interference.
- "P" indicates the RPD between the results for the two columns exceeds the method-specified criteria.
- "ND" indicates that asbestos was not detected in the respective sample.
- "-" indicates that sample was not anlayzed for that parameter.

LOCATION				**TP-111 FILL**		**TP-112 FILL**		**TP-112 NATIVE**		**TP-113 FILL**		**TP-113 NATIVE**		**TP-114 FILL**		**TP-114 NATIVE**		**TP-115 FILL**		**TP-115 NATIVE**	
SAMPLING DATE				**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-08**		**L2547432-09**		**L2547432-10**		**L2547174-11**		**L2547174-12**		**L2547432-11**		**L2547432-12**		**L2547432-13**		**L2547432-14**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**3-4**		**2-2.5**		**4-4.5**		**2-3**		**5-5.5**		**1-2**		**3-4**		**1-1.5**		**5-5.5**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organics by EPA 5035																					
1,1,1-Trichloroethane	0.68	100	0.68	0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
1,1,2,2-Tetrachloroethane				0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
1,1,2-Trichloroethane				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,1-Dichloroethane	0.27	26	0.27	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,1-Dichloroethene	0.33	100	0.33	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,2,4-Trichlorobenzene				0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
1,2-Dibromo-3-chloropropane				0.0026	U	- -		- -		0.0037	U	0.0036	U	0.0059	U	0.0036	U	0.0044	U	0.003	U
1,2-Dibromoethane				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,2-Dichlorobenzene	1.1	100	1.1	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
1,2-Dichloroethane	0.02	3.1	0.02	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,2-Dichloropropane				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
1,3,5-Trimethylbenzene	8.4	52	8.4	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
1,3-Dichlorobenzene	2.4	49	2.4	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
1,4-Dichlorobenzene	1.8	13	1.8	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
2-Butanone	0.12	100	0.12	0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
2-Hexanone				0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
4-Methyl-2-pentanone				0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
Acetone	0.05	100	0.05	0.0088	U	- -		- -		0.012	U	**0.019**		0.02	U	0.012	U	0.015	U	0.01	U
Benzene	0.06	4.8	0.06	0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Bromodichloromethane				0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Bromoform				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
Bromomethane				0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
Carbon disulfide				0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
Carbon tetrachloride	0.76	2.4	0.76	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Chlorobenzene	1.1	100	1.1	0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Chloroethane				0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
Chloroform	0.37	49	0.37	0.0013	U	- -		- -		0.0018	U	0.0018	U	0.0029	U	0.0018	U	0.0022	U	0.0015	U
Chloromethane				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
cis-1,2-Dichloroethene	0.25	100	0.25	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
cis-1,3-Dichloropropene				0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Cyclohexane				0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
Dibromochloromethane				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Dichlorodifluoromethane				0.0088	U	- -		- -		0.012	U	0.012	U	0.02	U	0.012	U	0.015	U	0.01	U
Ethylbenzene	1	41	1	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Freon-113				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
Isopropylbenzene				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Methyl Acetate				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
Methyl cyclohexane				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
Methyl tert butyl ether	0.93	100	0.93	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
Methylene chloride	0.05	100	0.05	0.0044	U	- -		- -		0.0062	U	0.0061	U	0.0098	U	0.006	U	0.0074	U	0.005	U
n-Butylbenzene	12	100	12	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
n-Propylbenzene	3.9	100	3.9	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Naphthalene	12	100	12	0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
o-Xylene				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
p-Isopropyltoluene				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
p/m-Xylene				0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
sec-Butylbenzene	11	100	11	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Styrene				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
tert-Butylbenzene	5.9	100	5.9	0.0018	U	- -		- -		0.0025	U	0.0024	U	0.0039	U	0.0024	U	0.003	U	0.002	U
Tetrachloroethene	1.3	19	1.3	0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Toluene	0.7	100	0.7	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
trans-1,2-Dichloroethene	0.19	100	0.19	0.0013	U	- -		- -		0.0018	U	0.0018	U	0.0029	U	0.0018	U	0.0022	U	0.0015	U
trans-1,3-Dichloropropene				0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U
Trichloroethene	0.47	21	0.47	0.00044	U	- -		- -		0.00062	U	0.00061	U	0.00098	U	0.0006	U	0.00074	U	0.0005	U
Trichlorofluoromethane				0.0035	U	- -		- -		0.0049	U	0.0049	U	0.0078	U	0.0048	U	0.0059	U	0.004	U
Vinyl chloride	0.02	0.9	0.02	0.00088	U	- -		- -		0.0012	U	0.0012	U	0.002	U	0.0012	U	0.0015	U	0.001	U

LOCATION				TP-111 FILL		TP-112 FILL		TP-112 NATIVE		TP-113 FILL		TP-113 NATIVE		TP-114 FILL		TP-114 NATIVE		TP-115 FILL		TP-115 NATIVE	
SAMPLING DATE				7/29/2025		7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-08		L2547432-09		L2547432-10		L2547174-11		L2547174-12		L2547432-11		L2547432-12		L2547432-13		L2547432-14	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				3-4		2-2.5		4-4.5		2-3		5-5.5		1-2		3-4		1-1.5		5-5.5	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS																					
1,2,4,5-Tetrachlorobenzene				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
1,4-Dioxane	0.1	13	0.1	0.031	U	0.029	U	0.03	U	0.027	U	0.03	U	0.032	U	0.03	U	0.03	U	0.029	U
2,3,4,6-Tetrachlorophenol				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2,4,5-Trichlorophenol				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2,4,6-Trichlorophenol				0.12	U	0.11	U	0.12	U	0.11	U	0.12	U	0.13	U	0.12	U	0.12	U	0.12	U
2,4-Dichlorophenol				0.19	U	0.17	U	0.18	U	0.16	U	0.18	U	0.19	U	0.18	U	0.18	U	0.17	U
2,4-Dimethylphenol				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2,4-Dinitrophenol				1	U	0.92	U	0.96	U	0.87	U	0.97	U	1	U	0.94	U	0.95	U	0.92	U
2,4-Dinitrotoluene				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2,6-Dinitrotoluene				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2-Chloronaphthalene				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2-Chlorophenol				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2-Methylnaphthalene				**0.029**	J	**0.62**		0.24	U	**0.11**	J	0.24	U	**0.16**	J	0.24	U	**0.068**	J	0.23	U
2-Methylphenol	0.33	100	0.33	0.21	U	**0.031**	J	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2-Nitroaniline				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
2-Nitrophenol				0.45	U	0.41	U	0.43	U	0.39	U	0.44	U	0.45	U	0.42	U	0.42	U	0.42	U
3,3'-Dichlorobenzidine				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
3-Methylphenol/4-Methylphenol	0.33	100	0.33	0.3	U	**0.087**	J	0.29	U	0.26	U	0.29	U	**0.081**	J	0.28	U	0.28	U	0.28	U
3-Nitroaniline				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
4,6-Dinitro-o-cresol				0.54	U	0.5	U	0.52	U	0.47	U	0.53	U	0.55	U	0.51	U	0.51	U	0.5	U
4-Bromophenyl phenyl ether				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
4-Chloroaniline				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
4-Chlorophenyl phenyl ether				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
4-Nitroaniline				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
4-Nitrophenol				0.29	U	0.27	U	0.28	U	0.25	U	0.28	U	0.29	U	0.28	U	0.28	U	0.27	U
Acenaphthene	20	100	98	0.17	U	**0.87**		0.16	U	**0.16**		0.16	U	**0.11**	J	0.16	U	**0.072**	J	0.15	U
Acenaphthylene	100	100	107	**0.16**	J	**0.58**		0.16	U	**0.17**		0.16	U	**0.38**		0.16	U	**0.14**	J	0.15	U
Acetophenone				0.21	U	**0.031**	J	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Anthracene	100	100	1000	**0.15**		**2.4**		0.12	U	**0.47**		0.12	U	**0.5**		0.12	U	**0.3**		0.12	U
Atrazine				0.17	U	0.15	U	0.16	U	0.14	U	0.16	U	0.17	U	0.16	U	0.16	U	0.15	U
Benzaldehyde				0.27	U	**0.16**	J	0.26	U	0.24	U	0.27	U	**0.12**	J	0.26	U	0.26	U	0.25	U
Benzo(a)anthracene	1	1	1	**0.75**		**5.7**		0.12	U	**1.3**		**0.03**	J	**3**		0.12	U	**1.2**		0.12	U
Benzo(a)pyrene	1	1	22	**0.72**		**5.1**		0.16	U	**1.2**		0.16	U	**3.9**		0.16	U	**1.2**		0.15	U
Benzo(b)fluoranthene	1	1	1.7	**1**		**7.4**		0.12	U	**1.5**		0.12	U	**5.6**		0.12	U	**1.5**		0.12	U
Benzo(ghi)perylene	100	100	1000	**0.42**		**2.7**		0.16	U	**0.73**		0.16	U	**2.9**		0.16	U	**0.68**		0.15	U
Benzo(k)fluoranthene	0.8	3.9	1.7	**0.34**		**1.8**		0.12	U	**0.44**		0.12	U	**1.4**		0.12	U	**0.45**		0.12	U
Biphenyl				0.47	U	**0.12**	J	0.46	U	0.41	U	0.46	U	**0.04**	J	0.45	U	0.45	U	0.44	U
Bis(2-chloroethoxy)methane				0.22	U	0.21	U	0.22	U	0.2	U	0.22	U	0.23	U	0.21	U	0.21	U	0.21	U
Bis(2-chloroethyl)ether				0.19	U	0.17	U	0.18	U	0.16	U	0.18	U	0.19	U	0.18	U	0.18	U	0.17	U
Bis(2-chloroisopropyl)ether				0.25	U	0.23	U	0.24	U	0.22	U	0.24	U	0.25	U	0.24	U	0.24	U	0.23	U
Bis(2-ethylhexyl)phthalate				**0.11**	J	**0.085**	J	0.2	U	0.18	U	0.2	U	**0.09**	J	0.2	U	0.2	U	0.19	U
Butyl benzyl phthalate				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Caprolactam				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Carbazole				**0.16**	J	**1**		0.2	U	**0.25**		0.2	U	**0.47**		0.2	U	**0.12**	J	0.19	U
Chrysene	1	3.9	1	**0.78**		**5**		0.12	U	**1.3**		**0.024**	J	**3.4**		0.12	U	**1.1**		0.12	U
Di-n-butylphthalate				0.21	U	**4.4**		0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Di-n-octylphthalate				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Dibenzo(a,h)anthracene	0.33	0.33	1000	**0.11**	J	**0.72**		0.12	U	**0.15**		0.12	U	**0.67**		0.12	U	**0.16**		0.12	U
Dibenzofuran	7	59	210	**0.026**	J	**0.7**		0.2	U	**0.11**	J	0.2	U	**0.2**	J	0.2	U	**0.073**	J	0.19	U
Diethyl phthalate				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Dimethyl phthalate				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Fluoranthene	100	100	1000	**1.5**		**9.4**		0.12	U	**2.5**		**0.034**	J	**5.7**		0.12	U	**2.3**		0.12	U
Fluorene	30	100	386	**0.034**	J	**1.1**		0.2	U	**0.17**	J	0.2	U	**0.18**	J	0.2	U	**0.1**	J	0.19	U
Hexachlorobenzene	0.33	1.2	3.2	0.12	U	0.11	U	0.12	U	0.11	U	0.12	U	0.13	U	0.12	U	0.12	U	0.12	U
Hexachlorobutadiene				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Hexachlorocyclopentadiene				0.59	U	0.54	U	0.57	U	0.52	U	0.58	U	0.6	U	0.56	U	0.56	U	0.55	U
Hexachloroethane				0.17	U	0.15	U	0.16	U	0.14	U	0.16	U	0.17	U	0.16	U	0.16	U	0.15	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	8.2	**0.49**		**3.1**		0.16	U	**0.69**		0.16	U	**3**		0.16	U	**0.77**		0.15	U
Isophorone				0.19	U	0.17	U	0.18	U	0.16	U	0.18	U	0.19	U	0.18	U	0.18	U	0.17	U
n-Nitrosodi-n-propylamine				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Naphthalene	12	100	12	**0.072**	J	**0.91**		0.2	U	**0.18**		0.2	U	**0.26**		0.2	U	**0.1**	J	0.19	U
NDPA/DPA				0.17	U	0.15	U	0.16	U	0.14	U	0.16	U	0.17	U	0.16	U	0.16	U	0.15	U
Nitrobenzene				0.19	U	0.17	U	0.18	U	0.16	U	0.18	U	0.19	U	0.18	U	0.18	U	0.17	U

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				**TP-111 FILL**		**TP-112 FILL**		**TP-112 NATIVE**		**TP-113 FILL**		**TP-113 NATIVE**		**TP-114 FILL**		**TP-114 NATIVE**		**TP-115 FILL**		**TP-115 NATIVE**	
SAMPLING DATE				**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/28/2025**		**7/28/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**		**7/29/2025**	
LAB SAMPLE ID				**L2547432-08**		**L2547432-09**		**L2547432-10**		**L2547174-11**		**L2547174-12**		**L2547432-11**		**L2547432-12**		**L2547432-13**		**L2547432-14**	
SAMPLE TYPE				**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**		**SOIL**	
SAMPLE DEPTH (ft.)				**3-4**		**2-2.5**		**4-4.5**		**2-3**		**5-5.5**		**1-2**		**3-4**		**1-1.5**		**5-5.5**	
	Unrestricted Use SCO	**Restricted Residential Use SCO**	**Protection of Groundwater SCO**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
p-Chloro-m-cresol				0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Pentachlorophenol	0.8	6.7	0.8	0.17	U	0.15	U	0.16	U	0.14	U	0.16	U	0.17	U	0.16	U	0.16	U	0.15	U
Phenanthrene	100	100	1000	**0.65**		**8.3**		0.12	U	**1.9**		0.12	U	**3.8**		0.12	U	**1.4**		0.12	U
Phenol	0.33	100	0.33	0.21	U	0.19	U	0.2	U	0.18	U	0.2	U	**0.032**	J	0.2	U	0.2	U	0.19	U
Pyrene	100	100	1000	**1.2**		**7.6**		0.12	U	**2.3**		**0.032**	J	**4.7**		0.12	U	**1.9**		0.12	U
Polychlorinated Biphenyls by GC																					
Aroclor 1016	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1221	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1232	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1242	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1248	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1254	0.1	1	3.2	**0.427**		0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1260	0.1	1	3.2	0.0599	U	**0.0137**	J	0.0593	U	- -		- -		**0.0127**	J	0.0551	U	0.0569	U	0.0383	U
Aroclor 1262	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
Aroclor 1268	0.1	1	3.2	0.0599	U	0.0571	U	0.0593	U	- -		- -		0.0612	U	0.0551	U	0.0569	U	0.0383	U
PCBs, Total	0.1	1	3.2	**0.427**		**0.0137**	J	0.0593	U	- -		- -		**0.0127**	J	0.0551	U	0.0569	U	0.0383	U
Organochlorine Pesticides by GC																					
4,4'-DDD	0.0033	13	14	**0.00223**	IP	**0.00173**	JIP	0.0019	U	- -		- -		**0.00231**		0.00187	U	0.00188	U	0.00182	U
4,4'-DDE	0.0033	8.9	17	**0.0121**		**0.00949**		0.0019	U	- -		- -		**0.0329**		0.00187	U	**0.00164**	J	0.00182	U
4,4'-DDT	0.0033	7.9	136	**0.0463**	P	**0.0238**		0.0019	U	- -		- -		**0.0366**		0.00187	U	0.00188	U	0.00182	U
Aldrin	0.005	0.097	0.19	0.00194	U	0.00183	U	0.0019	U	- -		- -		0.00197	U	0.00187	U	0.00188	U	0.00182	U
Alpha-BHC	0.02	0.48	0.02	0.00081	U	0.000761	U	0.000791	U	- -		- -		0.000822	U	0.000779	U	0.000782	U	0.000757	U
Beta-BHC	0.036	0.36	0.09	0.00194	U	0.00183	U	0.0019	U	- -		- -		0.00197	U	0.00187	U	0.00188	U	0.00182	U
cis-Chlordane	0.094	4.2	2.9	0.00243	U	**0.00176**	JIP	0.00237	U	- -		- -		0.00246	U	0.00234	U	0.00234	U	0.00227	U
Delta-BHC	0.04	100	0.25	0.00194	U	0.00183	U	0.0019	U	- -		- -		0.00197	U	0.00187	U	0.00188	U	0.00182	U
Dieldrin	0.005	0.2	0.1	0.00122	U	**0.000913**	JIP	0.00118	U	- -		- -		0.00123	U	0.00117	U	0.00117	U	0.00114	U
Endosulfan I	2.4	24	102	0.00194	U	0.00183	U	0.0019	U	- -		- -		0.00197	U	0.00187	U	0.00188	U	0.00182	U
Endosulfan II	2.4	24	102	0.00194	U	0.00183	U	0.0019	U	- -		- -		0.00197	U	0.00187	U	0.00188	U	0.00182	U
Endosulfan sulfate	2.4	24	1000	0.00081	U	0.000761	U	0.000791	U	- -		- -		0.000822	U	0.000779	U	0.000782	U	0.000757	U
Endrin	0.014	11	0.06	0.00081	U	0.000761	U	0.000791	U	- -		- -		0.000822	U	0.000779	U	0.000782	U	0.000757	U
Heptachlor	0.042	2.1	0.38	0.000972	U	0.000914	U	0.000949	U	- -		- -		0.000986	U	0.000934	U	0.000938	U	0.000908	U
Lindane	0.1	1.3	0.1	0.00081	U	0.000761	U	0.000791	U	- -		- -		0.000822	U	0.000779	U	0.000782	U	0.000757	U
Chlorinated Herbicides by GC																					
2,4,5-TP (Silvex)	3.8	100	3.8	0.207	U	0.19	U	0.198	U	- -		- -		0.21	U	0.196	U	0.2	U	0.191	U
Total Metals																					
Aluminum, Total				**5240**		**4340**		**7260**		**5130**		**6440**		**4250**		**5040**		**4660**		**5940**	
Antimony, Total				4.88	U	4.47	U	4.58	U	4.31	U	4.74	U	4.99	U	4.56	U	4.62	U	4.44	U
Arsenic, Total	13	16	16	**2.89**		**9.53**		**2.36**		**8.18**		**2.18**		**5.52**		**1.18**		**10.8**		**2.66**	
Barium, Total	350	400	820	**84.7**		**148**		**133**		**77.3**		**64.6**		**77**		**29**		**84.6**		**37.4**	
Beryllium, Total	7.2	72	47	**0.358**	J	**0.514**		**0.515**		**0.395**	J	**0.454**	J	**0.301**	J	**0.333**	J	**0.376**	J	**0.392**	J
Cadmium, Total	2.5	4.3	7.5	**0.19**	J	**0.804**	J	**0.239**	J	**0.159**	J	0.948	U	**0.5**	J	0.912	U	**0.366**	J	**0.098**	J
Calcium, Total				**5570**		**11700**		**2530**		**13000**		**2960**		**8120**		**14000**		**8240**		**1920**	
Chromium, Total				**7.97**		**8.75**		**10.9**		**8.54**		**10**		**9.58**		**6.16**		**8.27**		**9.78**	
Cobalt, Total				**7.03**		**5.22**		**6.96**		**5.68**		**5.43**		**3.56**		**4.73**		**4.35**		**4.7**	
Copper, Total	50	270	1720	**6.74**		**46.6**		**4.99**		**21.2**		**1.82**		**89.2**		**1.72**		**22.1**		**2.37**	
Cyanide, Total	27	27	40	1.2	U	**0.25**	J	1.1	U	1.1	U	1.2	U	**0.38**	J	1.1	U	1.1	U	1.1	U
Iron, Total				**12400**		**12800**		**15400**		**11300**		**13600**		**11600**		**9490**		**14700**		**16100**	
Lead, Total	63	400	450	**22.9**		**104**		**2.35**	J	**96**		**1.79**	J	**144**		**0.724**	J	**144**		**1.26**	J
Magnesium, Total				**5680**		**4180**		**3840**		**7410**		**4020**		**3640**		**10200**		**3530**		**3570**	
Manganese, Total	1600	2000	2000	**522**		**280**		**1140**		**388**		**252**		**240**		**187**		**269**		**152**	
Mercury, Total	0.18	0.81	0.73	**0.078**	J	**0.401**		0.077	U	**0.615**		0.099	U	**0.38**		0.084	U	**0.181**		0.078	U
Nickel, Total	30	310	130	**21.2**		**11.2**		**26.5**		**12.5**		**23.1**		**10.2**		**19.6**		**13.3**		**20.2**	
Potassium, Total				**1080**		**513**		**783**		**532**		**946**		**614**		**1060**		**717**		**1240**	
Selenium, Total	3.9	180	4	1.95	U	**0.492**	J	1.83	U	**0.476**	J	1.9	U	**0.544**	J	1.82	U	**0.427**	J	1.78	U
Silver, Total	2	180	8.3	0.488	U	0.447	U	0.458	U	0.431	U	0.474	U	0.499	U	0.456	U	0.462	U	0.444	U
Sodium, Total				195	U	179	U	183	U	172	U	190	U	200	U	182	U	185	U	178	U
Thallium, Total				1.95	U	1.79	U	1.83	U	1.72	U	1.9	U	2	U	1.82	U	1.85	U	1.78	U
Vanadium, Total				**8.28**		**13.7**		**11.6**		**11.6**		**8.44**		**9.53**		**5.44**		**10.4**		**8.95**	
Zinc, Total	109	10000	2480	**32.6**		**123**		**21.2**		**76.1**		**21**		**150**		**16.4**		**132**		**21.9**	

Table 3
Old Erie Commons - Remedial Investigation
Sub-Surface Soil Data Summary

LOCATION				TP-111 FILL		TP-112 FILL		TP-112 NATIVE		TP-113 FILL		TP-113 NATIVE		TP-114 FILL		TP-114 NATIVE		TP-115 FILL		TP-115 NATIVE	
SAMPLING DATE				7/29/2025		7/29/2025		7/29/2025		7/28/2025		7/28/2025		7/29/2025		7/29/2025		7/29/2025		7/29/2025	
LAB SAMPLE ID				L2547432-08		L2547432-09		L2547432-10		L2547174-11		L2547174-12		L2547432-11		L2547432-12		L2547432-13		L2547432-14	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				3-4		2-2.5		4-4.5		2-3		5-5.5		1-2		3-4		1-1.5		5-5.5	
	Unrestricted Use SCO	Restricted Residential Use SCO	Protection of Groundwater SCO	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Perfluorinated Alkyl Acids by EPA 1633																					
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)				6.27	U	5.79	U	6.07	U	- -		- -		6.38	U	5.94	U	6	U	5.84	U
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)				6.27	U	5.79	U	6.07	U	- -		- -		6.38	U	5.94	U	6	U	5.84	U
3-Perfluoropropyl Propanoic Acid (3:3FTCA)				1.25	U	1.16	U	1.21	U	- -		- -		1.28	U	1.19	U	1.2	U	1.17	U
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				1	U	0.927	U	0.971	U	- -		- -		1.02	U	0.951	U	0.96	U	0.934	U
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)				**0.04**	J	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)				2.51	U	2.32	U	2.43	U	- -		- -		2.55	U	2.38	U	2.4	U	2.34	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)				**1.02**		0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)				2.51	U	2.32	U	2.43	U	- -		- -		2.55	U	2.38	U	2.4	U	2.34	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)				0.502	U	0.463	U	0.485	U	- -		- -		0.51	U	0.476	U	0.48	U	0.467	U
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)				0.502	U	0.463	U	0.485	U	- -		- -		0.51	U	0.476	U	0.48	U	0.467	U
Perfluoro-3-Methoxypropanoic Acid (PFMPA)				0.502	U	0.463	U	0.485	U	- -		- -		0.51	U	0.476	U	0.48	U	0.467	U
Perfluoro-4-Methoxybutanoic Acid (PFMBA)				0.502	U	0.463	U	0.485	U	- -		- -		0.51	U	0.476	U	0.48	U	0.467	U
Perfluorobutanesulfonic Acid (PFBS)				0.251	U	0.232	U	0.243	U	- -		- -		**0.077**	J	0.238	U	**0.029**	J	0.234	U
Perfluorobutanoic Acid (PFBA)				**0.055**	J	**0.298**	J	0.971	U	- -		- -		**0.676**	J	0.951	U	**0.331**	J	**0.046**	J
Perfluorodecanesulfonic Acid (PFDS)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluorodecanoic Acid (PFDA)				0.251	U	0.232	U	0.243	U	- -		- -		**0.094**	J	0.238	U	**0.057**	J	0.234	U
Perfluorododecanesulfonic Acid (PFDoS)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluorododecanoic Acid (PFDoA)				0.251	U	0.232	U	0.243	U	- -		- -		**0.032**	J	0.238	U	0.24	U	0.234	U
Perfluoroheptanesulfonic Acid (PFHpS)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluoroheptanoic Acid (PFHpA)				**0.035**	J	**0.089**	J	0.243	U	- -		- -		**0.28**		0.238	U	**0.128**	J	0.234	U
Perfluorohexanesulfonic Acid (PFHxS)				0.251	U	**0.062**	J	0.243	U	- -		- -		**0.148**	J	0.238	U	**0.159**	J	0.234	U
Perfluorohexanoic Acid (PFHxA)				0.251	U	**0.119**	J	0.243	U	- -		- -		**0.231**	J	0.238	U	**0.15**	J	0.234	U
Perfluorononanesulfonic Acid (PFNS)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluorononanoic Acid (PFNA)				**0.095**	J	**0.102**	J	0.243	U	- -		- -		**0.193**	J	0.238	U	**0.142**	J	0.234	U
Perfluorooctanesulfonamide (PFOSA)				**0.175**	JF	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	1	**2.16**		**0.777**		0.243	U	- -		- -		**1.45**		**0.108**	J	**0.737**		0.234	U
Perfluorooctanoic Acid (PFOA)	0.66	33	0.8	**0.248**	J	**0.564**		0.243	U	- -		- -		**0.911**		0.238	U	**0.582**		0.234	U
Perfluoropentanesulfonic Acid (PFPeS)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluoropentanoic Acid (PFPeA)				0.502	U	**0.084**	J	0.485	U	- -		- -		**0.226**	J	0.476	U	**0.1**	J	0.467	U
Perfluorotetradecanoic Acid (PFTeDA)				0.251	U	0.232	U	0.243	U	- -		- -		0.255	U	0.238	U	0.24	U	0.234	U
Perfluorotridecanoic Acid (PFTrDA)				0.251	U	0.232	U	0.243	U	- -		- -		**0.031**	J	0.238	U	0.24	U	0.234	U
Perfluoroundecanoic Acid (PFUnA)				**0.04**	J	**0.032**	J	0.243	U	- -		- -		**0.071**	J	0.238	U	**0.052**	J	0.234	U
Asbestos in Bulk																					
Asbestos Fibers				- -		- -		- -		- -		- -		- -		- -		- -		- -	

Notes:
- Analytical data compared to NYSDEC Part 375-6.
- Results and soil cleanup objectives (SCO) in parts per million (ppm), except for PFAS which is in parts per billion (ppb).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates the respective use SCO(s) exceeded. Use type SCOs are listed from left to right from most restrictive to least restrictive.
- Blank space indicates that a SCO does not exist.
- Duplicate sample results are located to the right of the parent sample results.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "F" indicates the ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- "I" indicates the lower value for the two columns has been reported due to obvious interference.
- "P" indicates the RPD between the results for the two columns exceeds the method-specified criteria.
- "ND" indicates that asbestos was not detected in the respective sample.
- "-" indicates that sample was not anlayzed for that parameter.

LOCATION		**MW-101**	**MW-101**	**DUP_102125**	**MW-102**	**MW-102**	**MW-103**	**MW-103**	**MW-104**	**DUP-03**	**MW-104**	**EQUIPMENT BLANK**	**EQUIPMENT BLANK**	**TRIP BLANK**	**TRIP BLANK**	**TRIP BLANK**
SAMPLING DATE		**7/31/2025**	**10/21/2025**	**10/21/2025**	**7/31/2025**	**10/21/2025**	**7/30/2025**	**10/21/2025**	**7/30/2025**	**7/30/2025**	**10/21/2025**	**7/31/2025**	**10/21/2025**	**7/30/2025**	**7/31/2025**	**10/21/2025**
LAB SAMPLE ID		**L2548090-01**	**L2566646-01**	**L2566646-05**	**L2548090-02**	**L2566646-02**	**L2547831-02**	**L2566646-03**	**L2547831-01**	**L2547831-03**	**L2566646-04**	**L2548090-03**	**L2566646-06**	**L2547831-06**	**L2548090-05**	**L2566646-07**
SAMPLE TYPE		**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
SAMPLE DEPTH (ft.)		**12**	**12**	**15**	**11**	**11**	**12**	**12**	**15**	**15**	**15**	**--**	**--**	**--**	**--**	**--**
	TOGS 1.1.1 AWQS	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**
Volatile Organics by GC/MS																
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	0.0006	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Butanone	50	5 U	5 U	5 U	5 U	5 U	5 U	**46**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	**3.6** J	**5.2**	**8.6**	**3.7** J	**4.4** J	**15**	**79**	**2.8** J	**2.8** J	**4** J	5 U	**2** J	**3.2** J	**2.6** J	**3.6** J
Benzene	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon disulfide	60	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.53** J	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Freon-113	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Acetate		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl cyclohexane		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert butyl ether	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methylene chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
n-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
n-Propylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Naphthalene	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p-Isopropyltoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**29**	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p/m-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
tert-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4
Old Erie Commons - Remedial Investigation
Groundwater Data Summary

LOCATION		MW-101	MW-101	DUP_102125	MW-102	MW-102	MW-103	MW-103	MW-104	DUP-03	MW-104	EQUIPMENT BLANK	EQUIPMENT BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
SAMPLING DATE		7/31/2025	10/21/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	10/21/2025	7/30/2025	7/30/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	7/31/2025	10/21/2025
LAB SAMPLE ID		L2548090-01	L2566646-01	L2566646-05	L2548090-02	L2566646-02	L2547831-02	L2566646-03	L2547831-01	L2547831-03	L2566646-04	L2548090-03	L2566646-06	L2547831-06	L2548090-05	L2566646-07
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
SAMPLE DEPTH (ft.)		12	12	15	11	11	12	12	15	15	15	--	--	--	--	--
	TOGS 1.1.1 AWQS	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual
Semivolatile Organics by GC/MS																
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
2,3,4,6-Tetrachlorophenol		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,4,5-Trichlorophenol		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,4,6-Trichlorophenol		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,4-Dichlorophenol	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,4-Dimethylphenol	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	- -	- -	- -	- -	- -
2,4-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2,6-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2-Chlorophenol		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
2-Methylphenol		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
2-Nitrophenol		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
3-Methylphenol/4-Methylphenol		5 U	5 U	5 U	5 U	5 U	5 U	**1.7** J	5 U	5 U	5 U	- -	- -	- -	- -	- -
3-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
4,6-Dinitro-o-cresol		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
4-Bromophenyl phenyl ether		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
4-Chloroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
4-Chlorophenyl phenyl ether		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
4-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
4-Nitrophenol		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
Acetophenone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Atrazine	7.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
Benzaldehyde		5 U	5 U	5 U	5 U	5 U	**1.2** J	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Biphenyl		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Bis(2-chloroethoxy)methane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Bis(2-chloroethyl)ether	1	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Bis(2-chloroisopropyl)ether	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Bis(2-ethylhexyl)phthalate	5	3 U	**2.1** J	**1.9** J	3 U	**2** J	3 U	**2** J	3 U	3 U	**2.2** J	- -	- -	- -	- -	- -
Butyl benzyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Caprolactam		10 U	1.3 J	**1.5** J	10 U	**1.6** J	10 U	10 U	10 U	10 U	**2.1** J	- -	- -	- -	- -	- -
Carbazole		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Di-n-butylphthalate	50	5 U	**1.9** J	**2.4** J	5 U	**2.5** J	**5.2**	**1.9** J	**4.7** J	**4.6** J	**3.6** J	- -	- -	- -	- -	- -
Di-n-octylphthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Dibenzofuran		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Diethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Dimethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Hexachlorocyclopentadiene	5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	- -	- -	- -	- -	- -
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
n-Nitrosodi-n-propylamine		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
NDPA/DPA	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Nitrobenzene	0.4	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
p-Chloro-m-cresol		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Phenol	1	**0.94** J	5 U	5 U	5 U	5 U	5 U	**1.3** J	5 U	5 U	5 U	- -	- -	- -	- -	- -

LOCATION		**MW-101**	**MW-101**	**DUP_102125**	**MW-102**	**MW-102**	**MW-103**	**MW-103**	**MW-104**	**DUP-03**	**MW-104**	**EQUIPMENT BLANK**	**EQUIPMENT BLANK**	**TRIP BLANK**	**TRIP BLANK**	**TRIP BLANK**
SAMPLING DATE		**7/31/2025**	**10/21/2025**	**10/21/2025**	**7/31/2025**	**10/21/2025**	**7/30/2025**	**10/21/2025**	**7/30/2025**	**7/30/2025**	**10/21/2025**	**7/31/2025**	**10/21/2025**	**7/30/2025**	**7/31/2025**	**10/21/2025**
LAB SAMPLE ID		**L2548090-01**	**L2566646-01**	**L2566646-05**	**L2548090-02**	**L2566646-02**	**L2547831-02**	**L2566646-03**	**L2547831-01**	**L2547831-03**	**L2566646-04**	**L2548090-03**	**L2566646-06**	**L2547831-06**	**L2548090-05**	**L2566646-07**
SAMPLE TYPE		**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
SAMPLE DEPTH (ft.)		**12**	**12**	**15**	**11**	**11**	**12**	**12**	**15**	**15**	**15**	**--**	**--**	**--**	**--**	**--**
	TOGS 1.1.1 AWQS	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**	**Results Qual**
Semivolatile Organics by GC/MS-SIM																
1,4-Dioxane	0.35	**0.104** J	0.268 U	0.268 U	**0.147** J	0.268 U	**0.173** J	0.268 U	**0.171** J	**0.0931** J	0.268 U	- -	- -	- -	- -	- -
2-Chloronaphthalene	10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	- -	- -	- -	- -	- -
2-Methylnaphthalene		**0.03** J	0.1 U	0.1 U	**0.04** J	0.1 U	**0.03** J	**0.03** J	**0.04** J	**0.06** J	**0.03** J	- -	- -	- -	- -	- -
Acenaphthene	20	**0.15**	**0.16**	**0.18**	0.1 U	0.1 U	**0.04** J	**0.06** J	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Acenaphthylene		0.1 U	0.1 U	**0.03** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Anthracene	50	**0.05** J	**0.08** J	**0.12**	0.1 U	**0.03** J	0.1 U	**0.03** J	**0.05** J	**0.06** J	**0.06** J	- -	- -	- -	- -	- -
Benzo(a)anthracene	0.002	**0.04** J	0.1 U	**0.11**	**0.04** J	0.1 U	**0.04** J	0.1 U	**0.04** J	**0.03** J	0.1 U	- -	- -	- -	- -	- -
Benzo(a)pyrene	0	0.1 U	0.1 U	**0.06** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Benzo(b)fluoranthene	0.002	0.1 U	0.1 U	**0.11**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Benzo(ghi)perylene		0.1 U	0.1 U	**0.05** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Benzo(k)fluoranthene	0.002	0.1 U	0.1 U	**0.06** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Chrysene	0.002	0.1 U	0.1 U	**0.1** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Dibenzo(a,h)anthracene		0.1 U	0.1 U	**0.03** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Fluoranthene	50	**0.08** J	**0.04** J	**0.15**	**0.06** J	**0.05** J	**0.07** J	**0.07** J	**0.06** J	**0.05** J	**0.05** J	- -	- -	- -	- -	- -
Fluorene	50	**0.04** J	**0.03** J	**0.04** J	**0.04** J	0.1 U	**0.04** J	**0.04** J	**0.03** J	**0.03** J	**0.04** J	- -	- -	- -	- -	- -
Hexachlorobenzene	0.04	0.8 U	**0.02** J	**0.02** J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	**0.03** J	**0.01** J	- -	- -	- -	- -	- -
Hexachlorobutadiene	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	- -	- -	- -	- -	- -
Hexachloroethane	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	- -	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	0.002	0.1 U	0.1 U	**0.06** J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	- -	- -	- -	- -	- -
Naphthalene	10	**0.03** J	**0.03** J	**0.03** J	**0.04** J	**0.03** J	**0.06** J	**0.07** J	**0.04** J	**0.05** J	**0.06** J	- -	- -	- -	- -	- -
Pentachlorophenol	1	**0.26** J	0.8 U	0.8 U	0.8 U	0.8 U	**0.25** J	0.8 U	0.8 U	**0.24** J	0.8 U	- -	- -	- -	- -	- -
Phenanthrene	50	**0.15**	**0.08** J	**0.1** J	**0.2**	**0.1**	**0.18**	**0.14**	**0.14**	**0.12**	**0.12**	- -	- -	- -	- -	- -
Pyrene	50	**0.07** J	0.1 U	**0.12**	**0.05** J	0.1 U	**0.04** J	0.1 U	**0.07** J	**0.07** J	**0.08** J	- -	- -	- -	- -	- -
Polychlorinated Biphenyls by GC																
Aroclor 1016	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1221	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1232	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1242	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1248	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1254	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1260	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1262	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Aroclor 1268	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
PCBs, Total	0.09	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	- -	- -	- -	- -	- -
Organochlorine Pesticides by GC																
4,4'-DDD	0.3	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
4,4'-DDE	0.2	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
4,4'-DDT	0.2	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Aldrin	0	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Alpha-BHC	0.01	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Beta-BHC	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	- -	- -	- -	- -	- -
Chlordane	0.05	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	- -	- -	- -	- -	- -
cis-Chlordane		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	- -	- -	- -	- -	- -
Delta-BHC	0.04	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Dieldrin	0.004	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Endosulfan I		0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Endosulfan II		0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Endosulfan sulfate		0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Endrin	0	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Endrin aldehyde	5	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	- -	- -	- -	- -	- -
Endrin ketone	5	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	**0.031** IP	0.029 U	0.029 U	0.029 U	0.029 U	- -	- -	- -	- -	- -
Heptachlor	0.04	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Heptachlor epoxide	0.03	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Lindane	0.05	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	- -	- -	- -	- -	- -
Methoxychlor	35	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	- -	- -	- -	- -	- -
Toxaphene	0.06	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	- -	- -	- -	- -	- -
trans-Chlordane		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	- -	- -	- -	- -	- -
Chlorinated Herbicides by GC																
2,4,5-T	35	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
2,4,5-TP (Silvex)		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
2,4-D	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -

Table 4
Old Erie Commons - Remedial Investigation
Groundwater Data Summary

LOCATION		MW-101	MW-101	DUP_102125	MW-102	MW-102	MW-103	MW-103	MW-104	DUP-03	MW-104	EQUIPMENT BLANK	EQUIPMENT BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
SAMPLING DATE		7/31/2025	10/21/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	10/21/2025	7/30/2025	7/30/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	7/31/2025	10/21/2025
LAB SAMPLE ID		L2548090-01	L2566646-01	L2566646-05	L2548090-02	L2566646-02	L2547831-02	L2566646-03	L2547831-01	L2547831-03	L2566646-04	L2548090-03	L2566646-06	L2547831-06	L2548090-05	L2566646-07
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
SAMPLE DEPTH (ft.)		12	12	15	11	11	12	12	15	15	15	--	--	--	--	--
	TOGS 1.1.1 AWQS	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual
Total Metals																
Aluminum, Total		204	39	57.4	86.9	14.8	40.3	16.7	14.3	9.67 J	18.6	- -	- -	- -	- -	- -
Antimony, Total	3	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	- -	- -	- -	- -	- -
Arsenic, Total	25	1.2	0.7	0.61	0.61	1.3	1.39	9.27	0.59	0.49 J	2.52	- -	- -	- -	- -	- -
Barium, Total	1000	57.8	44.11	42	71.9	55.4	106.5	106.1	45.67	42.25	36.85	- -	- -	- -	- -	- -
Beryllium, Total	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	- -	- -	- -	- -	- -
Cadmium, Total	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	- -	- -	- -	- -	- -
Calcium, Total		78700	109000	98400	99100	122000	119000	147000	85400	86300	111000	- -	- -	- -	- -	- -
Chromium, Total	50	0.4 J	1 U	1 U	0.2 J	1 U	1 U	0.17 J	1 U	1 U	1 U	- -	- -	- -	- -	- -
Cobalt, Total		0.24 J	0.5 U	0.5 U	0.2 J	0.22 J	0.23 J	0.21 J	0.5 U	0.5 U	0.5 U	- -	- -	- -	- -	- -
Copper, Total	200	1 U	1 U	1 U	1 U	1 U	0.47 J	1 U	1 U	1 U	1 U	- -	- -	- -	- -	- -
Cyanide, Total	200	2 J	5 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Iron, Total	300	2260	2300	2160	2720	2970	2310	3160	1960	2000	2540	- -	- -	- -	- -	- -
Lead, Total	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	- -	- -	- -	- -	- -
Magnesium, Total	35000	34100	38100	36500	58600	67700	63900	65700	35300	36000	44300	- -	- -	- -	- -	- -
Manganese, Total	300	48.78	39.41	37.55	113.5	125.9	117.7	423.1	77.02	75.87	116.5	- -	- -	- -	- -	- -
Mercury, Total	0.7	0.1 J	0.2 U	0.2 U	0.12 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	- -	- -	- -	- -	- -
Nickel, Total	100	1.75 J	2 U	2 U	0.87 J	2 U	0.67 J	2 U	2 U	2 U	2 U	- -	- -	- -	- -	- -
Potassium, Total		13700	10000	9340	17200	15000	35000	37100	15400	15200	17300	- -	- -	- -	- -	- -
Selenium, Total	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Silver, Total	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	- -	- -	- -	- -	- -
Sodium, Total	20000	19300	23200	21600	11700	11700	22200	26500	32400	33000	27000	- -	- -	- -	- -	- -
Thallium, Total	0.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	- -	- -	- -	- -	- -
Vanadium, Total		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	- -	- -	- -	- -	- -
Zinc, Total	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	- -	- -	- -	- -	- -
Dissolved Metals																
Aluminum, Dissolved		- -	10 U	10 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Antimony, Dissolved	3	- -	4 U	4 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Arsenic, Dissolved	25	- -	0.28 J	0.28 J	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Barium, Dissolved	1000	- -	40.33	40.98	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Beryllium, Dissolved	3	- -	0.5 U	0.5 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Cadmium, Dissolved	5	- -	0.2 U	0.2 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Calcium, Dissolved		- -	95100	93600	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Chromium, Dissolved	50	- -	1 U	1 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Cobalt, Dissolved		- -	0.5 U	0.5 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Copper, Dissolved	200	- -	1 U	1 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Iron, Dissolved	300	- -	25.9 J	73	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Lead, Dissolved	25	- -	1 U	1 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Magnesium, Dissolved	35000	- -	37900	37900	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Manganese, Dissolved	300	- -	37.02	35.91	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Mercury, Dissolved	0.7	- -	0.2 U	0.2 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Nickel, Dissolved	100	- -	0.72 J	2 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Potassium, Dissolved		- -	8990	8780	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Selenium, Dissolved	10	- -	5 U	5 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Silver, Dissolved	50	- -	0.4 U	0.4 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Sodium, Dissolved	20000	- -	22600	21900	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Thallium, Dissolved	0.5	- -	1 U	1 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Vanadium, Dissolved		- -	5 U	5 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Zinc, Dissolved	2000	- -	10 U	10 U	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

LOCATION		MW-101	MW-101	DUP_102125	MW-102	MW-102	MW-103	MW-103	MW-104	DUP-03	MW-104	EQUIPMENT BLANK	EQUIPMENT BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
SAMPLING DATE		7/31/2025	10/21/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	10/21/2025	7/30/2025	7/30/2025	10/21/2025	7/31/2025	10/21/2025	7/30/2025	7/31/2025	10/21/2025
LAB SAMPLE ID		L2548090-01	L2566646-01	L2566646-05	L2548090-02	L2566646-02	L2547831-02	L2566646-03	L2547831-01	L2547831-03	L2566646-04	L2548090-03	L2566646-06	L2547831-06	L2548090-05	L2566646-07
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
SAMPLE DEPTH (ft.)		12	12	15	11	11	12	12	15	15	15	--	--	--	--	--
	TOGS 1.1.1 AWQS	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual
Perfluorinated Alkyl Acids by EPA 1633																
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)		36.2 U	39.8 U	35.9 U	35.6 U	34.5 U	34.9 U	35.6 U	35.2 U	35.6 U	35.3 U	40.9 U	38 U	- -	- -	- -
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)		36.2 U	39.8 U	35.9 U	35.6 U	34.5 U	34.9 U	35.6 U	35.2 U	35.6 U	35.3 U	40.9 U	38 U	- -	- -	- -
3-Perfluoropropyl Propanoic Acid (3:3FTCA)		7.24 U	7.97 U	7.18 U	7.12 U	6.9 U	6.98 U	7.11 U	7.03 U	7.12 U	7.07 U	8.19 U	7.59 U	- -	- -	- -
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)		5.79 U	6.37 U	5.74 U	5.7 U	5.52 U	5.58 U	5.69 U	5.63 U	5.69 U	5.66 U	6.55 U	6.07 U	- -	- -	- -
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)		**0.318** J	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)		14.5 U	15.9 U	14.4 U	14.2 U	13.8 U	14 U	14.2 U	14.1 U	14.2 U	14.1 U	16.4 U	15.2 U	- -	- -	- -
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)		**0.774** J	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)		14.5 U	15.9 U	14.4 U	14.2 U	13.8 U	14 U	14.2 U	14.1 U	14.2 U	14.1 U	16.4 U	15.2 U	- -	- -	- -
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)		2.9 U	3.19 U	2.87 U	2.85 U	2.76 U	2.79 U	2.84 U	2.81 U	2.85 U	2.83 U	3.28 U	3.04 U	- -	- -	- -
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)		2.9 U	3.19 U	2.87 U	2.85 U	2.76 U	2.79 U	2.84 U	2.81 U	2.85 U	2.83 U	3.28 U	3.04 U	- -	- -	- -
Perfluoro-3-Methoxypropanoic Acid (PFMPA)		2.9 U	3.19 U	2.87 U	2.85 U	2.76 U	2.79 U	2.84 U	2.81 U	2.85 U	2.83 U	3.28 U	3.04 U	- -	- -	- -
Perfluoro-4-Methoxybutanoic Acid (PFMBA)		2.9 U	3.19 U	2.87 U	2.85 U	2.76 U	2.79 U	2.84 U	2.81 U	2.85 U	2.83 U	3.28 U	3.04 U	- -	- -	- -
Perfluorobutanesulfonic Acid (PFBS)		**2.37**	**2.09**	**1.92**	**3.48**	**2.69**	**0.879** J	**0.555** J	**1.22** J	**0.946** J	**0.806** J	1.64 U	1.52 U	- -	- -	- -
Perfluorobutanoic Acid (PFBA)		**6.96**	**6.98**	**6.72**	**9.53**	**5.87**	**4.93** J	**2.66** J	**4.14** J	**4.41** J	**4** J	6.55 U	6.07 U	- -	- -	- -
Perfluorodecanesulfonic Acid (PFDS)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorodecanoic Acid (PFDA)		**0.275** J	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorododecanesulfonic Acid (PFDoS)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorododecanoic Acid (PFDoA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluoroheptanesulfonic Acid (PFHpS)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluoroheptanoic Acid (PFHpA)		**1.34** J	**1.59**	**1.55**	**1.84**	**2.36**	**1.16** J	**0.911** J	**0.528** J	**0.498** J	**0.919** J	1.64 U	1.52 U	- -	- -	- -
Perfluorohexanesulfonic Acid (PFHxS)		**1.6**	**3.41**	**3.29**	**1.27** J	**1.67**	**2**	**1.2** J	**0.9** J	**1.13** J	**1** J	1.64 U	1.52 U	- -	- -	- -
Perfluorohexanoic Acid (PFHxA)		**1.87**	**2.17**	**2.33**	**3.17**	**3.3**	**1.84**	**0.939** J	**0.914** J	**0.996** J	**1.14** J	1.64 U	1.52 U	- -	- -	- -
Perfluorononanesulfonic Acid (PFNS)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorononanoic Acid (PFNA)		**0.528** J	**0.558** J	**0.445** J	**0.449** J	**0.676** J	**0.461** J	**0.341** J	**0.422** J	**0.349** J	**0.325** J	1.64 U	1.52 U	- -	- -	- -
Perfluorooctanesulfonamide (PFOSA)		**0.427** J	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorooctanesulfonic Acid (PFOS)	2.7	**8.1**	**8.8**	**8.89**	**1.82**	**2.94**	**0.858** J	**0.74** J	**1.66**	**1.97**	**2.35**	1.64 U	**0.562** J	- -	- -	- -
Perfluorooctanoic Acid (PFOA)	6.7	**3.52**	**4.35**	**4.19**	**5.51**	**6.71**	**1.87**	**1.17** J	**2.14**	**1.85**	**2.9**	1.64 U	1.52 U	- -	- -	- -
Perfluoropentanesulfonic Acid (PFPeS)		**0.326** J	1.59 U	1.44 U	**0.392** J	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluoropentanoic Acid (PFPeA)		**1.51** J	**2.42** J	**2.05** J	**3.29**	**3.46**	**1.26** J	**0.612** J	**1.04** J	**0.754** J	**1.29** J	3.28 U	3.04 U	- -	- -	- -
Perfluorotetradecanoic Acid (PFTeDA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluorotridecanoic Acid (PFTrDA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -
Perfluoroundecanoic Acid (PFUnA)		1.45 U	1.59 U	1.44 U	1.42 U	1.38 U	1.4 U	1.42 U	1.41 U	1.42 U	1.41 U	1.64 U	1.52 U	- -	- -	- -

Notes:
- Except for PFAS, analytical results compared to NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values.
- PFAS compounds compared to thresholds provided in Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, April 2023.
- Results and groundwater standards are in parts per billion (ppb), except for PFAS which is in parts per trillion (ppt).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted cell indicates the respective use groundwater limitation exceeded.
- Blank space indicates that a groundwater limitation does not exist.
- Duplicate sample results are provided to the right of the parent sample results.
- "J" indicates estimated concentration.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "-" indicates that sample was not anlayzed for that parameter.
- Equipment blank was collected through unused sampling tubing.

LOCATION			**SV-101**		**SV-102**		**SV-103**		**SV-104**		**SV-106**		**OA-101**	
SAMPLING DATE			**7/31/2025**		**7/31/2025**		**7/31/2025**		**7/31/2025**		**7/31/2025**		**7/31/2025**	
LAB SAMPLE ID			**L2548247-01**		**L2548247-02**		**L2548247-03**		**L2548247-04**		**L2548247-06**		**L2548247-07**	
SAMPLE TYPE			**SOIL VAPOR**		**SOIL VAPOR**		**SOIL VAPOR**		**SOIL VAPOR**		**SOIL VAPOR**		**AIR**	
SAMPLE DEPTH (ft.)			**2**		**3**		**2**		**2**		**2**		**--**	
	NYSDOH Air Guideline Value	**NYSDOH Decision Matrix - Soil Vapor**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organics in Air														
1,1,1-Trichloroethane		100	3.64	U	5.46	U	5.46	U	3.64	U	10.9	U	1.09	U
1,1,2,2-Tetrachloroethane			4.58	U	6.87	U	6.87	U	4.58	U	13.7	U	1.37	U
1,1,2-Trichloroethane			3.64	U	5.46	U	5.46	U	3.64	U	10.9	U	1.09	U
1,1-Dichloroethane			2.7	U	4.05	U	4.05	U	2.7	U	8.09	U	0.809	U
1,1-Dichloroethene		6	2.64	U	3.96	U	3.96	U	2.64	U	7.93	U	0.793	U
1,2,4-Trichlorobenzene			4.95	U	7.42	U	7.42	U	4.95	U	14.8	U	1.48	U
1,2,4-Trimethylbenzene		60	**26.4**		**25.1**		**30.8**		**27.3**		**33.8**		0.983	U
1,2-Dibromoethane			5.13	U	7.69	U	7.69	U	5.13	U	15.4	U	1.54	U
1,2-Dichlorobenzene			4.01	U	6.01	U	6.01	U	4.01	U	12	U	1.2	U
1,2-Dichloroethane			2.7	U	4.05	U	4.05	U	2.7	U	8.09	U	0.809	U
1,2-Dichloropropane			3.08	U	4.62	U	4.62	U	3.08	U	9.24	U	0.924	U
1,3,5-Trimethylbenzene		60	**7.03**		**7.03**		**8.21**		**7.33**		9.83	U	0.983	U
1,3-Butadiene			1.48	U	2.21	U	2.21	U	1.48	U	4.42	U	0.442	U
1,3-Dichlorobenzene			4.01	U	6.01	U	6.01	U	4.01	U	12	U	1.2	U
1,4-Dichlorobenzene			4.01	U	6.01	U	6.01	U	4.01	U	12	U	1.2	U
1,4-Dioxane			2.4	U	3.6	U	3.6	U	2.4	U	7.21	U	0.721	U
2,2,4-Trimethylpentane		60	3.12	U	4.67	U	4.67	U	3.12	U	9.34	U	0.934	U
2-Butanone			**843**		**1930**		**1480**		**1330**		**2670**		**1.69**	
2-Hexanone			**201**		**335**		**245**		**261**		**387**		0.82	U
3-Chloropropene			2.09	U	3.13	U	3.13	U	2.09	U	6.26	U	0.626	U
4-Ethyltoluene			**6.83**		4.92	U	4.92	U	**3.49**		9.83	U	0.983	U
4-Methyl-2-pentanone			6.84	U	10.2	U	10.2	U	6.84	U	20.5	U	2.05	U
Acetone			**150**		**499**		**359**		**316**		**717**		**16.2**	
Benzene		60	2.13	U	3.19	U	**8.69**		2.13	U	6.39	U	**0.76**	
Benzyl chloride			3.45	U	5.18	U	5.18	U	3.45	U	10.4	U	1.04	U
Bromodichloromethane			4.47	U	6.7	U	6.7	U	4.47	U	13.4	U	1.34	U
Bromoform			6.9	U	10.3	U	10.3	U	6.9	U	20.7	U	2.07	U
Bromomethane			2.59	U	3.88	U	3.88	U	2.59	U	7.77	U	0.777	U
Carbon disulfide			**3.52**		**4.05**		**12.3**		**20.6**		**6.51**		0.623	U
Carbon tetrachloride		6	4.2	U	6.29	U	6.29	U	4.2	U	12.6	U	1.26	U
Chlorobenzene			3.07	U	4.61	U	4.61	U	3.07	U	9.21	U	0.921	U
Chloroethane			1.76	U	2.64	U	2.64	U	1.76	U	5.28	U	0.528	U
Chloroform			**6.69**		4.88	U	4.88	U	**5.13**		**11.1**		0.977	U
Chloromethane			1.38	U	2.07	U	2.07	U	1.38	U	4.13	U	**1.36**	
cis-1,2-Dichloroethene		6	2.64	U	3.96	U	3.96	U	2.64	U	7.93	U	0.793	U
cis-1,3-Dichloropropene			3.03	U	4.54	U	4.54	U	3.03	U	9.08	U	0.908	U
Cyclohexane		60	2.3	U	3.44	U	**7.5**		**2.43**		6.88	U	0.688	U
Dibromochloromethane			5.68	U	8.52	U	8.52	U	5.68	U	17	U	1.7	U
Dichlorodifluoromethane			3.3	U	4.94	U	4.94	U	3.3	U	9.89	U	**2.12**	
Ethanol			**38.8**		**52**		47.1	U	**1740**		94.2	U	9.42	U
Ethyl Acetate			6.02	U	9.01	U	9.01	U	6.02	U	18	U	1.8	U
Ethylbenzene		60	**16.3**		**17.8**		**18.9**		**15.5**		**24.5**		0.869	U
Freon-113			5.11	U	7.66	U	7.66	U	5.11	U	15.3	U	1.53	U
Freon-114			4.66	U	6.99	U	6.99	U	4.66	U	14	U	1.4	U
Heptane		200	2.73	U	**4.47**		**6.27**		**4.34**		8.2	U	0.82	U
Hexachlorobutadiene			7.11	U	10.7	U	10.7	U	7.11	U	21.3	U	2.13	U
Isopropanol			8.19	U	12.3	U	12.3	U	8.19	U	24.6	U	38.8	
Methyl tert butyl ether			2.4	U	3.61	U	3.61	U	2.4	U	7.21	U	0.721	U
Methylene chloride	60	100	5.8	U	8.69	U	8.69	U	5.8	U	17.4	U	1.74	U
n-Hexane		200	2.35	U	**3.95**		**8.11**		**6.13**		**8.46**		**4.23**	
Naphthalene		60	3.32	U	4.98	U	4.98	U	3.32	U	9.96	U	0.996	U
o-Xylene		60	**25.8**		**29.3**		**31.7**		**27.1**		**41.8**		0.869	U
p/m-Xylene		200	**70.4**		**76.4**		**76.4**		**66.9**		**99**		1.74	U
Styrene			2.84	U	4.26	U	4.26	U	2.84	U	8.52	U	0.852	U
Tertiary butyl Alcohol			**5.58**		**14.8**		7.58	U	**8.31**		**21**		1.52	U
Tetrachloroethene	30	100	4.52	U	6.78	U	**14.6**		4.52	U	13.6	U	1.36	U
Tetrahydrofuran			4.93	U	7.37	U	7.37	U	4.93	U	14.7	U	1.47	U
Toluene		300	**29.5**		**36.5**		**36.6**		**27**		**41.5**		0.754	U
trans-1,2-Dichloroethene			2.64	U	3.96	U	3.96	U	2.64	U	7.93	U	0.793	U
trans-1,3-Dichloropropene			3.03	U	4.54	U	4.54	U	3.03	U	9.08	U	0.908	U
Trichloroethene	2	6	3.58	U	5.37	U	5.37	U	3.58	U	10.7	U	1.07	U
Trichlorofluoromethane			**15.5**		5.62	U	5.62	U	3.75	U	11.2	U	1.12	U
Vinyl bromide			2.92	U	4.37	U	4.37	U	2.92	U	8.74	U	0.874	U
Vinyl chloride		6	1.71	U	2.56	U	2.56	U	1.71	U	5.11	U	0.511	U

Notes:
- Analytical data compared to NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York and NYSDOH Soil Vapor / Indoor Air Decision Matrices.
- Results and guidance values in micrograms per cubic meter (ug/m3).
- Analytes detected at concentrations greater than laboratory detections limits are **bolded**.
- Highlighted color indicates AGV exceeded. Red text indicates sub-slab decision matrice value exceeded.
- Blank space indicates that a standard does not exist.
- "U" indicates analyte not detected at concentration greater than laboratory detection limit.
- "-" indicates that sample was not anlayzed for that parameter.
- SV-105 could not be analyzed because the sample was impacted by groundwater.

BENCHMARK

Table 6

SUMMARY OF PREVIOUS PHASE II INVESTIGATIONS SOIL/FIII ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS WORK PLAN
OLD ERIE COMMONS SITE
VILLAGE OF CANASTOTA, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	Industrial Use SCOs[2]	SB-1 0 to 4 ft	SB-3 0 to 4 ft	SB-5 4 to 6 ft	TP-1 1 to 3 ft	TP-5 3 to 4 ft	TP-8 3 to 4 ft	TP-9 2 to 3 ft	TP-15 2 to 4 ft	TP-16 2 to 2.5 ft	TP-17 1 to 3 ft	TP-18 3 to 3.5 ft
Sample Date					10/25/2019			03/24/2021				10/20/2021			
Volatile Organic Compounds (VOCs) - mg/kg [3]															
Acetone	0.05	100	500	1000	0.032	0.019	**0.063**	--	--	--	--	--	--	--	--
Methylene Chloride	0.05	100	500	1000	0.0052 JB	0.004 JB	0.0034 JB	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds (SVOCs) - mg/kg [3]															
Acenaphthene	20	100	500	1000	ND	ND	0.52 J	ND	0.15 J	0.12 J	0.028 J	--	1.2	ND	--
Fluoranthene	100	100	500	1000	0.11 J	0.043 J	5.1	0.24	2.7	2.5	0.28	--	31 D	0.41	--
Naphthalene	12	100	500	1000	ND	ND	0.53 J	0.038 J	0.19 J	0.93	0.061 J	--	--	--	--
Benzo(a)anthracene	1	1	5.6	11	0.065 J	0.028 J	**2.3**	0.16	**1.6**	**1.3**	0.19	--	**11**	0.21 J	--
Benzo(a)pyrene	1	1	1	1.1	0.042 J	ND	**1.9**	0.13 J	**1.3**	**1.1**	0.14 J	--	**10**	0.18 J	--
Benzo(b)fluoranthene	1	1	5.6	11	0.069 J	ND	**2.1**	0.19	**1.7**	**1.6**	0.2	--	**14**	0.26 J	--
Benzo(k)fluoranthene	0.8	3.9	56	110	ND	ND	**1.2**	0.054 J	0.57	0.56	0.07 J	--	**3.9**	ND	--
Chrysene	1	3.9	56	110	0.073 J	ND	**2.2**	0.16	**1.4**	**1.4**	0.23	--	**12**	0.23 J	--
Acenaphthylene	100	100	500	1000	ND	ND	0.21 J	ND	0.24	0.31	0.038 J	--	2.3	ND	--
Anthracene	100	100	500	1000	ND	ND	1.2	ND	0.59	0.38	0.076 J	--	5	ND	--
Benzo(ghi)perylene	100	100	500	1000	0.032 J	ND	1	0.088 J	0.95	0.65	0.099 J	--	7.1	0.13 J	--
Fluorene	30	100	500	1000	ND	ND	0.69 J	ND	0.17 J	0.14 J	0.038 J	--	2.4	ND	--
Phenanthrene	100	100	500	1000	0.083 J	0.039 J	4.7	0.17	2.1	1.8	0.34	--	28	0.32 J	--
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1	ND	ND	0.29 J	ND	0.22	0.19	0.031 J	--	**1.4**	ND	--
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	0.028 J	ND	**0.97 J**	0.092 J	**1**	**0.76**	0.083 J	--	**8.3**	0.15 J	--
Pyrene	100	100	500	1000	0.1 J	0.039 J	4	0.21	2.5	2.2	0.26	--	28	0.37 J	--
Biphenyl	--	--	--	--	ND	ND	ND	ND	ND	0.13 J	ND	--	--	--	--
2-Methylnaphthalene	--	--	--	--	ND	ND	0.2 J	0.044 J	0.18 J	1.1	ND	--	--	--	--
Dibenzofuran	7	59	350	1000	ND	ND	0.43 J	ND	0.13 J	0.33	0.033 J	--	--	--	--
Acetonphenone	--	--	--	--	ND	ND	ND	ND	ND	0.17 J	0.08 J	--	--	--	--
Carbazole	--	--	--	--	ND	ND	0.56 J	ND	0.2 J	0.19 J	0.032 J	--	--	--	--
Polychlorinated Biphenyls (PCBs) - mg/Kg															
Total PCBs	0.1	1	1	25	ND	ND	ND	--	--	--	--	--	--	--	--
Metals - mg/Kg															
Aluminum	--	--	--	--	10000	13000	15300	--	--	--	--	--	--	--	--
Antimony	--	--	--	--	0.79 J	0.71 J	ND	--	--	--	--	--	--	--	--
Arsenic	13	16	16	16	**16**	9.1	8.3	7.47	**28.6**	**20.7**	**52.6**	**63.8**	**33.1**	**29.8**	**39.3**
Barium	350	400	400	10000	**479**	312	170	349	241	168	31.4	310	**1980**	293	**408**
Beryllium	7.2	72	590	2700	1.3	1.3	0.75	--	--	--	--	--	--	--	--
Cadmium	2.5	4.3	9.3	60	0.27	ND	ND	0.587	0.452 J	0.703	0.436 J	0.587 J	**3.32**	1.33	0.349 J
Calcium	--	--	--	--	5540 B	3200 B	25200 B	--	--	--	--	--	--	--	--
Chromium	30	180	1500	6800	20.7	**69.8**	23.4	7.15	6.65	7.94	2.54	7.88	**32.5**	11.6	6.72
Cobalt	--	--	--	--	9.2	10.7	6.5	--	--	--	--	--	--	--	--
Copper	50	270	270	10000	33.6	22.3	2	--	--	--	--	--	--	--	--
Iron	--	--	--	--	17700	27000	33000	--	--	--	--	--	--	--	--
Lead	63	400	1000	3900	**104**	**142**	9.2	**93.6**	63.8	**127**	5.3	**708**	**33500**	**352**	25.8
Magnesium	--	--	--	--	2830	3620	15800	--	--	--	--	--	--	--	--
Manganese	1600	2000	10000	10000	184	195	427	--	--	--	--	--	--	--	--
Mercury	0.18	0.81	2.8	5.7	0.096	0.051	0.021 J	**1.64**	**0.887**	**0.553**	0.096	0.077 J	**11**	**0.32**	**0.28**
Nickel	30	310	310	10000	25.5	**31.2**	26.4	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	2740	4300	7580	--	--	--	--	--	--	--	--
Selenium	3.9	180	1500	6800	ND	0.97 J	ND	0.405 J	1.03 J	1.32	1.12	0.399 J	0.654 J	1.09	0.62 J
Silver	2	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	0.373 J	0.37 J	ND
Sodium	--	--	--	--	204	136 J	157 J	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	26.4	25.9	26.3	--	--	--	--	--	--	--	--
Zinc	109	10000	10000	10000	79.8	**109**	31.7	--	--	--	--	--	--	--	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analyzed for.
B = Analyte was detected in associated method blank.

Bold	: Results Exceed Unrestricted Use Soil Cleanup Objectives
Bold	: Results Exceed Restricted Residential Use Soil Cleanup Objectives
Bold	: Results Exceed Commercial Use Soil Cleanup Objectives
Bold	: Results Exceed Industrial Use Soil Cleanup Objectives

Appendices

Appendix A

Test Pit Logs

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

TEST PIT LOG

Test Pit:	TP-101
Northing:	1122671.80894
Easting:	1043142.18097

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0					
1			0.5-1.5	Brown gravelly SILT with sand, Non-Plastic, Firm, Moist, Trace HFM (brick, concrete)	0.0					▼
2			1.5-2.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0					
3		▼	2.5-3	Dark brown sandy lean CLAY with gravel, Medium Plasticity, Soft, Moist	0.0					▼
4			3-4	Grey silty GRAVEL with sand, Loose, Wet	0.0					
5			4	Test Pit Termination - Groundwater Infiltration						
6										
7										
8										
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C&S Engineers, Inc. 499 Col. Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	**TEST PIT LOG**	**Test Pit:**	TP-102
		Northing:	1122697.00351
		Easting:	1043311.20658

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-2	Brown HFM, Stone, brick, tar, wood, Moist	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	▼
			2-3	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
3		▼				☐	☐	☐	☐	
			3-3.5	Reddish brown gravelly lean CLAY, Medium Plasticity, Stiff, Wet	0.0	☐	☐	☐	☐	▼
4			3.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
5						☐	☐	☐	☐	
6						☐	☐	☐	☐	
7						☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-103
Northing:	1122728.02314
Easting:	1043348.79859

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
1			0-1	Brown Topsoil, Moist	0.1					
2			1-4.5	Black HFM, Brick, tar, cinder, Moist	0.1					
3										
4										
5			4.5-8	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0					
6										
7										
8		▼								
9			8-9	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0					
10			9	Test Pit Termination - Refusal						
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

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Test Pit:	TP-104
Northing:	1122705.36953
Easting:	1043433.79607

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Black HFM, Coal, cinder, stone, Moist	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	
3						☐	☐	☐	☐	▼
			3-6	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
4						☐	☐	☐	☐	
5						☐	☐	☐	☐	
6		▼	6-6.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	▼
7			6.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

C&S Engineers, Inc. 499 Col. Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	**TEST PIT LOG**	**Test Pit:**	TP-105
		Northing:	1122796.79393
		Easting:	1043292.04263

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Black HFM, Coal, cinder, stone, brick, Moist	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	
3						☐	☐	☐	☐	▼
4			3-6	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
5						☐	☐	☐	☐	
6		▼	6-6.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	▼
7			6.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-106
Northing:	1122781.98817
Easting:	1043355.11779

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
1			0-1.5	Brown Topsoil, Moist	0.1	☐	☐	☐	☐	
2			1.5-3	Black HFM, Wood, cinder, coal, slag, Moist	0.1	☐	☐	☐	☐	▼
3			3-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
4						☐	☐	☐	☐	
5		▼				☐	☐	☐	☐	
6			5.5-7	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	
7						☐	☐	☐	☐	▼
8			7	Test Pit Termination - Refusal		☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-107
Northing:	1122807.60178
Easting:	1043122.02263

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Black HFM, Wood, cinder, coal, slag, Moist	0.1	☐	☐	☐	☐	
2						☐	☐	☐	☐	
3						☐	☐	☐	☐	▼
			3-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
4						☐	☐	☐	☐	
5		▼				☐	☐	☐	☐	
6			5.5-7	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	
7						☐	☐	☐	☐	
			7	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-108
Northing:	1122813.66863
Easting:	1043244.92606

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-4	Black HFM, Coal, brick, concrete, asphalt, Moist	0.1	☐	☐	☐	☐	
1						☐	☐	☐	☐	
2						☐	☐	☐	☐	▼
3						☐	☐	☐	☐	
4			4-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
5		▼	5.5-6	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	▼
6			6	Test Pit Termination - Refusal		☐	☐	☐	☐	
7						☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-109
Northing:	1122832.04979
Easting:	1043337.23515

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Black HFM, Brick, concrete, coal, cinder, wood, Moist	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	
3			3-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	▼
4						☐	☐	☐	☐	
5		▼	5.5-6	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	
6			6	Test Pit Termination - Refusal		☐	☐	☐	☐	▼
7						☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-110
Northing:	1122881.66791
Easting:	1043230.25863

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Brown gravelly SILT with sand, Non-Plastic, Firm, Moist, Trace HFM (brick, concrete, cinder)	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	▼
3			3-6	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.1	☐	☐	☐	☐	
4						☐	☐	☐	☐	
5						☐	☐	☐	☐	
6		▼	6-6.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.1	☐	☐	☐	☐	▼
7			6.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-111
Northing:	1122937.24749
Easting:	1043150.71087

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	▶
1–3		▼ (at 3)	0-3	Reddish brown HFM, Building materials (wood, metal, concrete, rail ties), Moist	0.0	☐	☐	☐	☐	
4–6			3-6	Reddish brown HFM, Building materials (wood, metal, concrete, rail ties), Wet	0.0	☐	☐	☐	☐	▼
7–20			6	Test Pit Termination - Groundwater Infiltration		☐	☐	☐	☐	

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		Northing:	1122933.74166
		Easting:	1043248.97218

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-3	Brown gravelly SILT with sand, Non-Plastic, Firm, Moist, Trace HFM (brick, glass, concrete, styrofoam, tile, building materials)	0.0	☐	☐	☐	☐	
2						☐	☐	☐	☐	▼
3			3-6	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
4						☐	☐	☐	☐	▼
5						☐	☐	☐	☐	
6		▼	6-6.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	
7			6.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-113
Northing:	1122920.34387
Easting:	1043322.3097

Project Number:	W96.013.001	**Start Date:**	7/28/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/28/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
1			0-1	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
2			1-3	Black HFM, Coal, cinder, brick, Moist	0.0	☐	☐	☐	☐	
3						☐	☐	☐	☐	▼
4			3-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
5						☐	☐	☐	☐	
6		▼	5.5-6	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	▼
7			6	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

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TEST PIT LOG

Test Pit:	TP-114
Northing:	1122988.24738
Easting:	1043194.41621

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Sample
		0-0.5	Brown Topsoil, Moist	0.0	
1		0.5-2	Brown gravelly SILT with sand, Non-Plastic, Firm, Moist, Trace HFM (glass, brick, coal)	0.0	1.5-2
2					
3		2-5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	3.5-4
4					
5	▼	5-5.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	
6		5.5	Test Pit Termination - Refusal		
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

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TEST PIT LOG

Test Pit:	TP-115
Northing:	1122989.14958
Easting:	1043312.88957

Project Number:	W96.013.001	**Start Date:**	7/29/2025
Project Name:	Old Erie Commons	**Finish Date:**	7/29/2025
Client:	Housing Visions	**Excavating Firm:**	Matrix Environmental Technologies
Address:	160 Center Street, Canastota	**Excavator:**	Kubota BT1000

Depth (ft)	Test Pit	Groundwater	Depth (ft)	USCS MATERIAL DESCRIPTION	PID (ppm)	Staining	Odor	Petroleum Impacts	Chemical Impacts	Sample
			0-0.5	Brown Topsoil, Moist	0.0	☐	☐	☐	☐	
1			0.5-1.5	Brown gravelly SILT with sand, Non-Plastic, Firm, Moist, Trace HFM (brick, glass)	0.0	☐	☐	☐	☐	▼
2			1.5-5.5	Reddish brown lean CLAY, Medium Plasticity, Stiff, Moist	0.0	☐	☐	☐	☐	
3						☐	☐	☐	☐	
4						☐	☐	☐	☐	
5		▼				☐	☐	☐	☐	▼
6			5.5-6.5	Reddish brown / grey gravelly lean CLAY, Medium Plasticity, Hard, Wet, (Glacial Till)	0.0	☐	☐	☐	☐	
7			6.5	Test Pit Termination - Refusal		☐	☐	☐	☐	
8						☐	☐	☐	☐	
9						☐	☐	☐	☐	
10						☐	☐	☐	☐	
11						☐	☐	☐	☐	
12						☐	☐	☐	☐	
13						☐	☐	☐	☐	
14						☐	☐	☐	☐	
15						☐	☐	☐	☐	
16						☐	☐	☐	☐	
17						☐	☐	☐	☐	
18						☐	☐	☐	☐	
19						☐	☐	☐	☐	
20						☐	☐	☐	☐	

Appendix B

Groundwater Monitoring Well Construction and Sampling Logs

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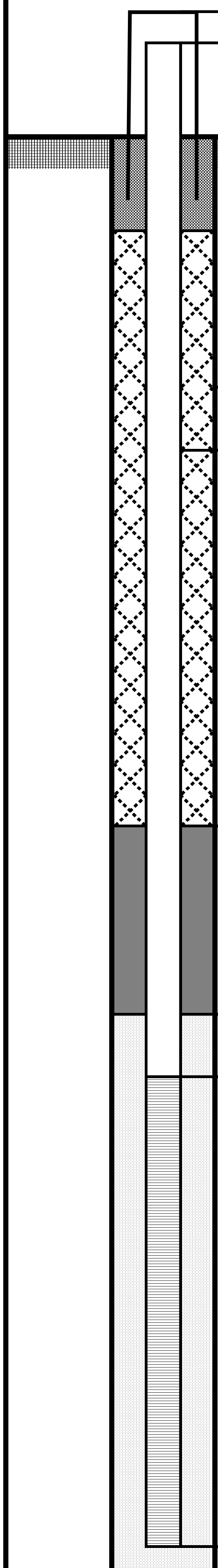
GROUNDWATER OBSERVATION WELL CONSTRUCTION LOG

		Well No.	**MW-101**
		Project No.:	W96.013.001
		Surface Elev.:	428.18'
Project Name:	Old Erie Commons	***Datum:***	NAD83 NYSPCS Cen
Location:	160 Center Street, Canastota	***Start Date:***	7/30/25
Client:	Housing Visions	***Finish Date:***	7/30/25
Drilling Firm:	Matrix Environmental Technologies	***Inspector:***	NC
Drill Rig:	GeoProbe 7822DT	***Casing:***	4.25" I.D. Auger

Notes: (provide description of observation well location, method of construction, development method and any other information)

- No water added during well construction
- Drill cuttings spread in general vicinity because no signs of contamination



0'-0" **Top Protective Casing**

-3.2" **Top of Riser**

0'-0" **Ground Surface**

Surface Backfill Material
- [ ] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [X] Concrete

8.5" **Bore Hole Diameter**

2" **Well Diameter**

Well Material
- [X] PVC
- [ ] Stainless Steel

Backfill Material
- [X] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [X] Bentonite Chips/Pellets
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout

2' **Top of Filter Pack**

2.5' **Top of Screen**

Screen Slot Size
- [X] 010 in
- [ ] 015 in
- [ ] 020 in
- [ ] 025 in

Filter Material
- [ ] 00 Sand Pack
- [X] 0 Sand Pack
- [ ] 1 Sand Pack
- [ ] 2 Sand Pack
- [ ] 3 Sand Pack
- [ ] 4 Sand Pack

12.5' **Bottom of Screen**

12.5' **Bottom of Bore Hole**

Groundwater Measurement Data

Date	Time	Depth to Water	Water Elevation	Tide Status
7/31/2025	8:40	3.07		
10/21/2025	9:30	3.37		

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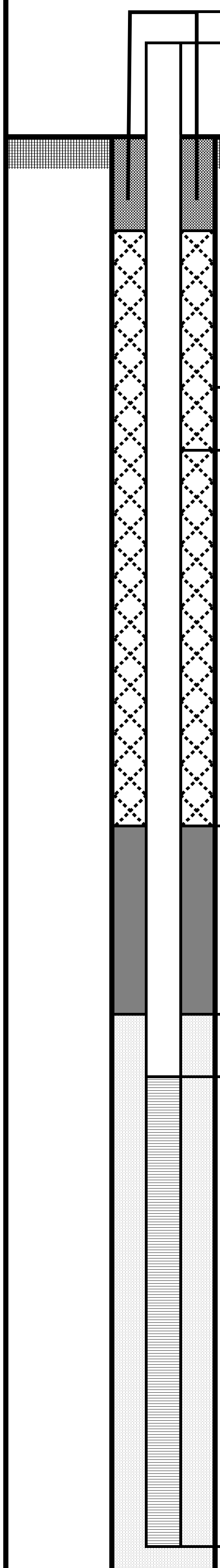
GROUNDWATER OBSERVATION WELL CONSTRUCTION LOG

Well No.	**MW-102**
Project No.:	W96.013.001
Surface Elev.:	426.99'
Datum:	NAD83 NYSPCS Cen
Start Date:	7/29/25
Finish Date:	7/29/25
Inspector:	NC / CD

Project Name: Old Erie Commons
Location: 160 Center Street, Canastota
Client: Housing Visions
Drilling Firm: Matrix Environmental Technologies
Drill Rig: GeoProbe 7822DT
Casing: 4.25" I.D. Auger

Notes: (provide description of observation well location, method of construction, development method and any other information)

- No water added during well construction
- Drill cuttings spread in general vicinity because no signs of contamination



0'-0" **Top Protective Casing**

-4.4" **Top of Riser**

0'-0" **Ground Surface**

Surface Backfill Material
- [ ] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [X] Concrete

8.5" **Bore Hole Diameter**

2" **Well Diameter**

Well Material
- [X] PVC
- [ ] Stainless Steel

Backfill Material
- [X] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [X] Bentonite Chips/Pellets
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout

2' **Top of Filter Pack**

2.5' **Top of Screen**

Screen Slot Size
- [X] 010 in
- [ ] 015 in
- [ ] 020 in
- [ ] 025 in

Filter Material
- [ ] 00 Sand Pack
- [X] 0 Sand Pack
- [ ] 1 Sand Pack
- [ ] 2 Sand Pack
- [ ] 3 Sand Pack
- [ ] 4 Sand Pack

12.5' **Bottom of Screen**

12.5' **Bottom of Bore Hole**

Groundwater Measurement Data

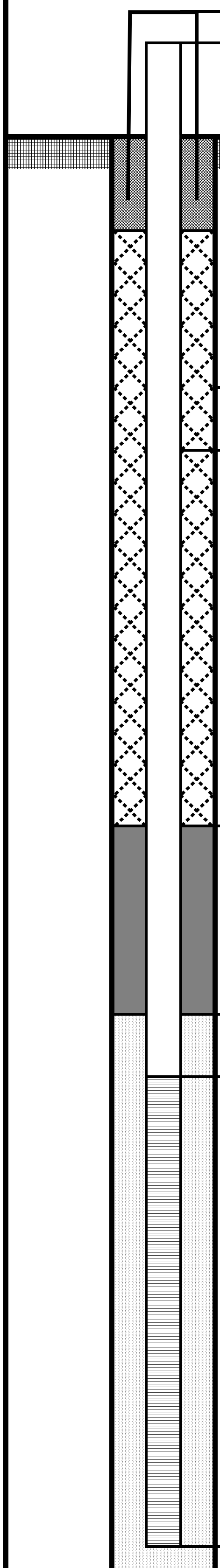
Date	Time	Depth to Water	Water Elevation	Tide Status
7/31/2025	11:10	3.07		
10/21/2025	9:40	3.3		

C&S COMPANIES	C&S Engineers, Inc. 499 Col Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	GROUNDWATER OBSERVATION WELL CONSTRUCTION LOG	Well No.	MW-103
			Project No.:	W96.013.001
			Surface Elev.:	427.37'

Project Name:	Old Erie Commons	Datum:	NAD83 NYSPCS Cen
Location:	160 Center Street, Canastota	Start Date:	7/29/25
Client:	Housing Visions	Finish Date:	7/29/25
Drilling Firm:	Matrix Environmental Technologies	Inspector:	NC / CD
Drill Rig:	GeoProbe 7822DT	Casing:	4.25" I.D. Auger

Notes: (provide description of observation well location, method of construction, development method and any other information)

- No water added during well construction
- Drill cuttings spread in general vicinity because no signs of contamination



0'-0" Top Protective Casing

-3.7" Top of Riser

0'-0" Ground Surface

Surface Backfill Material
- [ ] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [X] Concrete

8.5" Bore Hole Diameter

2" Well Diameter

Well Material
- [X] PVC
- [ ] Stainless Steel

Backfill Material
- [X] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' Top of Seal

Seal Material
- [X] Bentonite Chips/Pellets
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout

2' Top of Filter Pack

3' Top of Screen

Screen Slot Size
- [X] 010 in
- [ ] 015 in
- [ ] 020 in
- [ ] 025 in

Filter Material
- [ ] 00 Sand Pack
- [X] 0 Sand Pack
- [ ] 1 Sand Pack
- [ ] 2 Sand Pack
- [ ] 3 Sand Pack
- [ ] 4 Sand Pack

13' Bottom of Screen

13' Bottom of Bore Hole

Groundwater Measurement Data

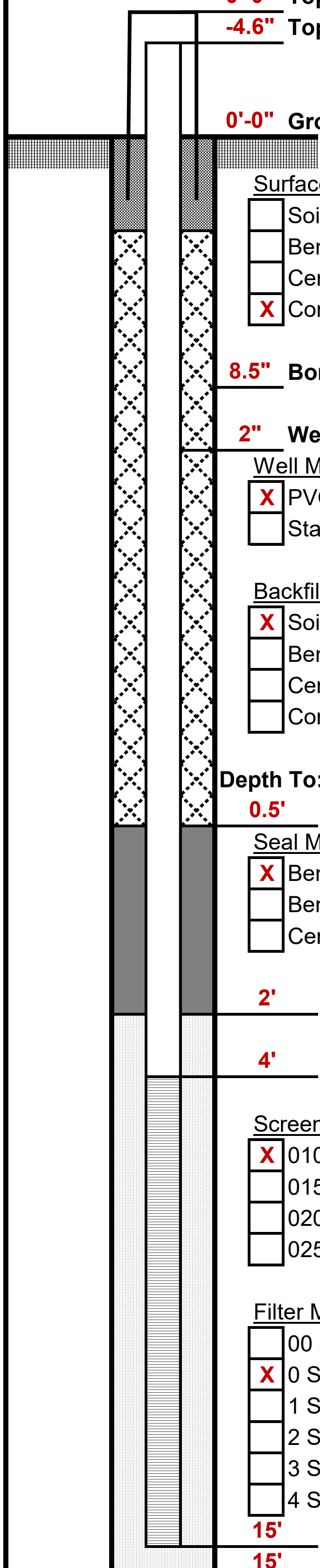
Date	Time	Depth to Water	Water Elevation	Tide Status
7/30/2025	11:30	4.4		
10/21/2025	9:45	5.15		

C&S COMPANIES	**C&S Engineers, Inc.** 499 Col Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	**GROUNDWATER OBSERVATION WELL CONSTRUCTION LOG**	

		Well No.	**MW-104**
		Project No.:	W96.013.001
		Surface Elev.:	427.79'
Project Name:	Old Erie Commons	***Datum:***	NAD83 NYSPCS Cen
Location:	160 Center Street, Canastota	***Start Date:***	7/28/25
Client:	Housing Visions	***Finish Date:***	7/28/25
Drilling Firm:	Matrix Environmental Technologies	***Inspector:***	NC / CD
Drill Rig:	GeoProbe 7822DT	***Casing:***	4.25" I.D. Auger

Notes: (provide description of observation well location, method of construction, development method and any other information)

- Added 3 gallons of water during well construction
- Drill cuttings spread in general vicinity because no signs of contamination



0'-0" **Top Protective Casing**

-4.6" **Top of Riser**

0'-0" **Ground Surface**

Surface Backfill Material
- [ ] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [X] Concrete

8.5" **Bore Hole Diameter**

2" **Well Diameter**

Well Material
- [X] PVC
- [ ] Stainless Steel

Backfill Material
- [X] Soil Cuttings
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [X] Bentonite Chips/Pellets
- [ ] Bentonite Slurry
- [ ] Cement/Bentonite Grout

2' **Top of Filter Pack**

4' **Top of Screen**

Screen Slot Size
- [X] 010 in
- [ ] 015 in
- [ ] 020 in
- [ ] 025 in

Filter Material
- [ ] 00 Sand Pack
- [X] 0 Sand Pack
- [ ] 1 Sand Pack
- [ ] 2 Sand Pack
- [ ] 3 Sand Pack
- [ ] 4 Sand Pack

15' **Bottom of Screen**

15' **Bottom of Bore Hole**

Groundwater Measurement Data

Date	Time	Depth to Water	Water Elevation	Tide Status
7/29/2025	8:00	3.62		
7/30/2025	8:30	4.9		
10/21/2025	9:50	3.6		

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Well Sampling Field Data Sheet

Well Casing Unit Volume
(gal/l.f.)

1¼" = 0.08 2" = 0.17 3" = 0.38
4" = 0.66 6" = 1.5 8" = 2.6

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: NC / CD

WELL DATA

Date	7/31/2025	
Time	8:40	
Water meter ID		
Well Number	**MW-101**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	12.28	
Static Water Level (feet)	3.07	
H_2O Column (feet)	9.21	
Pump Intake (feet)	12.00	
Well Volume (gal)	1.50	
Amount to Evacuate (gal)	4.50	
Amount Evacuated (gal)	4.80	

SAMPLE DATA

Sample Date	7/31/2025	
Sample Time	10:20	
Sampler Initials	CD	
Sample I.D.	MW-101	
Dupe Collected?	☐	ID:
MS Collected?	☑	ID: MS-03
MSD Collected?	☑	ID: MSD-03
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK
Comments		

FIELD READINGS

Date	Stabilization Criteria	7/31/2025							
Time		9:00	9:05	9:10	9:15	9:20	9:25	9:30	9:35
Volume Extracted	gallons	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4
Flow Rate	mL/min	250	250	250	250	250	250	250	250
Static Water Level (feet)	NA	3.24	3.24	3.24	3.26	3.26	3.26	3.27	3.27
pH (Std. Units)	+/-0.1	8.3	8.15	8.13	8.12	8.1	8.08	8.07	8.06
Conductivity (mS/cm)	3%	0.746	0.798	0.805	0.806	0.807	0.809	0.808	0.81
Turbidity (NTU)	10%	1000	874	536	272	233	147	112	87.5
D.O. (mg/L)	10%	0.82	0.42	2.13	2.06	1.79	1.2	1.11	1.07
Temperature (ºC) (ºF)	3%	19.71	16.58	16.08	15.91	15.7	15.56	15.43	15.34
ORP[3](mV)	+/-10 mv	40	-110	-130	-137	-142	-144	-146	-148
Appearance		VT	VT	VT	T	T	ST	ST	ST
Color		Reddish	Reddish	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization Criteria	7/31/2025							
Time		9:40	9:45	9:50	9:55	10:00	10:05	10:10	10:15
Volume Extracted	gallons	2.7	3	3.3	3.6	3.9	4.2	4.5	4.8
Flow Rate	mL/min	250	250	250	250	250	250	250	250
Static Water Level (feet)	NA	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27
pH (Std. Units)	+/-0.1	8.06	8.06	8.07	8.07	8.07	8.07	8.07	8.07
Conductivity (mS/cm)	3%	0.811	0.812	0.813	0.813	0.807	0.814	0.815	0.815
Turbidity (NTU)	10%	76.4	67.6	63.1	57.3	55.9	53.9	51.8	50
D.O. (mg/L)	10%	0.96	0.91	0.85	0.79	0.72	0.68	0.65	0.62
Temperature (ºC) (ºF)	3%	15.22	15.18	15.09	15.04	14.95	14.92	14.84	14.8
ORP[3](mV)	+/-10 mv	-149	-149	-150	-150	-150	-151	-150	-151
Appearance		ST	ST	ST	ST	ST	ST	ST	C
Color		Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

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

Comments
All parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)

1¼" = 0.08 2" = 0.17 3" = 0.38
4" = 0.66 6" = 1.5 8" = 2.6

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: NC / CD

WELL DATA

Date	7/31/2025	
Time	11:10	
Water meter ID		
Well Number	**MW-102**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	11.65	
Static Water Level (feet)	3.07	
H_2O Column (feet)	8.58	
Pump Intake (feet)	11.00	
Well Volume (gal)	1.40	
Amount to Evacuate (gal)	4.20	
Amount Evacuated (gal)	7.00	

SAMPLE DATA

Sample Date	7/31/2025	
Sample Time	13:05	
Sampler Initials	CD	
Sample I.D.	MW-102	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK
Comments		

FIELD READINGS

Date	Stabilization Criteria	7/31/2025							
Time		11:50	11:55	12:00	12:05	12:10	12:15	12:20	12:25
Volume Extracted	gallons	2	2.5	3	3.5	4	4.3	4.6	4.9
Flow Rate	mL/min	400	400	400	400	400	250	250	250
Static Water Level (feet)	NA	4.37	4.26	4.21	4.2	4.2	4.08	4	3.96
pH (Std. Units)	+/-0.1	8.07	7.9	7.85	7.81	7.79	7.78	7.77	7.77
Conductivity (mS/cm)	3%	1.04	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turbidity (NTU)	10%	1000	438	244	174	116	84.2	77.1	72.5
D.O. (mg/L)	10%	4.33	2.97	2.51	2.19	1.83	1.87	1.71	1.45
Temperature (ºC) (ºF)	3%	17.02	16.22	15.97	15.86	15.72	15.88	15.89	15.83
ORP^3(mV)	+/-10 mv	-57	-77	-82	-86	-90	-91	-92	-92
Appearance		VT	T	T	ST	ST	ST	ST	ST
Color		Reddish	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization Criteria	7/31/2025							
Time		12:30	12:35	12:40	12:45	12:50	12:55	13:00	
Volume Extracted	gallons	5.2	5.5	5.8	6.1	6.4	6.7	7	
Flow Rate	mL/min	250	250	250	250	250	250	250	
Static Water Level (feet)	NA	3.97	3.97	3.97	3.97	3.95	3.94	3.93	
pH (Std. Units)	+/-0.1	7.76	7.76	7.76	7.75	7.75	7.75	7.75	
Conductivity (mS/cm)	3%	1.06	1.06	1.06	1.06	1.06	1.06	1.06	
Turbidity (NTU)	10%	74.3	70.6	70.5	69.5	72.6	74.5	69.3	
D.O. (mg/L)	10%	1.47	1.5	1.51	1.47	1.42	1.4	1.38	
Temperature (ºC) (ºF)	3%	15.78	15.75	15.73	15.69	15.68	15.68	15.71	
ORP^3(mV)	+/-10 mv	-93	-93	-93	-93	-93	-93	-93	
Appearance		ST	ST	ST	ST	ST	ST	ST	
Color		Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	
Free Product (Yes/No)		No	No	No	No	No	No	No	
Odor		None	None	None	None	None	None	None	

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

Comments
Very muddy on initial purge. Waited to connect Horiba.
All parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

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

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: NC / MC

WELL DATA

Date	7/30/2025	
Time	11:30	
Water meter ID		
Well Number	**MW-103**	
PID Reading (ppm)	0.6	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	12.76	
Static Water Level (feet)	4.40	
H_2O Column (feet)	8.36	
Pump Intake (feet)	12.00	
Well Volume (gal)	1.36	
Amount to Evacuate (gal)	4.09	
Amount Evacuated (gal)	4.75	

SAMPLE DATA

Sample Date	7/30/2025	
Sample Time	14:40	
Sampler Initials	MCC	
Sample I.D.	MW-103	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK
Comments		

FIELD READINGS

Date	Stabilization Criteria	7/30/2025							
Time		12:30	12:35	12:40	12:45	12:50	12:55	13:00	13:05
Volume Extracted	gallons	0.25	0.5	0.75	1	1.25	1.5	1.75	2
Flow Rate	mL/min	200	200	200	200	200	200	200	200
Static Water Level (feet)	NA	5.52	5.94	6.02	6.18	6.35	6.39	6.51	6.6
pH (Std. Units)	+/-0.1	7.84	7.83	7.81	7.79	7.78	7.77	7.78	7.78
Conductivity (mS/cm)	3%	1.2	1.24	1.22	1.21	1.22	1.22	1.22	1.22
Turbidity (NTU)	10%	193	94.9	134	104	105	92.6	77.3	66.4
D.O. (mg/L)	10%	4.43	3.95	3.7	3.52	3.44	3.41	3.29	3.21
Temperature (ºC) (ºF)	3%	17.32	16.73	18.61	18.25	17.81	18.22	18.31	18.19
ORP[3](mV)	+/-10 mv	56	13	4	-12	-30	-38	-46	-51
Appearance		ST	ST	ST	ST	ST	ST	ST	ST
Color		Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization Criteria								
Time		13:10	13:15	13:20	13:25	13:30	13:35	13:40	13:45
Volume Extracted	gallons	2.2	2.4	2.6	2.8	3	3.25	3.5	4
Flow Rate	mL/min	200	200	200	200	200	200	200	200
Static Water Level (feet)	NA	6.63	6.74	6.78	6.85	6.95	7.01	7.12	7.21
pH (Std. Units)	+/-0.1	7.78	7.77	7.77	7.77	7.78	7.78	7.78	7.78
Conductivity (mS/cm)	3%	1.22	1.22	1.22	1.22	1.22	1.22	1.21	1.22
Turbidity (NTU)	10%	52.4	43.2	39.4	33.3	33.1	28.7	25.6	25.7
D.O. (mg/L)	10%	3.21	3.09	3.09	3.1	2.97	2.78	2.65	2.78
Temperature (ºC) (ºF)	3%	17.95	17.86	17.86	17.78	17.7	17.59	17.43	17.31
ORP[3](mV)	+/-10 mv	-55	-59	-62	-65	-67	-71	-72	-72
Appearance		ST	C	C	C	C	C	C	C
Color		Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	Sulfur	Sulfur	Sulfur	Sulfur

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

Comments
Slight sulfur odor observed.
All parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

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

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: NC / MC

WELL DATA

Date	7/30/2025	
Time	11:30	
Water meter ID		
Well Number	**MW-103**	
PID Reading (ppm)	0.6	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	12.76	
Static Water Level (feet)	4.40	
H_2O Column (feet)	8.36	
Pump Intake (feet)	12.00	
Well Volume (gal)	1.36	
Amount to Evacuate (gal)	4.09	
Amount Evacuated (gal)	4.75	

SAMPLE DATA

Sample Date	7/30/2025	
Sample Time	14:40	
Sampler Initials	MCC	
Sample I.D.	MW-103	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK

Comments:

FIELD READINGS

Date	Stabilization Criteria	7/30/2025							
Time		12:00	13:55	14:00					
Volume Extracted	gallons	4.25	4.5	4.75					
Flow Rate	mL/min	200	200	200					
Static Water Level (feet)	NA	7.26	7.39	7.44					
pH (Std. Units)	+/-0.1	7.77	7.76	7.76					
Conductivity (mS/cm)	3%	1.21	1.21	1.21					
Turbidity (NTU)	10%	21.9	20.1	19.9					
D.O. (mg/L)	10%	2.76	2.75	2.86					
Temperature (ºC) (ºF)	3%	17.11	17.23	17.47					
ORP[3](mV)	+/-10 mv	-74	-75	-75					
Appearance		C	C	C					
Color		Colorless	Colorless	Colorless					
Free Product (Yes/No)		No	No	No					
Odor		Sulfur	Sulfur	Sulfur					

Date	Stabilization Criteria								
Time									
Volume Extracted	gallons								
Flow Rate	mL/min								
Static Water Level (feet)	NA								
pH (Std. Units)	+/-0.1								
Conductivity (mS/cm)	3%								
Turbidity (NTU)	10%								
D.O. (mg/L)	10%								
Temperature (ºC) (ºF)	3%								
ORP[3](mV)	+/-10 mv								
Appearance									
Color									
Free Product (Yes/No)									
Odor									

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

Comments
Slight sulfur odor observed.
All parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

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

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: NC / MC

WELL DATA

Date	7/30/2025	
Time	8:30	
Water meter ID		
Well Number	**MW-104**	
PID Reading (ppm)	0.1	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	16.27	
Static Water Level (feet)	4.90	
H_2O Column (feet)	11.37	
Pump Intake (feet)	15.00	
Well Volume (gal)	1.86	
Amount to Evacuate (gal)	5.57	
Amount Evacuated (gal)	6.50	

SAMPLE DATA

Sample Date	7/30/2025	
Sample Time	10:21	
Sampler Initials	MCC	
Sample I.D.	MW-104	
Dupe Collected?	☑	ID: DUP-03
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☐	ID: EQUIPMENT BLANK
Comments		

FIELD READINGS

Date	Stabilization Criteria	7/30/2025							
Time		9:10	9:15	9:20	9:25	9:35	9:40	9:45	9:50
Volume Extracted	gallons	0.5	1	1.5	2	2.5	3	3.5	4
Flow Rate	mL/min	400	400	400	400	400	400	400	400
Static Water Level (feet)	NA	5.22	5.35	5.39	5.45	5.48	5.68	5.83	5.87
pH (Std. Units)	+/-0.1	8.31	8.01	7.98	7.97	8.06	7.94	7.92	7.94
Conductivity (mS/cm)	3%	0.941	0.922	0.922	0.92	0.913	0.918	0.914	0.915
Turbidity (NTU)	10%	412	66.6	34.4	34.7	204	26.4	24.3	24.2
D.O. (mg/L)	10%	4.37	2.51	1.91	1.97	2.77	1.58	1.73	1.83
Temperature (ºC) (ºF)	3%	16.24	15.89	16.02	15.77	15.33	15.12	15.05	15.1
ORP[3](mV)	+/-10 mv	85	-1	-57	-72	-69	-94	-94	-97
Appearance		T	ST	C	C	T	C	C	C
Color		Brown	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization Criteria								
Time		9:55	10:00	10:05	10:10	10:15			
Volume Extracted	gallons	4.5	5	5.5	6	6.5			
Flow Rate	mL/min	400	400	400	400	400			
Static Water Level (feet)	NA	5.98	5.96	5.9	5.89	5.89			
pH (Std. Units)	+/-0.1	7.91	7.9	7.9	7.88	7.88			
Conductivity (mS/cm)	3%	0.916	0.914	0.914	0.91	0.912			
Turbidity (NTU)	10%	18.3	16.1	13.4	13.9	12.6			
D.O. (mg/L)	10%	1.32	1.22	0.95	0.9	0.88			
Temperature (ºC) (ºF)	3%	15.01	15.03	15.07	15.1	14.95			
ORP[3](mV)	+/-10 mv	-103	-105	-108	-112	-113			
Appearance		C	C	C	C	C			
Color		Colorless	Colorless	Colorless	Colorless	Colorless			
Free Product (Yes/No)		No	No	No	No	No			
Odor		None	None	None	None	None			

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

Comments
All parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

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

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: CD

WELL DATA

Date	10/21/2025	
Time	9:30	
Water meter ID		
Well Number	**MW-101**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	12.28	
Static Water Level (feet)	3.37	
H_2O Column (feet)	8.91	
Pump Intake (feet)	12.00	
Well Volume (gal)	1.45	
Amount to Evacuate (gal)	NA	
Amount Evacuated (gal)	3.00	

SAMPLE DATA

Sample Date	10/21/2025	
Sample Time	10:35	
Sampler Initials	CD	
Sample I.D.	MW-101_102125	
Dupe Collected?	☑	ID: DUP_102125
MS Collected?	☑	ID: MS_102125
MSD Collected?	☑	ID: MSD_102125
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK

Comments
Turbidity over 50 NTU, so collected dissolved metals.

FIELD READINGS

Date	Stabilization Criteria	10/21/2025							
Time		9:50	9:55	10:00	10:05	10:10	10:15	10:20	10:25
Volume Extracted	gallons	0.33	0.66	1	1.33	1.66	2	2.33	2.66
Flow Rate	mL/min	250	250	250	250	250	250	250	250
Static Water Level (feet)	NA	3.45	3.56	3.59	3.61	3.61	3.62	3.63	3.64
pH (Std. Units)	+/-0.1	9.14	8.58	8.31	8.16	8.09	8.03	8.01	7.98
Conductivity (mS/cm)	3%	0.884	0.872	0.87	0.865	0.862	0.861	0.858	0.859
Turbidity (NTU)	10%	615	285	165	104	98.7	83.9	77.1	82.7
D.O. (mg/L)	10%	12.16	0.81	0.49	0.36	0.32	0.3	0.28	0.27
Temperature (ºC) (ºF)	3%	13.18	13.49	13.68	13.82	13.91	14	14.04	14.08
ORP[3](mV)	+/-10 mv	-121	-130	-135	-138	-139	-141	-142	-142
Appearance		VT	T	ST	ST	ST	ST	ST	ST
Color		Red	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization Criteria	10/21/2025							
Time		10:30							
Volume Extracted	gallons	3							
Flow Rate	mL/min	250							
Static Water Level (feet)	NA	3.65							
pH (Std. Units)	+/-0.1	7.97							
Conductivity (mS/cm)	3%	0.858							
Turbidity (NTU)	10%	79.6							
D.O. (mg/L)	10%	0.25							
Temperature (ºC) (ºF)	3%	14.13							
ORP[3](mV)	+/-10 mv	-143							
Appearance		ST							
Color		Colorless							
Free Product (Yes/No)		No							
Odor		None							

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

Comments
DO below 0.5 mg/L, all other parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)

1¼" = 0.08 2" = 0.17 3" = 0.38
4" = 0.66 6" = 1.5 8" = 2.6

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: CD

WELL DATA

Date	10/21/2025	
Time	9:40	
Water meter ID		
Well Number	**MW-102**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	11.81	
Static Water Level (feet)	3.30	
H_2O Column (feet)	8.51	
Pump Intake (feet)	11.00	
Well Volume (gal)	1.39	
Amount to Evacuate (gal)	NA	
Amount Evacuated (gal)	3.00	

SAMPLE DATA

Sample Date	10/21/2025	
Sample Time	12:45	
Sampler Initials	CD	
Sample I.D.	MW-102_102125	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK

Comments
Turbidity under 50 NTU, so did not collect dissolved metals.

FIELD READINGS

Date	Stabilization	10/21/2025							
Time	Criteria	12:00	12:05	12:10	12:15	12:20	12:25	12:30	12:35
Volume Extracted	gallons	0.33	0.66	1	1.33	1.66	2	2.33	2.66
Flow Rate	mL/min	250	250	250	250	250	250	250	250
Static Water Level (feet)	NA	3.83	3.87	3.92	3.95	3.97	3.97	3.98	3.99
pH (Std. Units)	+/-0.1	7.98	8	7.94	7.91	7.84	7.8	7.78	7.76
Conductivity (mS/cm)	3%	1.17	1.13	1.11	1.11	1.11	1.12	1.12	1.12
Turbidity (NTU)	10%	756	211	123	83.9	66.2	64.3	45.3	46.8
D.O. (mg/L)	10%	0.69	0.64	0.84	0.64	0.48	0.41	0.27	0.23
Temperature (ºC) (ºF)	3%	15.82	15.78	15.92	15.97	15.88	15.89	15.89	15.9
ORP[3](mV)	+/-10 mv	-50	-87	-89	-90	-92	-94	-95	-96
Appearance		VT	T	ST	ST	ST	ST	C	C
Color		Brown	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization	10/21/2025							
Time	Criteria	12:40							
Volume Extracted	gallons	3							
Flow Rate	mL/min	250							
Static Water Level (feet)	NA	4.01							
pH (Std. Units)	+/-0.1	7.76							
Conductivity (mS/cm)	3%	1.12							
Turbidity (NTU)	10%	45.9							
D.O. (mg/L)	10%	0.34							
Temperature (ºC) (ºF)	3%	15.91							
ORP[3](mV)	+/-10 mv	-98							
Appearance		C							
Color		Colorless							
Free Product (Yes/No)		No							
Odor		None							

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

Comments
DO below 0.5 mg/L, all other parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)

1¼″ = 0.08 | 2″ = 0.17 | 3″ = 0.38
4″ = 0.66 | 6″ = 1.5 | 8″ = 2.6

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: CD

WELL DATA

Date	10/21/2025	
Time	9:45	
Water meter ID		
Well Number	**MW-103**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	12.69	
Static Water Level (feet)	5.15	
H_2O Column (feet)	7.54	
Pump Intake (feet)	12.00	
Well Volume (gal)	1.23	
Amount to Evacuate (gal)	NA	
Amount Evacuated (gal)	2.00	

SAMPLE DATA

Sample Date	10/21/2025	
Sample Time	13:45	
Sampler Initials	CD	
Sample I.D.	MW-103_102125	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK

Comments
Turbidity under 50 NTU, so did not collect dissolved metals.

FIELD READINGS

Date	Stabilization Criteria	10/21/2025							
Time		13:15	13:20	13:25	13:30	13:35	13:40		
Volume Extracted	gallons	0.33	0.66	1	1.33	1.66	2		
Flow Rate	mL/min	250	250	250	250	250	250		
Static Water Level (feet)	NA	6.07	6.2	6.49	6.77	7.15	7.42		
pH (Std. Units)	+/-0.1	7.94	7.94	7.95	7.99	7.98	7.92		
Conductivity (mS/cm)	3%	1.32	1.32	1.32	1.32	1.33	1.32		
Turbidity (NTU)	10%	52.3	48.6	41.2	41.4	39.5	40.1		
D.O. (mg/L)	10%	0.61	0.43	0.33	0.31	0.29	0.27		
Temperature (ºC) (ºF)	3%	15.07	15.04	14.98	14.9	14.87	14.83		
ORP[3](mV)	+/-10 mv	-133	-140	-149	-152	-154	-155		
Appearance		ST	C	C	C	C	C		
Color		Colorless	Colorless	Colorless	Colorless	Colorleee	Colorless		
Free Product (Yes/No)		No	No	No	No	No	No		
Odor		Organic	Organic	None	None	None	None		

Date	Stabilization Criteria								
Time									
Volume Extracted	gallons								
Flow Rate	mL/min								
Static Water Level (feet)	NA								
pH (Std. Units)	+/-0.1								
Conductivity (mS/cm)	3%								
Turbidity (NTU)	10%								
D.O. (mg/L)	10%								
Temperature (ºC) (ºF)	3%								
ORP[3](mV)	+/-10 mv								
Appearance									
Color									
Free Product (Yes/No)									
Odor									

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

Comments
DO below 0.5 mg/L, all other parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

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Well Sampling Field Data Sheet

Well Casing Unit Volume
(gal/l.f.)

1¼″ = 0.08   2″ = 0.17   3″ = 0.38
4″ = 0.66   6″ = 1.5   8″ = 2.6

Client Name: Housing Visions
Site Name: Old Erie Commons
Project No.: W96.013.001
Field Staff: CD

WELL DATA

Date	10/21/2025	
Time	9:50	
Water meter ID		
Well Number	**MW-104**	
PID Reading (ppm)	0.0	
Diameter (inches)	2.0	
Total Sounded Depth (feet)	14.45	
Static Water Level (feet)	3.60	
H_2O Column (feet)	10.85	
Pump Intake (feet)	15.00	
Well Volume (gal)	1.77	
Amount to Evacuate (gal)	NA	
Amount Evacuated (gal)	3.00	

SAMPLE DATA

Sample Date	10/21/2025	
Sample Time	15:15	
Sampler Initials	CD	
Sample I.D.	MW-104_102125	
Dupe Collected?	☐	ID:
MS Collected?	☐	ID:
MSD Collected?	☐	ID:
Trip Blank Collected?	☑	ID: TRIP BLANK
EQ Blank Collected?	☑	ID: EQUIPMENT BLANK

Comments
Turbidity under 50 NTU, so did not collect dissolved metals.

FIELD READINGS

Date	Stabilization	10/21/2025							
Time	Criteria	14:30	14:35	14:40	14:45	14:50	14:55	15:00	15:05
Volume Extracted	gallons	0.33	0.66	1	1.33	1.66	2	2.33	2.66
Flow Rate	mL/min	250	250	250	250	250	250	250	250
Static Water Level (feet)	NA	3.95	4.01	4.04	4.07	4.11	4.14	4.16	4.18
pH (Std. Units)	+/-0.1	8.05	7.99	7.96	7.95	7.93	7.91	7.9	7.88
Conductivity (mS/cm)	3%	0.97	0.958	0.955	0.951	0.949	0.948	0.945	0.947
Turbidity (NTU)	10%	166	83.4	69.5	58.5	55.9	54.1	49.5	46.1
D.O. (mg/L)	10%	0.54	0.36	0.29	0.25	0.22	0.2	0.18	0.17
Temperature (ºC) (ºF)	3%	15.65	15.58	15.5	15.42	15.35	15.31	15.29	15.25
ORP[3](mV)	+/-10 mv	-115	-115	-115	-116	-116	-115	-115	-116
Appearance		ST	ST	ST	ST	ST	ST	C	C
Color		Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
Free Product (Yes/No)		No	No	No	No	No	No	No	No
Odor		None	None	None	None	None	None	None	None

Date	Stabilization	10/21/2025							
Time	Criteria	15:10							
Volume Extracted	gallons	3							
Flow Rate	mL/min	250							
Static Water Level (feet)	NA	4.2							
pH (Std. Units)	+/-0.1	7.87							
Conductivity (mS/cm)	3%	0.944							
Turbidity (NTU)	10%	45.2							
D.O. (mg/L)	10%	0.15							
Temperature (ºC) (ºF)	3%	15.23							
ORP[3](mV)	+/-10 mv	-114							
Appearance		C							
Color		Colorless							
Free Product (Yes/No)		No							
Odor		None							

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

Comments
DO below 0.5 mg/L, all other parameters stable, collecting sample.

Light yellow shading indicates the static water level is 0.3 feet or lower from initial level

Light green shading indicates that stabilization criteria have been achieved across three consecutive readings

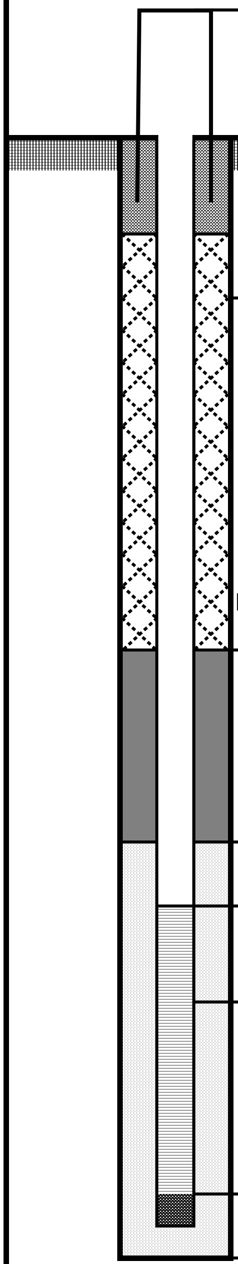
Appendix C

Soil Vapor Implant Construction Logs

C&S Engineers, Inc.
499 Col Eileen Collins Blvd
Syracuse, NY 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

SOIL VAPOR IMPLANT CONSTRUCTION LOG

		Soil Vapor Implant No.:	**SV-101**
		Project No.:	W96.013.001
		Surface Elev.:	
Project Name:	Old Erie Commons	***Datum:***	
Location:	160 Center Street, Canastota	***Start Date/Time:***	7/29/25
Client:	Housing Visions	***Finish Date/Time:***	7/29/25
Drilling Firm:	Matrix ***Drill Rig:*** GeoProbe 7822DT	***Inspector:***	NC / CD



0'-0" **Top Protective Casing**
(If used)

0'-0" **Ground Surface**

2.25" **Bore Hole Diameter**

Backfill Material
- [ ] Soil Cuttings
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout

1' **Top of Filter Pack**

1.5' **Top of Screen**

3/8" **Screen Diameter**

Screen Filter Material
- [x] 00N Sand

2' **Bottom of Screen**

2' **Bottom of Bore Hole**

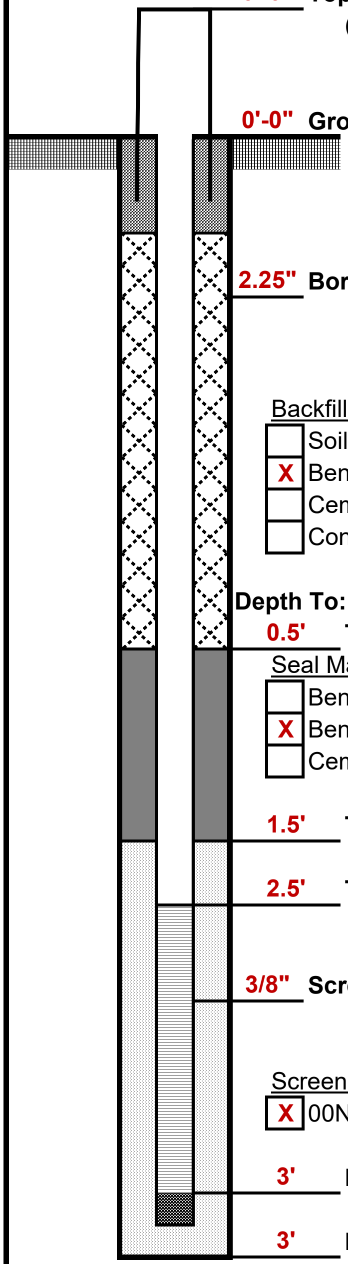
Depth to Groundwater
3' Feet Below Grade

Measure Length of Screen Weight
NA Length of Weight in Inches

Vapor Implant Material
6" **Length of Screen**
Stainless **Implant Material**

Notes: (provide description of observation well location, method of construction, development method and any other information)

C&S COMPANIES	**C&S Engineers, Inc.** 499 Col Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	**SOIL VAPOR IMPLANT CONSTRUCTION LOG**	***Soil Vapor Implant No.:***	**SV-102**
			Project No.:	W96.013.001
			Surface Elev.:	
Project Name:	Old Erie Commons		***Datum:***	
Location:	160 Center Street, Canastota		***Start Date/Time:***	7/29/25
Client:	Housing Visions		***Finish Date/Time:***	7/29/25
Drilling Firm:	Matrix	***Drill Rig:*** GeoProbe 7822DT	***Inspector:***	NC / CD



0'-0" **Top Protective Casing**
(If used)

0'-0" **Ground Surface**

Depth to Groundwater
3.5' Feet Below Grade

2.25" **Bore Hole Diameter**

Measure Length of Screen Weight
0 Length of Weight in Inches

Backfill Material
- [ ] Soil Cuttings
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Vapor Implant Material
6" **Length of Screen**
Stainless **Implant Material**

Depth To:
0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout

1.5' **Top of Filter Pack**

2.5' **Top of Screen**

3/8" **Screen Diameter**

Screen Filter Material
- [x] 00N Sand

3' **Bottom of Screen**

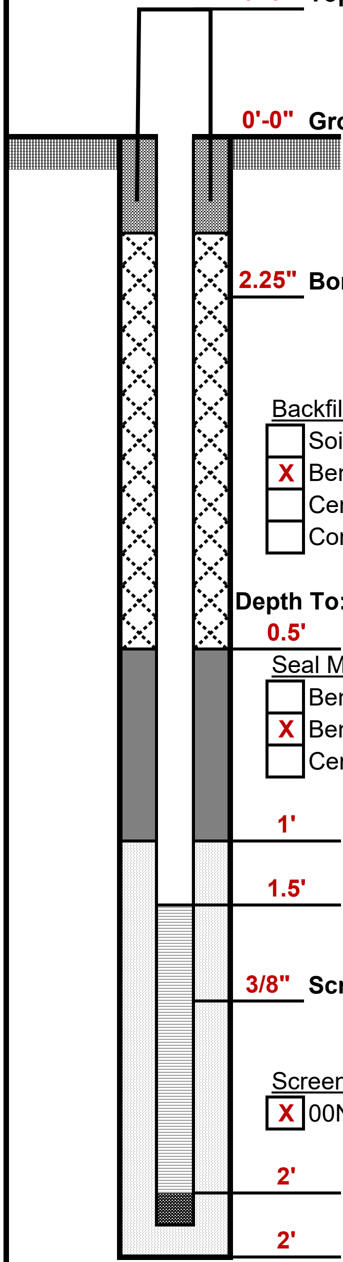
3' **Bottom of Bore Hole**

Notes:	(provide description of observation well location, method of construction, development method and any other information)

C&S COMPANIES
C&S Engineers, Inc.
499 Col Eileen Collins Blvd
Syracuse, NY 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

SOIL VAPOR IMPLANT CONSTRUCTION LOG

				Soil Vapor Implant No.:	**SV-103**
				Project No.:	W96.013.001
				Surface Elev.:	
Project Name:	Old Erie Commons			***Datum:***	
Location:	160 Center Street, Canastota			***Start Date/Time:***	7/30/25
Client:	Housing Visions			***Finish Date/Time:***	7/30/25
Drilling Firm:	Matrix	***Drill Rig:***	GeoProbe 7822DT	***Inspector:***	NC / CD



0'-0" **Top Protective Casing**
(If used)

0'-0" **Ground Surface**

Depth to Groundwater
3' Feet Below Grade

2.25" **Bore Hole Diameter**

Measure Length of Screen Weight
0 Length of Weight in Inches

Backfill Material
- [ ] Soil Cuttings
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Vapor Implant Material
6" **Length of Screen**
Stainless **Implant Material**

Depth To:
0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout

1' **Top of Filter Pack**

1.5' **Top of Screen**

3/8" **Screen Diameter**

Screen Filter Material
- [X] 00N Sand

2' **Bottom of Screen**

2' **Bottom of Bore Hole**

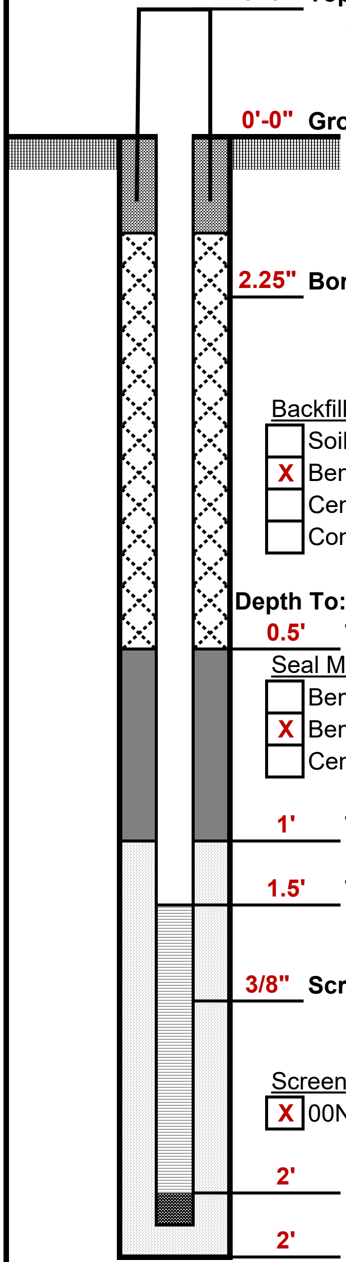
Notes: (provide description of observation well location, method of construction, development method and any other information)

C&S COMPANIES

C&S Engineers, Inc.
499 Col Eileen Collins Blvd
Syracuse, NY 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

SOIL VAPOR IMPLANT CONSTRUCTION LOG

		Soil Vapor Implant No.:	**SV-104**
		Project No.:	W96.013.001
		Surface Elev.:	
Project Name:	Old Erie Commons	***Datum:***	
Location:	160 Center Street, Canastota	***Start Date/Time:***	7/30/25
Client:	Housing Visions	***Finish Date/Time:***	7/30/25
Drilling Firm:	Matrix ***Drill Rig:*** GeoProbe 7822DT	***Inspector:***	NC / CD



0'-0" **Top Protective Casing**
(If used)

0'-0" **Ground Surface**

Depth to Groundwater
3' Feet Below Grade

2.25" **Bore Hole Diameter**

Measure Length of Screen Weight
0 Length of Weight in Inches

Backfill Material
- [ ] Soil Cuttings
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Vapor Implant Material
6" **Length of Screen**
Stainless **Implant Material**

Depth To:
0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [x] Bentonite Slurry
- [ ] Cement/Bentonite Grout

1' **Top of Filter Pack**

1.5' **Top of Screen**

3/8" **Screen Diameter**

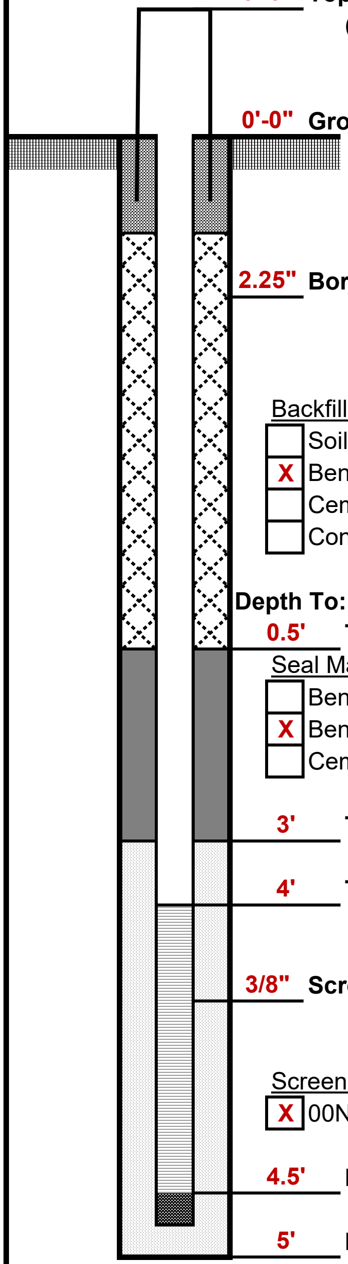
Screen Filter Material
- [x] 00N Sand

2' **Bottom of Screen**

2' **Bottom of Bore Hole**

Notes: (provide description of observation well location, method of construction, development method and any other information)

C&S COMPANIES	C&S Engineers, Inc. 499 Col Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	SOIL VAPOR IMPLANT CONSTRUCTION LOG				
					Soil Vapor Implant No.:	**SV-105**
					Project No.:	W96.013.001
					Surface Elev.:	
Project Name:	Old Erie Commons				***Datum:***	
Location:	160 Center Street, Canastota				***Start Date/Time:***	7/28/25
Client:	Housing Visions				***Finish Date/Time:***	7/28/25
Drilling Firm:	Matrix	***Drill Rig:***	GeoProbe 7822DT		***Inspector:***	NC / CD



0'-0" **Top Protective Casing**
(If used)

0'-0" **Ground Surface**

2.25" **Bore Hole Diameter**

Backfill Material
- [ ] Soil Cuttings
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout

3' **Top of Filter Pack**

4' **Top of Screen**

3/8" **Screen Diameter**

Screen Filter Material
- [X] 00N Sand

4.5' **Bottom of Screen**

5' **Bottom of Bore Hole**

Depth to Groundwater
5.5' Feet Below Grade

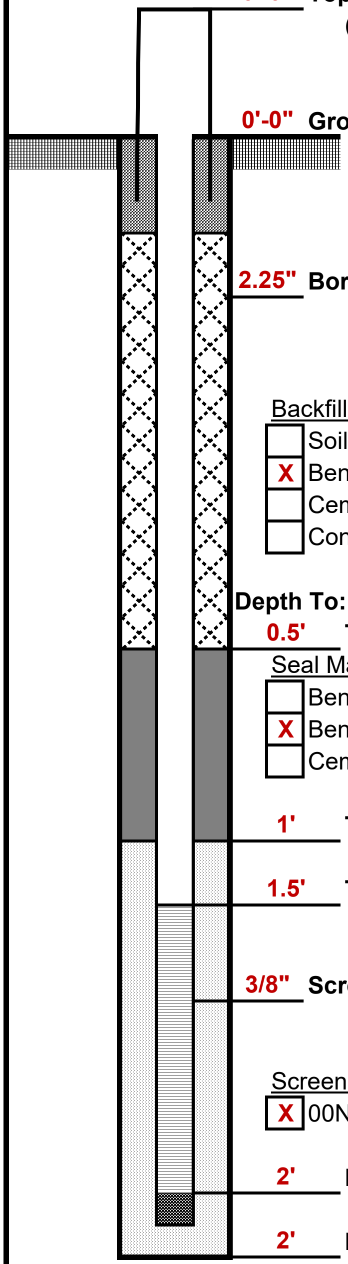
Measure Length of Screen Weight
0 Length of Weight in Inches

Vapor Implant Material
6" **Length of Screen**
Stainless **Implant Material**

Notes:	(provide description of observation well location, method of construction, development method and any other information)

C&S Engineers, Inc. 499 Col Eileen Collins Blvd Syracuse, NY 13212 Phone: 315-455-2000 Fax: 315-455-9667 www.cscos.com	**SOIL VAPOR IMPLANT CONSTRUCTION LOG**	***Soil Vapor Implant No.:***	**SV-106**
		Project No.:	W96.013.001
		Surface Elev.:	

Project Name:	Old Erie Commons			***Datum:***	
Location:	160 Center Street, Canastota			***Start Date/Time:***	7/30/25
Client:	Housing Visions			***Finish Date/Time:***	7/30/25
Drilling Firm:	Matrix	***Drill Rig:***	GeoProbe 7822DT	***Inspector:***	NC / CD



0'-0" **Top Protective Casing** (If used)

0'-0" **Ground Surface**

2.25" **Bore Hole Diameter**

Backfill Material
- [ ] Soil Cuttings
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout
- [ ] Concrete

Depth To:

0.5' **Top of Seal**

Seal Material
- [ ] Bentonite Chips/Pellets
- [X] Bentonite Slurry
- [ ] Cement/Bentonite Grout

1' **Top of Filter Pack**

1.5' **Top of Screen**

3/8" **Screen Diameter**

Screen Filter Material
- [X] 00N Sand

2' **Bottom of Screen**

2' **Bottom of Bore Hole**

Depth to Groundwater

3' Feet Below Grade

Measure Length of Screen Weight

0 Length of Weight in Inches

Vapor Implant Material

6" **Length of Screen**

Stainless **Implant Material**

Notes:	(provide description of observation well location, method of construction, development method and any other information)

Appendix D

Community Air Monitoring Plan

C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

Community Air Monitoring Plan

Old Erie Commons
160 Center Street, Canastota, New York
BCP Site No. C727015

Prepared for:

Old Erie Commons, LLC
1201 East Fayette Street
Syracuse, New York

November 2025

C&S Project No. W96.013.001

Community Air Monitoring Plan

Old Erie Commons
160 Center Street
Canastota, Madison County, New York
BCP Site No. C727015

Prepared for:

HOUSINGVISIONS
Real Plans. Real People. Real Progress.

Old Erie Commons LLC
1201 East Fayette Street
Syracuse, New York

Prepared by:
C&S Engineers, Inc.
499 Col. Eileen Collins Boulevard
Syracuse, New York 13212

November 2025

C&S Project#: W96.013.001

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1.0 OVERVIEW

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Planned sampling and remediation activities to be conducted at the Site will require real-time air monitoring for VOCs and airborne particulate levels at the perimeter of all work areas during all site activities. The nature of such monitoring and the number of monitoring points will be dependent upon and determined by the nature and extent of activities being conducted at any given time. It is the intent of this CAMP to ensure that real-time monitoring is representative of site conditions and risks and is extensive enough to ensure that the surrounding community is sufficiently protected from potential airborne contaminants.

The air monitoring to be conducted at the Site will employ the following provisions:

- **Mobile Air Monitoring Stations**: The following monitoring stations will be established each day, based on current wind direction and the location and nature of site activities. The station locations will be adjusted throughout the day, as needed, to account for changes in wind direction.
    - *Upwind Monitoring Station*: One monitoring station equipped to monitor and log VOC and particulate concentrations near the upwind side of the site. This upwind monitoring location will provide data on local ambient (i.e., background) conditions and serve as a comparison for VOC and particulate concentrations recorded at the downwind monitoring locations.
    - *Downwind Monitoring Stations*: Monitoring stations will be placed downwind of intrusive site work activities (i.e., excavation, soil handling, loading, soil mixing) and routes of truck and equipment traffic across the site. The number of stations will depend on the size of the area of subsurface disturbance or the number of active work areas. Concentrations of VOC and particulates will be continuously monitored at these locations, and compared to upwind (background) concentrations, to determine if site activities are resulting in higher downwind concentrations.

- **Dust Suppression Measures**: Dust suppression techniques will be employed by the contractor as necessary to limit fugitive dust generated in disturbed areas during investigation and remediation activities. Such techniques may be employed, as appropriate, even if the community air monitoring results indicate that particulate levels are below action levels. Techniques may include but are not limited to:

  - Applying water on haul roads
  - Wetting equipment and excavation surfaces
  - Wetting soil during on-site handling, stabilization, and loading activities
  - Pre-wetting the surface of soil in trucks prior to transportation from the site
  - Hauling materials in properly tarped or watertight containers
  - Limiting vehicle speed on the site
  - Limiting the size of excavations
  - Covering excavated areas and materials following excavation
  - Applying alternate dust suppression agents if use of water does not adequately mitigate dust generation

- **Continuous Monitoring** will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil / waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

- **Periodic Monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

2.0 VOC MONITORING, RESPONSE LEVELS AND ACTIONS

Monitoring of real-time VOC concentrations will be performed at each monitoring station (upwind, downwind, and fixed) using portable photo-ionization detectors (PIDs) equipped with 10.6 eV lamps. These instruments are capable of detecting the VOCs that may be present in the soil or groundwater at the site.

2.1 Monitoring Equipment

The instrument specifications are as follows:

Instrument Manufacturer	RAE Systems, Inc.
Model Number	MiniRAE 3000
Type of Sensor	Photoionization with 10.6 eV lamp
Compounds Measured	Volatile organic compounds with ionization potentials at or below 10.6 eV
Measurement Range	0.0 to 15,000 ppm by volume
Resolution	0.1 ppm at concentration range 0.0 to 999.9 ppm and 1.0 ppm at concentration range 1,000 to 15,000 ppm
Calibration	100 ppm Isobutylene
Sampling Pump	Internal, integral flow rate at 500 cc/min
Datalogging	6 months at 1 minute increments
Direct Readout	Instantaneous reading of VOCs as ppm by volume; high values; STEL and TWA; battery and shutdown voltage; date, time, and temperature
Alarms	95 dB at 12" (30 cm) buzzer and flashing red LED to indicate exceeded preset high, low, STEL, and TWA limits; additional diagnostic alarm and display message for low battery and pump stall
Operating Time	16 hours
Operating Temperature	-20 to 50 °C (-4 to 122 °F)

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis while ground-intrusive or dust generating (i.e., truck and equipment traffic; soil handling, mixing, and loading) activities are being performed. Upwind concentrations will be also measured at the upwind perimeter of the site during such activities, to monitoring ambient / background levels that are present in the area. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate, such as isobutylene. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

Upwind and downwind monitoring locations must be adjusted throughout the course of each workday in the event of changes in wind direction, as indicated by the on-site weather station.

2.2 VOC Action Levels and Responses

The following action levels will be observed during the duration of work at the site:

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

3.0 PARTICULATE MONITORING, RESPONSE LEVELS, AND ACTIONS

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the site while ground-intrusive or dust generating (i.e., truck and equipment traffic; soil handling, mixing, and loading) activities are being performed. Upwind concentrations should be also measured at the upwind perimeter of the site during such activities, to monitoring ambient / background levels that are present in the area. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action levels. The equipment will be equipped with an alarm and telemetry to alert site personnel of an exceedance of the action level.

In addition to the particulate monitoring, fugitive dust migration will be visually assessed during all work activities.

3.1 Monitoring Equipment

Particulate monitoring will be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

Instrument Manufacturer	TSI Incorporated
Model Number	DustTrak II Model 8530
Compounds Measured	Dust, mists or aerosols
Flow Rate	3.0 L/min (pre-set), 1.4 to 3.0 L/Min user adjustable
Measurement Range	0.001 to 400 mg/m^3 (1 to 400,000 ug/m^3)
Accuracy	+/- 5% of reading +/- precision (referenced to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 m, g= 2.5, as aerosolized)
Resolution	0.1% of reading or 1 g/m^3, whichever is larger
Particle Size Range of Maximum Response	0.1-10 µm
Memory	5 MB (>60,000 Data Points), 45 Days at 1 minute interval
Operating Temperatures	0 to 50 °C (32 to 120 °F)
Log Interval	1 second to 1 hour
Logged Data	Each data point with average concentration, time/date and data point number
Run Summary	Overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number
Alarm Averaging Time (user selectable)	Real-time (1-60 seconds) or STEL (15 minutes), alarms required
Operating Time	48 hours (fully charged NiCd battery); continuously with charger

3.2 Particulate Action Levels and Responses

The following action levels will be observed during the duration of work at the site:

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (μg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 μg/m^3above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 μg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 μg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

4.0 REPORTING

Daily CAMP reports will be provided to the NYSDEC and NYSDOH project managers. The reports will consist of figures showing work zones and monitoring stations and downloaded CAMP data. The daily reports will summarize any CAMP exceedances and the corrective actions taken. Any CAMP exceedances will be reported to NYSDEC and NYSDOH project managers within one business day.

5.0 SPECIAL REQUIREMENTS

In addition or in combination with the above, the following special requirements apply for work within 20 feet of potentially exposed individuals or structures:

- When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates will reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor / dust barriers, temporary negative-pressure enclosures, or special ventilation devices will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring will occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 $\mu g/m^3$, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 $\mu g/m^3$ or less at the monitoring point.

- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements are as stated above under “Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures” except that in this instance “nearby / occupied structures” would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, shall be understood and the monitoring locations established accordingly. In these situations, exhaust fans or other engineering controls will be used to create negative air pressure within the work area during remedial activities. Additionally, the planned work will be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

Appendix E

Quality Assurance Project Plan

C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

Quality Assurance Project Plan

Old Erie Commons
160 Center Street, Canastota, New York
BCP Site No. C727015

Prepared for:

HOUSINGVISIONS
Real Plans. Real People. Real Progress.

Old Erie Commons, LLC
1201 East Fayette Street
Syracuse, New York

November 2025

C&S Project No. W96.013.001

Quality Assurance Project Plan

Old Erie Commons
160 Center Street
Canastota, Madison County, New York
BCP Site No. C727015

Prepared for:

Real Plans. Real People. Real Progress.

Old Erie Commons LLC
1201 East Fayette Street
Syracuse, New York

Prepared by:

C&S Engineers, Inc.
499 Col. Eileen Collins Boulevard
Syracuse, New York 13212

November 2025

C&S Project#: W96.013.001

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APPENDICES

1.0 INTRODUCTION

C&S' Quality Control (QC) Program is a vital part of its approach to remedial investigations. Through our thorough QC program, our firm is able to provide accurate and dependable data. QC also provides safe working conditions for field staff.

The QC program contains procedures, which provide for collected data to be properly evaluated, and which document that quality control procedures have been followed in the collection of samples. The QC program represents the methodology and measurement procedures used in collecting quality field data. This methodology includes the proper use of equipment, documentation of sample collection, and sample handling practices.

Procedures used in the firm's QC program are consistent with federal, state, and local regulations, as well as appropriate professional and technical standards.

This QC program has been organized into the following areas:

- QC Objectives

- Field Sampling Techniques
  - Procedures
  - Preparation
  - Measurement
  - Decontamination

- Sample Management

2.0 QUALITY CONTROL OBJECTIVES

2.1 Data Quality Objectives

Data Quality Objectives (DQOs) are statements which describe the desired quality of data necessary to meet the objectives of the sampling program. The DQOs for the site sampling program were formulated during the scoping effort and developed as part of this Plan. The general steps followed in preparation of the DQOs were as follows:

- Identification of the media to be sampled – Identifies the media being investigated (e.g., ground water, surface soil).

- Identification of the data uses – Identifies the intended use of the data according to the following:
    - Site Characterization – Data are used to determine the composition, nature, and extent of contamination.
    - Risk Assessment – Data are used to evaluate the actual or potential risks posed by contaminants determined to be present on-site. Particular attention is given to sampling at locations where human exposure is possible.
    - Health and Safety Plan (HASP) – Data are used to establish the level of protection needed for on-site workers during site characterization activities.
    - Monitoring – Data are used during the monitoring of the remedial action to access the effectiveness of such action.
    - PRP Enforcement – Data are used to help establish potentially responsible parties (PRP's).
    - Evaluation of Alternatives – Data are used to evaluate various proposed remedial technologies and assist in proper design of alternatives.

- Identification of the data types – Identifies what types of analyses are to be performed.

- Sample Collected – Describes the sample types to be collected.
    - Environmental – Refers to a specific media sampled such as water, soil, air, or biological.
    - Source – Refers to sampling an actual contamination source.
    - Grab – A discrete sample representative of a specific location.
    - Composite – A sample that represents a mixture of a number of grab samples that represents the average properties over the extent of areas sampled.
    - Biased – Sampling that focuses on a specific area of expected contamination or uncontaminated area (background).

- Identification of the data quality needs – Identifies the analytical options available to support data collection activities and are identified as follows:
    - Level I: Field Screening – portable type instruments which provide real-time data.
    - Level II: Field Analysis – portable analytical instruments in an on-site lab or

transported to the site.
- Level III: Standard Analytical Protocols – standard analytical protocols or without the NYSDEC Analytical Services Protocol (ASP) (2000) deliverables / reportables documentation.
- Level IV: NYSDEC ASP Reportables / Deliverables – rigorous QA / QC protocols and reportables / deliverables documentation; NYSDEC ASP (2000) Category B deliverables.
- Level V: Non-Standard – methods which have been modified to meet specific site study or remediation needs or by use of some other specialized analytical methods that cannot be obtained through standard or typical avenues of analytical support.

- Identification of Data Quality Factors – Describes factors which influence the quality or quantity of data to be collected. Primary contaminants and associated levels of concern are identified concerning ARARs or potential risks. The required detection limit are also given or referenced.

- Identification of QA / QC Samples – Specifies additional samples to be collected to support Quality Assurance / Quality Control (QA / QC) procedures. Additional samples to be collected could include:
  - Matrix Spike/Matrix Spike Duplicates – Matrix spike and matrix spike duplicate samples are collected as a duplicate sample to which the analytical laboratory will add known amounts of target analytes. These QA / QC samples are intended to assess the extraction procedure used by the laboratory.
  - Blind Duplicates – Blind duplicates are a duplicate of another sample submitted for analysis. The location of the sample is recorded in the field book and not disclosed on the chain of custody. These QA / QC samples are intended to assess the repeatability of analysis by the laboratory.
  - Field Blanks – Field (equipment) blanks are samples which are obtained by running analyte-free water through the sample collection equipment in a way that is identical to the sample collection procedures. Field blanks may be used during QA / QC procedures to evaluate if sampling equipment has contributed contaminants to the samples.
  - Trip Blanks – Trip blanks are samples which are prepared prior to the sampling event in the same type of sample container and are kept with the collected samples throughout the sampling event unit analysis. Trip blank vials are not opened in the field and are analyzed for volatile organics only.

2.2 Sampling Procedures

All sampling objectives, locations, and procedures have been included as the Remedial Investigation Work Plan (RIWP) and are further described in **Section 3.0**. Items including Field Measurement Techniques, General Field Decontamination, and Sample Management have also been included in **Section 3.0** and **Section 4.0**.

2.3 Laboratory Certification and Coordination

The Environmental Laboratory Approval Program (ELAP) certification is an accreditation issued by the New York State Department of Health (NYSDOH). Such laboratories have demonstrated that they consistently ensure the accuracy and reliability of samples analyzed. All chemical analyses for samples from the site will be completed by an ELAP laboratory capable of performing project specific analyses as indicated in this QA / QC plan. The project QA / QC Officer will also be responsible for all project related laboratory coordination.

Supporting documentation related to per- and polyfluoroalkyl substances (PFAS) analysis, such as standard operating procedures (SOPs), analyte lists, and method detection limits (MDLs) are provided in **Appendix A**.

2.4 Analytical Methodologies

Sampling and analysis will be performed for the Target Compound List (TCL) parameters including volatiles. The specific analyses will be conducted according to the following NYSDEC ASP 2000 methodologies:

Table 2-1: ASP 2000 Methodologies

Parameter Group	USEPA Analysis Method
Volatiles	8260C or TO-15 for air
Semivolatiles	8270D
PCBs	8082A
Pesticides	8081B
Herbicides	8151A
Metals / Inorganics	6010D, 7471B, 9010C/9012B, 7196A
PFOA/PFOS	1633

Samples will be analyzed by Pace Analytical Services LLC, and the data will be presented in Category B reportables / deliverables format.

2.5 Analytical Quality Control

Analytical quality control for this Project will be consistent with the methodology and quality assurance/quality control requirements in the NYSDEC ASP 2000.

The tables on the following page detail sample volumes, containers, preservation, and holding time for typical analytes.

2.6 Data Usability Summary Report

A Data Usability Summary Report (DUSR) will be prepared by Vali-Data of WNY, LLC consistent with NYSDECs Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports as given in DER-10. The main objective of the DUSR is to determine whether the data presented meets the project specific needs for data quality and data use.

Table 2-2: Water Samples

Type of Analysis	Type and Size of Container	Number of Containers and Requirements	Preservation	Holding Time Until Extraction / Analysis
VOCs	40-mL VOA vial	Three (3); fill completely; no headspace	HCl, pH<2 Cool to 4°C	14 days
SVOCs	250-mL amber glass jar, Teflon lined	Two (2); fill completely	Cool to 4°C	7 days to extraction
PCBs	125-mL amber glass jar, Teflon lined	Two (2); fill completely	Cool to 4°C	365 days to extraction
Pesticides	125-mL amber glass jar, Teflon lined	Two (2); fill completely	Cool to 4°C	7 days to extraction
Herbicides	1,000-mL amber glass jar, Teflon lined	Two (2); fill completely	Cool to 4°C	7 days to extraction
Total Metals, including Hg	250-mL plastic	One (1); fill completely	HNO_3, pH<2 Cool to 4°C	180 days (28 days for mercury)
Dissolved Metals, including Hg	250-mL plastic	One (1); fill completely; filtered	HNO_3, pH<2 Cool to 4°C	180 days (28 days for mercury)
Hexavalent Chromium	500-mL plastic	One (1); fill completely	Cool to 4°C	24 hours
Cyanide	250-mL plastic	One (1); fill completely	NaOH, pH>12 Cool to 4°C	14 days
1,4-Dioxane	250-mL amber glass jar, Teflon lined	Two (2); fill completely	Cool to 4°C	7 days to extraction
PFAS	250-mL plastic	Two (2); fill completely	Cool to 4°C	28 days to extraction

All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as glassware may vary by laboratory.
Holding time begins at the time of sample collection.

Table 2-3: Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Requirements	Preservation	Holding Time Until Extraction / Analysis
VOCs	40-mL VOA vial and Terracore	One (1); 5-15 grams	MeOH Cool to 4°C	14 days
	40-mL VOA vial and Terracore	Two (2); 5 grams each	Water Cool to 4°C	48 hours to freeze 14 days to analysis
SVOCs	4-oz amber glass jar, Teflon lined	One (1); fill completely	Cool to 4°C	14 days to extraction
PCBs	4-oz amber glass jar, Teflon lined	One (1); fill completely	Cool to 4°C	365 days to extraction
Pesticides	4-oz amber glass jar, Teflon lined	One (1); fill completely	Cool to 4°C	14 days to extraction
Herbicides	4-oz amber glass jar, Teflon lined	One (1); fill completely	Cool to 4°C	14 days to extraction
Metals, including Hg	4-oz amber glass jar	One (1); fill completely	Cool to 4°C	180 days (28 days for mercury)
Hexavalent Chromium	4-oz amber glass jar	One (1); fill completely	Cool to 4°C	30 days
Cyanide	4-oz amber glass jar	One (1); fill completely	Cool to 4°C	14 days
1,4-Dioxane	4-oz amber glass jar, Teflon lined	One (1); fill completely	Cool to 4°C	14 days to extraction
PFAS	8-oz plastic	One (1); fill completely	Cool to 4°C	90 days to extraction

All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as glassware may vary by laboratory.
Holding time begins at the time of sample collection.

3.0 FIELD SAMPLING PLAN

3.1 Sampling Procedures

The following sections provide procedures for collecting a variety of samples, not all of which will be needed at this site.

3.1.1 Preparation for Sampling

The sample collection technique is of prime importance to assure the integrity of the collected sample. The following techniques include provisions so that:

- A representative sample is obtained;
- Contamination of the sample is minimized;
- The sample is properly preserved; and
- An acceptable Chain-of-Custody record is maintained.

The QA / QC Sampling Component of the Plan includes:

- Incorporation of accepted sampling techniques referenced in the sampling plan;
- Procedures for documenting any field actions contrary to the QA / QC Plan;
- Documentation of all preliminary activities such as equipment check-out, calibrations, and container storage and preparation;
- Documentation of field measurement quality control data (quality control procedures for such measurements shall be equivalent to corresponding QC procedures);
- Documentation of field activities;
- Documentation of post-field activities including sample shipment and receipt, field team debriefing, and equipment check-in;
- Generation of quality control samples including duplicate samples, field blanks, equipment blanks, and trip blanks;
- The use of these samples in the context of data evaluation with details of the methods employed (including statistical methods) and of the criteria upon which the information generated will be judged; and

- The number of QA / QC samples generally required are shown in the following table. When there is a disagreement with QA / QC sample numbers and types, between this document and a Work Plan, the Work Plan shall prevail.

Table 3-1: QA / QC Samples

Sample Type	Analysis	Number	Note
MS / MSD	Full Suite	Every sample batch, or minimum of 5% (1 per 20)	Two additional samples at a given location
Trip Blank	VOC	One per day or 5% (1 per 20), whichever is more frequent	Vials of clean water provided by laboratory. Packed with collected samples.
Field Blank	VOC and PFAS	One per day or 5% (1 per 20), or whichever is more frequent	Clean water passed through / over decontaminated sample collection equipment / tubing
Blind Duplicate	Same as field sample	Every sample batch, or minimum of 5% (1 per 20)	An additional sample at a given location

The personnel responsible for collection of groundwater, soil, air, miscellaneous media, and petroleum spill remediation / verification samples will be familiar with standard sampling procedures and follow the appropriate protocol. Field records will be maintained in bound notebooks with numbered pages to document daily instrument calibration, locations sampled, field observations, and weather conditions. Each page will be dated and signed by the sampler. Each notebook will be numbered and a log of notebooks will be maintained by the project manager.

Prior to sampling, all equipment must be procured and accommodations for sample container delivery, and sample shipment must be made. The following is a list of general equipment that would be on hand for sampling events. Special equipment for each sampling event is presented in the section describing that specific sampling event.

- Field Data Sheets
- Chain-of-Custody forms
- Engineers tape and folding ruler with 0.01-foot intervals
- Field Record Sheets
- Latex gloves
- Face-safety shield
- Tyvek coveralls
- Respirators
- Photoionization detector
- Bio-degradable phosphate free detergent
- Coolers and ice (no blue ice)
- Drums
- Sample bottles
- Aluminum foil
- Duct and filament tape
- Tap water
- Distilled water
- Laboratory grade methanol and hexane
- Wash buckets
- Decontamination towels / cloths
- Large disposal containers
- Large plastic sheets

3.2 Sample Collection Techniques

3.2.1 Surface Soil Sampling

Surface soil samples will be collected at the locations and depths indicated in the Work Plan. When sampling is conducted in areas where a vegetative turf has been established, a pre-cleaned trowel or shovel will be used to remove the turf so that it may be replaced at the conclusion of sampling. Samples will then be collected using a pre-cleaned, stainless steel spoon. When the sample is obtained, it will be deposited into a pre-cleaned stainless steel bowl or plastic pail for mixing prior to filling the sample containers. The soil will be mixed thoroughly until the material is homogenized. At that point, the soil will be placed into the laboratory provided containers.

Once removed from the ground the soil will immediately be observed for soil characteristics, including general soil type (sand, silt, clay), moisture, and evidence of impairment ((e.g. petroleum or chemical odors, staining, volatile organic vapors as measured by a photoionization detector (PID)). The PID will be calibrated daily (and more often as required by the manufacturer's data) prior to use in the field, using calibration test gases.

When PFAS sampling / testing is required, no sampling equipment components or sample containers should come into contact with aluminum foil, LDPE, glass, or Teflon tape. Acceptable equipment includes stainless steel spoons and bowl, HDPE containers, and steel shovels or augers that are not coated.

3.2.2 Subsurface Soil Sampling

3.2.2.1 Direct Push Drilling

Generally, soil borings will be advanced with a Geoprobe direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a four to five-foot Macro-Core® sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four or five-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The Macro-Core® sampler will be decontaminated between boring locations using an Alconox® and water solution.

Prior to initiating drilling activities, the Macrocores, drive rods, and pertinent equipment, will be steam cleaned or washed with an Alconox® and water solution. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.

Test borings will be advanced with 2-inch (or larger) inside diameter (ID) direct push Macro-Core® through overburden soils. Drilling fluids, other than potable water will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

3.2.2.2 Hollow Stem Auger

The drilling and installation of monitoring wells will be performed using a rotary drill rig which will have sufficient capacity to perform 4 1/4-inch ID hollow-stem auger drilling in the overburden, retrieve Macro-Core® or split-spoon samples. Equipment sizes and diameters may vary based on project-specific criteria. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

Prior to initiating drilling activities, the augers, rods, Macro-Core®, split spoons, and other pertinent equipment will be steam cleaned or washed with an Alconox® and water solution. This cleaning procedure will also be used between each boring. Steam cleaning activities will be performed in a designated on-site decontamination area. During and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.

Test borings will be advanced with 4 1/4-inch ID hollow stem augers through overburden, driven by truck-, track-, or trailer-mounted drilling equipment. Alternative methods of drilling or equipment may be allowed or requested for project specific criteria, but must be approved by the NYSDEC. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

Hollow stem auger advanced groundwater-monitoring wells typically utilize minimum 2-inch threaded flush joint PVC pipe with 0.010-in. slotted screen or pre-packed well screens. PVC piping used for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe. All materials used to construct the wells will be NSF / ASTM approved. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated wood cap or plastic plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well.

3.2.2.3 Subsurface Soil Sample Screening and Collection

When polyethylene sleeves or split spoons are removed from borings, the soil will immediately be observed for soil characteristics, including general soil type (sand, silt, clay), moisture, confining layers, and evidence of impairment (e.g. petroleum or chemical odors, staining, volatile organic vapors as measured by a PID – ex-situ and headspace). Generally, sample selection is based on evidence of impairment, depth, spatial distribution, or for delineation purposes. Normally, sample locations will not be known until the end of each day in the field. Therefore, samples for potential analysis will be placed in new Ziploc bags and placed on ice until they are placed into laboratory provided glassware.

When PFAS sampling / testing is required, no sampling equipment components or sample containers should come into contact with aluminum foil, LDPE, glass, or Teflon tape. Acceptable equipment includes stainless steel spoons and bowl, HDPE containers, and steel tools that are not coated.

3.2.3 Groundwater Monitoring Well Construction / Completion

3.2.3.1 Artificial Sand Pack

When utilized, granular backfill will be chemically and texturally clean, inert, siliceous, and of appropriate grain size for the screen slot size and the host environment. The sand pack will be installed using a tremie pipe, when possible (i.e., a tremie pipe may not fit into smaller, 2-inch diameter boreholes). When utilized, the well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending at least 2 feet above the top of the screen. A pre-packed well screen may be used if pre-approved by the NYSDEC.

3.2.3.2 Bentonite Seal

A minimum 2-foot thick seal will be placed directly on top of the sand pack, and care will be taken to avoid bridging. In the event that Site geology does not allow for a 2-foot seal (e.g., only 1-foot of space remains between the top of the sand pack and ground surface), the remaining space in the annulus will be filled with bentonite.

3.2.3.3 Grout Mixture

Upon completion of the bentonite seal, the well may be grouted with a 30% solids pure bentonite grout, a non-shrinking cement grout, a cement / bentonite grout mix, or a bentonite / soil mix as indicated in the Work Plan. The grout will be placed from the top of the bentonite seal to the ground surface.

3.2.3.4 Surface Protection

At all times during the progress of the work, precautions shall be used to prevent tampering with or the entrance of foreign material into the well. Upon completion of the well, a suitable cap shall be installed to prevent material from entering the well. Where permanent wells are to be installed, the well riser shall be protected by a flush mounted road box set into a concrete pad or locking well cap for stick-up wells. A concrete pad, sloped away from the well, shall be constructed around the flush mount road box or stick-up casing at ground level.

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap.

3.2.3.5 Surveying

Coordinates and elevations will be established for each monitoring well and sampling location. Elevations to the closest 0.01 foot shall be used for the survey. These elevations shall be referenced to a regional, local, or project-specific datum. The location, identification, coordinates, and elevations of the wells will be plotted on maps with a scale large enough to show their location with reference to other structures at each site.

3.2.3.6 Well Development

After completion of the well, but not sooner than 48 hours after grouting is completed, development will be accomplished using pumping, bailing, and / or surge blocking. No dispersing agents, acids, disinfectants, or other additives will be used during development or introduced into the well at any other time. During development, water will be removed throughout the entire water column by periodically lowering and raising the pump intake (or bailer stopping point).

Water elevations will be taken on all wells prior to development, purging, and sampling. All measurements will be taken within a 24-hour period to obtain consistent elevations and recorded on well data sheets. The procedure for measuring water levels in the monitoring wells is:

- Unlock and remove well cap;
- Test the atmosphere of the well with the calibrated PID. If the gases from the well have caused the air in the breathing zone to read greater than 5 ppm, stop work and refer to the HASP;
- Measure water level to nearest 0.01 foot with a water level indicator (electronic);
- Water level indicators will be decontaminated before moving to next well. The tape and cable are decontaminated by washing in a bucket of distilled water-biodegradable phosphate free-detergent solution, followed by a rinse with distilled water.

Development water will either be properly contained and treated as waste until the results of chemical analysis of samples are obtained or discharged on Site as determined by the Site-specific work plans and/or consultation with the NYSDEC representatives on Site.

The development process will continue until removal of a minimum of 110% of the water lost during drilling, three well volumes; whichever is greater (or as specified in the Work Plan), and when water quality monitoring demonstrates stabilization of the effluent. The water quality meter will be calibrated prior to each sampling event (and more often as required by the manufacturer's data), using calibration fluids. Stabilization criteria is shown in the table below. In the event that limited recharge does not allow for the recovery of all drilling water lost in the well or three well volumes, the well will be allowed to stabilize to conditions deemed representative of groundwater conditions. Stabilization periods will vary by project but will be confirmed with the NYSDEC prior to sampling.

Table 3-2: Well Development Stabilization Criteria

Parameter	Units	Stabilization Criteria
pH	Standard Units	± 0.1
Conductivity	mS/cm	± 3%
Turbidity	NTU	10% or < 10 NTU
D.O.	mg/L	10% or < 0.5 mg/L
Temperature	°F / °C	± 3%
ORP	mV	± 10

3.2.3.7 Groundwater Sample Collection

Groundwater samples will be collected using a dedicated low flow pump. When analysis is limited to VOCs, samples may be collected with disposable or stainless steel bailers. When PFAS sampling / testing is required, only the following equipment will be permitted:

- Stainless steel inertia pump with HDPE tubing
- Peristaltic pump with HDPE and silicone tubing
- Stainless steel bailer with stainless steel ball
- Bladder pump (identified as PFAS-free) with HDPE tubing

All sampling equipment will be properly decontaminated in the field (see **Section 3.3**). The following equipment will be available for sampling of monitoring wells in addition to the general sampling equipment list:

- Well Data Sheets
- Pump
- Electronic water level indicator
- Water Quality Meter
- Acid resistant gloves

The following activities will be completed before going into the field every day before the start of sampling:

- Fill out appropriate section on Well Data Sheet for the wells to be sampled;
- Obtain the sampling schedule for each well to be sampled;

- Calibrate the PID with the calibration gas;

- Determine the amount of sampling to be done for the day and prepare the necessary number of coolers;

- Each well to be sampled will have designated coolers containing the pre-labeled, certified clean, sample bottles. The groundwater samples will be placed in the cooler labeled for the well from which they were taken. The bottle shall be labeled with large distinguishable letters, so that the groundwater samples will be placed in the proper cooler; and

- Select the appropriate sample bottles for the day's sampling. The bottles shall be pre-marked with a sample parameter and preservatives. Reusable glass bottles will have been cleaned and prepared at the laboratory. The bottles for the various parameters to be analyzed from each well location will then be placed in a cooler.

The following steps describe the sample collection of groundwater:

- Unlock and remove the well cap;

- When VOCs are a contaminant of concern, test the air at the wellhead with the calibrated PID. If the gases from the well have caused the air in the breathing zone to read greater than 5 ppm, stop work and refer to the HASP. Record the reading on the Well Data Sheet;

- In order to obtain a representative sample of the formation water, the well must be purged of the static water within the well. Prior to purging, the static water level within the well must be measured and the measurement recorded on the Well Data Sheet. To determine the amount of water necessary to purge, find the liquid column height in the well to determine the total volume (three liquid column borehole volumes) of liquid to be purged;

- Purge the well; lower pump slowly into the well until it is below the water surface. In accordance with the Work Plan, purge waters will either be disposed within the vicinity of the respective well or containerized.

- Record the amount of water purged in the field logbook and on the Well Data Sheet.

- If the well goes dry during pumping, allow for full recovery (measure the water level) and then sample. If recovery takes more than twenty minutes, proceed to next well but return to sample within 24 hours.

- Fill the appropriate sample bottles according to the sampling schedule for each well. While filling the sample bottles, record the well number, type, volume of container, and the preservatives used on the Ground Water Sampling Analyses form.

- The preservatives for the various sampling parameters were previously added to the clean sample bottles by the laboratory. Some parameters may require additional special handling.

- Volatile organics analyses sample vials must be free of air bubbles. When a bubble-free sample has been obtained, it must be immediately chilled.

- Collect the matrix spike duplicates, duplicates, field blanks, and trip blanks, as applicable. Take samples according to sampling schedule presented in the Work Plan.

- Record all pertinent information in field logbook and on the Well Data Sheet (include color, odor, sediment content of sample, etc.). Any situations at the site that have the potential to interfere with the analytical results should also be recorded here.

- Lock well, inspect well site, and note any maintenance required.

- Dispose of potentially contaminated materials in designated container.

3.2.4 Air Sample Collection

All activities will be conducted in accordance with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006, and subsequent revisions.

3.2.4.1 Soil Vapor Implant Installation

Semi-permanent soil vapor monitoring points will be installed using direct-push methods. Continuous soil sampling will be conducted at each location using Geoprobe® Systems' Macro-Core® soil samplers, to create a nominal 2.25-inch diameter borehole. The direct-push borings will be terminated at the target depth of the vapor implant placement. As consistent with NYSDOH guidance, the vapor implants will be positioned so as to allow collection of vapor samples at depths comparable to the depths of nearby foundation footings (normally +/- five feet in depth), or at least 12 inches above the water table, if groundwater is present at a depth less than six feet bgs. The groundwater depth will be determined based upon static water levels recorded in nearby wells.

Following creation of the borehole, the vapor implants will be placed at the target sampling depth. Each implant will consist of a six-inch long vapor implant with stainless steel mesh / screen. Polyethylene tubing will be affixed to the top of the stainless-steel screen and extended to the ground surface. The borehole annulus below, surrounding, and to twelve inches above the top of the screen will be filled with 00N sand or glass beads to create an inert, porous vapor sampling zone. The remainder of the borehole annulus will be filled with a bentonite slurry to minimize outdoor air from entering the sampling zone. Each vapor implant will be completed with a flush-mount protective casing.

Following installation, samples will be collected using a Summa™ canister (6-Liter capacity) equipped with a critical orifice flow regulation device sized to allow an air sample to be collected over a 4-hour sampling period.

3.2.4.2 Sub-Slab Soil Gas Sampling

Sub-slab sampling points will be installed to collect soil gas immediately below the slab. Sub-slab samples are typically co-located with corresponding indoor air samples to allow comparison of sub-slab and nearby indoor air concentrations. Sub-slab gas samples will be collected using a Summa™ canister (6-Liter capacity) equipped with a critical orifice flow regulation device sized to allow an air sample to be collected over a 24-hour sampling period.

The sub-slab vapor points will be installed by first advancing a small diameter hole (approximately 3/8-inches in diameter) through the floor slab to determine thickness. The holes will be drilled via a hammer drill or concrete core. The hole will extend through the slab and terminate at the interface with underlying material (i.e. gravel base or soil). A length of vinyl tubing will be placed into the hole to extend to the bottom of the slab. The cored slab annulus will be sealed with clay around the tubing.

To ensure there is no connection between the sub-slab and indoor air, helium short-circuit testing will be performed at each sampling point. The helium will be introduced into a dome placed over the sealed tubing. The dome will be sealed to the concrete floor with modeling clay. A helium meter that is capable to read down to 1-2% helium will be connected to the sample tubing to measure helium concentrations in the sub-slab environment. The detection of helium in the sub-slab air indicates communication between the air inside the dome and the sub-slab, revealing a leak in the seal around the tubing. If helium is detected in the sub-slab tubing at a concentration greater than 10% of the concentration of helium in the dome, the clay seal around the tubing will be reconfigured and the tracer test will be repeated until an adequate seal is observed.

Prior to sub-slab soil gas sample collection, the sample tubing will be purged at a rate not exceeding 200 mL/min to remove three tubing volumes of air. This ensures the concentrations detected in the sample are representative of soil gas and not diluted by indoor air.

3.2.4.3 Indoor Air Sampling

Indoor air samples will be collected using a Summa™ canister (6-Liter capacity) equipped with a critical orifice flow regulation device sized to allow an air sample to be collected over a 24-hour sampling period. The sampling canister will be placed approximately three to five feet off the ground.

A NYSDOH Indoor Air Quality Questionnaire and Building Inventory Form will be completed at the time of sampling (**Appendix B**). Testing will be conducted under the following conditions:

- Air samples will be collected during the heating season. In New York State, heating season generally extends from November 15 to March 31. However, in Upstate New York, it is common to heat buildings between October and April.

- Closed building conditions will begin at least 12 hours prior to the initiation of testing and shall be maintained throughout the test period, lasting less than four days.

- All exterior windows and doors shall be kept closed (except for momentary entry and exit by personnel). This includes areas not being tested.

- Heating and cooling systems shall be set to normal, occupied, operating temperatures; fan/blower controls shall be set to intermittent activity unless the system is designed to only run the fan continuously.

- Occupants should avoid excessive operation of clothes dryers, range hoods, bathroom fans, and other mechanical systems that draw air into and out of the building.

- Solid, liquid, or gas burning fireplaces shall not be operated unless they are the primary / normal sources of heat for the building.

- Window air-conditioning units shall only be operated in a re-circulating mode.

- Equipment that supplies fresh air to the building shall be deactivated unless it is an integral part of the HVAC system or supplies make-up air to a combustion appliance.

- Window fans shall be removed or sealed shut.

- Fans installed in attics to control only attic air and not whole-building temperature, or humidity may continue to operate.

- Normal operation of permanently installed ventilation systems such as energy recovery ventilators (also known as heat recovery ventilators or air-to-air heat exchangers) may continue during closed-building conditions so long as the system is regularly maintained and continuously operational.

Beginning 24 hours prior to test initiation and continuing throughout the duration of the test, the following activities will be avoided inside the building:

- Performing excavations or other activities that may generate particulate matter;

- Smoking;

- Painting;
- Cleaning, waxing, polishing furniture or floors with petroleum or oil-based products;
- Application of hairspray, nail polish, nail polish remover, perfume / cologne;
- Using air fresheners or odor eliminators; and
- Using any other products or performing any activities that contain VOCs, produce odors, or may otherwise influence indoor air testing results, or that are not consistent with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*.

3.2.4.4 Ambient Air Sampling

Ambient air samples will be collected in the same manner as the indoor air samples. The outdoor air sample will be collected using a Summa™ canister (6-Liter capacity) equipped with a critical orifice flow regulation device sized to allow an air sample to be collected over a 24-hour sampling period. The sampling canister will be located upwind of the structure and will be placed approximately three to five feet off the ground.

3.2.4.5 Sample Canister Deployment and Retrieval

For all soil vapor, sub-slab soil vapor, and indoor and outdoor air sampling described above, sample canisters will be deployed and retrieved as described below:

- Air sample canisters will be labeled with a unique sample designation number. The sample number and location will be recorded on the field log.
- The canister vacuum will be measured using an integrated vacuum gauge immediately prior to canister deployment and recorded on the field log. The critical orifice flow controller will be installed, as supplied by the laboratory, on the canister; the canister will be opened fully at the beginning of sample collection period; and the start time will be recorded.
- The canister vacuum will be measured and recorded immediately prior to canister retrieval at the end of the sample period. Once the vacuum is measured, the canister valve will be closed fully at the end of the sample period by disconnecting the regulator from the canister and the end time will be recorded.
- The canisters will be returned to their sampling boxes for safe storage and shipping. Field data will be verified as correctly entered into field books prior to shipment and the canisters will be shipped to the laboratory under a chain-of-custody.

- Each sample will be analyzed for VOCs via USEPA Compendium Method TO-15. Five indoor air compounds (trichloroethene, cis-1,2-dichloroethene, 1,1-dichloroethene, carbon tetrachloride, and vinyl chloride) will be analyzed using USEPA Method TO-15 Select Ion Monitoring (SIM) to achieve low level laboratory reporting limits of 0.20 micrograms per cubic meter (µg/m^3) or less.

3.3 General Decontamination

The following procedures will be performed for the decontamination of exploration equipment, sampling equipment, and personnel after each drilling/sampling event:

- *Drill rig, backhoe, and excavator* – The drill rig, direct-push rig, backhoe, and/or excavator will be cleaned prior to their entrance and exit of the site. Greases and oils will not be used on any down hole equipment during drilling or exploration activities.

- *Exploration equipment* – To avoid cross contamination, use of a PID meter and cleaning between each sampling site will be employed on backhoe arms, buckets, hollow stem augers, casing drill rods, down-hole tools, and appurtenant equipment.

- *Split spoon sampler* – The split spoon sampler will be scrubbed, cleaned, and put through a series of rinses between each sampling event. A number of split spoon samplers will be used so that one can be utilized for sampling while the others are being cleaned.

- *Reusable equipment* – The following steps will be employed to decontaminate reusable equipment:
  - Rinse equipment of soil or foreign material with potable water;
  - Immerse and scrub equipment with bio-degradable phosphate-free detergent and potable water;
  - Immerse and scrub in a potable water rinse without detergent;
  - Immerse and scrub in deionized/distilled water;
  - Saturate by spraying or immersion in laboratory-grade hexane;
  - Air dry and wrap cleaned equipment in foil to carry to next monitoring site to prevent contamination of equipment during transfer; and
  - The decontamination wash and rinse water will not be considered hazardous unless visual inspection or monitoring by the PID and other equipment indicate that contaminants may be present. The rinse waters can be discharged on-site if they are not contaminated. If contaminants are expected to be present, the rinsate waters should be placed in 55 gallon drums and stored on-site.

- *Disposable equipment* – The following steps will be employed to decontaminate disposable equipment:
  - Rinse with potable water;
  - Remove all standing liquid from the piece of equipment;
  - Dispose of the equipment in a dedicated container for contaminated solids; and

- Dispose of rinse water in 55 gallon drums if contaminants are found to be present.

- *Sample containers* – Upon filling and capping sample bottles, the outside of the bottle will be wiped off with a clean paper towel. These towels will be disposed of in a dedicated container for contaminated solids.

- *Personnel decontamination* – The following procedures will be used to decontaminate sampling personnel.
    - After each sampling event chemical resistant gloves will be disposed of in a dedicated container for contaminated solids;
    - At the end of each sampling day, Tyvek™ coveralls will be disposed of in a dedicated container for contaminated solids;
    - Boots will be rinsed off with water to remove mud, clay, or any other contaminants; and
    - Personnel will be required to follow procedures outlined in the HASP.

- *Special Considerations for PFAS* – The following procedures will be used when sampling for PFAS.
    - Clothing that contains PTFE material, including Gore-Tex or that have been water-proofed with PFAS materials should be avoided. All clothing worn by sampling personnel should first be laundered multiple times. Acceptable rain gear includes PVC, polyurethane, or rubber. If such materials are required because site conditions warrant additional protection for samplers, their use will be documented in the field notes.
    - Decontamination water shall be verified in advance to be PFAS-free through laboratory analysis or certification. Previous results of non-detect for PFAS are acceptable.

4.0 SAMPLE MANAGEMENT PLAN

4.1 Sample Management

This Sample Management Plan provides procedures to document and track samples and results obtained during this work effort. A series of pre-printed forms with the appropriate information serves as a vehicle for documentation and tracking.

In order to accomplish this task, the documentation materials will include sample labels, sample characterization and Chain-of-Custody sheets, daily field reports, and a sample log.

- *Sample Label* – A sample label will be completed for each sample obtained and will be affixed to the sample container. The label is configured in a way to address various types of mediums. Information on the label includes, at a minimum, client name, location, sample description, sample number, date, time, grab sample, composite sample, notes, and sampler's name.

- *Sample Characterization & Chain-of-Custody Sheet* – All pertinent field information will be entered onto the sample characterization and chain-of-custody sheets including client name, sample ID, sample description, location of sample, sampling method, number of containers, container type, analysis required, and preservation. The monitoring well form has space allotted for entering information regarding the well including depth to water, well volume, sample pH, temperature, color, etc. The Chain-of-Custody section of the form will document the sample's pathway of sample shipment which will include names of persons delivering/receiving, dates, and times. The reverse side of this form will be used by the laboratory to document analysis performed on the sample. Copies of the completed forms will be retained by the Engineer and the analytical laboratory. The original sample characterization and Chain-of-Custody sheets will be submitted in the Remedial Investigation report along with the laboratory results.

- *Daily Field Reports* – Daily activities will be recorded on the Inspection Report form. The purpose of this form will be to summarize the work performed on the site each day. The completed forms will be submitted to the Project Manager on a daily basis for short term site activity and on a weekly basis for site activities of a longer duration.

- *Sample Log* – The sample log will be utilized to track each individual sample obtained at the site. The upper portion, "Field Identification" will be completed the day the sample is taken. The form will accompany the sample characterization and Chain-of-Custody form to the laboratory. Personnel at the laboratory will complete the middle section of this form and return it to the Engineer, who will use the document to track incoming results. The bottom of the sheet has space allocated to enter "Recommended Actions" based on laboratory results.

4.2 Sample Handling

Each collected sample will be dispensed into the appropriate sample containers for the type of analysis to be performed. Sampling staff will wear nitrile gloves at all times when handling samples. Appropriate sample preservatives will be added to the sample containers by the contracted analytical laboratory prior to the delivery into the field, except in cases where the sample preservative must be added after sample collection. All samples that require cool storage will be immediately placed in coolers with appropriate packaging materials so as to protect the breakage of sample containers during shipment. The sample coolers will be filled with cubed ice (no "Blue Ice") prior to leaving the sample collection location. In the instance that a local analytical laboratory is contracted, the samples will be hand delivered to the laboratory each sampling day. The chain-of-custody forms will be signed by the laboratory personnel picking up the samples and placed within the coolers. In the instance that an analytical laboratory is contracted which is not based locally and a common carrier is used for sample shipment, the chain-of-custody forms will be signed by the sampler and the carrier personnel and placed inside of the coolers. Careful packaging techniques will be used to prevent sample containers from breakage during shipment. Materials such as cardboard, foam wrap, or Styrofoam may be used as packaging materials. All samples will be delivered to the contracted analytical laboratory on the day they were collected and will be received by the laboratory within 24 hours of sample collection. The samples will be collected with sufficient time allowed at the end of the day for the analytical laboratory to properly process the sample chain-of-custody.

Appendices

Appendix A

Supporting Documentation for PFAS Analysis

NEW YORK
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Department of
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Conservation

SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Under NYSDEC's Part 375 Remedial Programs

April 2023

www.dec.ny.gov

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April 2023

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

ERRATA SHEET for

SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) Under NYSDEC's Part 375 Remedial Programs Issued January 17, 2020

Citation and Page Number	Current Text	Corrected Text	Date
Title of Appendix I, page 32	Appendix H	Appendix I	2/25/2020
Document Cover, page 1	Guidelines for Sampling and Analysis of PFAS	Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs	9/15/2020
Data Assessment and Application to Site Cleanup Page 3	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published	Until such time as Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published	3/28/2023
Water Sample Results Page 3	PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water if PFOA or PFOS is detected in any water sample at or above 10 ng/L (ppt) and is determined to be attributable to the site, either by a comparison of upgradient and downgradient levels, or the presence of soil source areas, as defined below.	NYSDEC has adopted ambient water quality guidance values for PFOA and PFOS. Groundwater samples should be compared to the human health criteria of 6.7 ng/l (ppt) for PFOA and 2.7 ng/l (ppt) for PFOS. These guidance values also include criteria for surface water for PFOS applicable for aquatic life, which may be applicable at some sites. Drinking water sample results should be compared to the NYS maximum contaminant level (MCL) of 10 ng/l (ppt).Analysis to determine if PFOA and PFOS concentrations are attributable to the site should include a comparison between upgradient and downgradient levels, and the presence of soil source areas, as defined below.	3/28/2023
Soil Sample Results Page 3	Soil cleanup objectives for PFOA and PFOS have been proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values:	NYSDEC will delay adding soil cleanup objectives for PFOA and PFOS to 6 NYCRR Part 375-6 until the PFAS rural soil background study has been completed. Until SCOs are in effect, the following are to be used as guidance values:	3/28/2023
Protection of Groundwater Page 3	PFOA (ppb) 1.1 PFOS (ppb) 3.7	PFOA (ppb) 0.8 PFOS (ppb) 1.0	3/28/2023

Citation and Page Number	Current Text	Corrected Text	Date
Footnote 2 Page 3	The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	The Protection of Groundwater values are based on the above referenced ambient groundwater guidance values. Details on that calculation are available in the following document, prepared for the February 2022 proposed changes to Part 375 (https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375techsupport.pdf). The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	3/28/2023
Testing for Imported Soil Page 4	If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable.	If the concentrations of PFOA and PFOS in leachate are at or above the ambient water quality guidance values for groundwater, then the soil is not acceptable.	3/28/2023
Routine Analysis, page 9	“However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1 or ISO 25101.”	“However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1, ISO 25101, or Method 533.”	9/15/2020
Additional Analysis, page 9, new paragraph regarding soil parameters	None	“In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (EPA Method 9060), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils.”	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Data Assessment and Application to Site Cleanup Page 10	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFAS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Target levels for cleanup of PFAS in other media, including biota and sediment, have not yet been established by the DEC.	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.	9/15/2020
Water Sample Results Page 10	PFAS should be further assessed and considered as a potential contaminant of concern in groundwater or surface water (…) If PFAS are identified as a contaminant of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water (…) If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Soil Sample Results, page 10	"The extent of soil contamination for purposes of delineation and remedy selection should be determined by having certain soil samples tested by Synthetic Precipitation Leaching Procedure (SPLP) and the leachate analyzed for PFAS. Soil exhibiting SPLP results above 70 ppt for either PFOA or PFOS (individually or combined) are to be evaluated during the cleanup phase."	"Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values. " [Interim SCO Table] "PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP. As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf. "	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Testing for Imported Soil Page 11	Soil imported to a site for use in a soil cap, soil cover, or as backfill is to be tested for PFAS in general conformance with DER-10, Section 5.4(e) for the PFAS Analyte List (Appendix F) using the analytical procedures discussed below and the criteria in DER-10 associated with SVOCs. If PFOA or PFOS is detected in any sample at or above 1 µg/kg, then soil should be tested by SPLP and the leachate analyzed for PFAS. If the SPLP results exceed 10 ppt for either PFOA or PFOS (individually) then the source of backfill should be rejected, unless a site-specific exemption is provided by DER. SPLP leachate criteria is based on the Maximum Contaminant Levels proposed for drinking water by New York State's Department of Health, this value may be updated based on future Federal or State promulgated regulatory standards. Remedial parties have the option of analyzing samples concurrently for both PFAS in soil and in the SPLP leachate to minimize project delays. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable. PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Footnotes	None	[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances. [2] The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the soil cleanup objective for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	9/15/2020
Additional Analysis, page 9	In cases… soil parameters, such as Total Organic Carbon (EPA Method 9060), soil…	In cases… soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil…	1/8/2021
Appendix A, General Guidelines, fourth bullet	List the ELAP-approved lab(s) to be used for analysis of samples	List the ELAP- certified lab(s) to be used for analysis of samples	1/8/2021
Appendix E, Laboratory Analysis and Containers	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by ISO Method 25101.	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101	1/8/2021
Water Sample Results Page 9	“In addition, further assessment of water may be warranted if either of the following screening levels are met: a. any other individual PFAS (not PFOA or PFOS) is detected in water at or above 100 ng/L; or b. total concentration of PFAS (including PFOA and PFOS) is detected in water at or above 500 ng/L”	Deleted	6/15/2021

Citation and Page Number	Current Text	Corrected Text	Date
Routine Analysis, Page XX	Currently, New York State Department of Health's Environmental Laboratory Approval Program (ELAP)… criteria set forth in the DER's laboratory guidelines for PFAS in non-potable water and solids (Appendix H - Laboratory Guidelines for Analysis of PFAS in Non-Potable Water and Solids).	Deleted	5/31/2022
Analysis and Reporting, Page XX	As of October 2020, the United States Environmental Protection Agency (EPA) does not have a validated method for analysis of PFAS for media commonly analyzed under DER remedial programs (non-potable waters, solids). DER has developed the following guidelines to ensure consistency in analysis and reporting of PFAS.	Deleted	5/31/2022
Routine Analysis, Page XX	LC-MS/MS analysis for PFAS using methodologies based on EPA Method 537.1 is the procedure to use for environmental samples. Isotope dilution techniques should be utilized for the analysis of PFAS in all media.	EPA Method 1633 is the procedure to use for environmental samples.	
Soil Sample Results, Page XX	Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6	Soil cleanup objectives for PFOA and PFOS have been proposed in an upcoming revision to 6 NYCRR Part 375-6	
Appendix A	"Include in the text… LC-MS/MS for PFAS using methodologies based on EPA Method 537.1"	"Include in the text ….EPA Method 1633"	
Appendix A	"Laboratory should have ELAP certification for PFOA and PFOS in drinking water by EPA Method 537, 537.1, EPA Method 533, or ISO 25101"	Deleted	
Appendix B	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	

Citation and Page Number	Current Text	Corrected Text	Date
Appendix C	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	
Appendix D	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	
Appendix G		Updated to include all forty PFAS analytes in EPA Method 533	
Appendix H		Deleted	
Appendix I	Appendix I	Appendix H	
Appendix H	"These guidelines are intended to be used for the validation of PFAS analytical results for projects within the Division of Environmental Remediation (DER) as well as aid in the preparation of a data usability summary report."	"These guidelines are intended to be used for the validation of PFAS using EPA Method 1633 for projects within the Division of Environmental Remediation (DER)."	
Appendix H	"The holding time is 14 days…"	"The holding time is 28 days…"	
Appendix H, Initial Calibration	"The initial calibration should contain a minimum of five standards for linear fit…"	"The initial calibration should contain a minimum of six standards for linear fit…"	
Appendix H, Initial Calibration	Linear fit calibration curves should have an R^2 value greater than 0.990.	Deleted	
Appendix H, Initial Calibration Verification	Initial Calibration Verification Section	Deleted	
Appendix H	secondary Ion Monitoring Section	Deleted	
Appendix H	Branched and Linear Isomers Section	Deleted	

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs

Objective

New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) performs or oversees sampling of environmental media and subsequent analysis of PFAS as part of remedial programs implemented under 6 NYCRR Part 375. To ensure consistency in sampling, analysis, reporting, and assessment of PFAS, DER has developed this document which summarizes currently accepted procedures and updates previous DER technical guidance pertaining to PFAS.

Applicability

All work plans submitted to DEC pursuant to one of the remedial programs under Part 375 shall include PFAS sampling and analysis procedures that conform to the guidelines provided herein.

As part of a site investigation or remedial action compliance program, whenever samples of potentially affected media are collected and analyzed for the standard Target Analyte List/Target Compound List (TAL/TCL), PFAS analysis should also be performed. Potentially affected media can include soil, groundwater, surface water, and sediment. Based upon the potential for biota to be affected, biota sampling and analysis for PFAS may also be warranted as determined pursuant to a Fish and Wildlife Impact Analysis. Soil vapor sampling for PFAS is not required.

Field Sampling Procedures

DER-10 specifies technical guidance applicable to DER's remedial programs. Given the prevalence and use of PFAS, DER has developed "best management practices" specific to sampling for PFAS. As specified in DER-10 Chapter 2, quality assurance procedures are to be submitted with investigation work plans. Typically, these procedures are incorporated into a work plan, or submitted as a stand-alone document (e.g., a Quality Assurance Project Plan). Quality assurance guidelines for PFAS are listed in Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS.

Field sampling for PFAS performed under DER remedial programs should follow the appropriate procedures outlined for soils, sediments, or other solids (Appendix B), non-potable groundwater (Appendix C), surface water (Appendix D), public or private water supply wells (Appendix E), and fish tissue (Appendix F).

QA/QC samples (e.g. duplicates, MS/MSD) should be collected as specified in DER-10, Section 2.3(c). For sampling equipment coming in contact with aqueous samples only, rinsate or equipment blanks should be collected. Equipment blanks should be collected at a minimum frequency of one per day per site or one per twenty samples, whichever is more frequent.

Analysis and Reporting

The investigation work plan should describe analysis and reporting procedures, including laboratory analytical procedures for the methods discussed below. As specified in DER-10 Section 2.2, laboratories should provide a full Category B deliverable. In addition, a Data Usability Summary Report (DUSR) should be prepared by an independent, third-party data validator. Electronic data submissions should meet the requirements provided at: https://www.dec.ny.gov/chemical/62440.html.

DER has developed a *PFAS Analyte List* (Appendix G) for remedial programs to understand the nature of contamination at sites. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. If lab and/or matrix specific issues are encountered for any analytes, the DER project manager, in consultation with the DER chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each site. As with other contaminants that are analyzed for at a site, the *PFAS Analyte List* may be refined for future sampling events based on investigative findings.

Routine Analysis

EPA Method 1633 is the procedure to use for environmental samples. Reporting limits for PFOA and PFOS in aqueous samples should not exceed 2 ng/L. Reporting limits for PFOA and PFOS in solid samples should not exceed 0.5 µg/kg. Reporting limits for all other PFAS in aqueous and solid media should be as close to these limits as possible. If laboratories indicate that they are not able to achieve these reporting limits for the entire *PFAS Analyte List*, site-specific decisions regarding acceptance of elevated reporting limits for specific PFAS can be made by the DER project manager in consultation with the DER chemist. Data review guidelines were developed by DER to ensure data comparability and usability (Appendix H - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids).

Additional Analysis

Additional laboratory methods for analysis of PFAS may be warranted at a site, such as the Synthetic Precipitation Leaching Procedure (SPLP) and Total Oxidizable Precursor Assay (TOP Assay).

In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils.

SPLP is a technique used to determine the mobility of chemicals in liquids, soils and wastes, and may be useful in determining the need for addressing PFAS-containing material as part of the remedy. SPLP by EPA Method 1312 should be used unless otherwise specified by the DER project manager in consultation with the DER chemist.

Impacted materials can be made up of PFAS that are not analyzable by routine analytical methodology. A TOP Assay can be utilized to conceptualize the amount and type of oxidizable PFAS which could be liberated in the environment, which approximates the maximum concentration of perfluoroalkyl substances that could be generated if all polyfluoroalkyl substances were oxidized. For example, some polyfluoroalkyl substances may degrade or transform to form perfluoroalkyl substances (such as PFOA or PFOS), resulting in an increase in perfluoroalkyl substance concentrations as contaminated groundwater moves away from a source. The TOP Assay converts, through oxidation, polyfluoroalkyl substances (precursors) into perfluoroalkyl substances that can be detected by routine analytical methodology.[1]

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[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances.

Commercial laboratories have adopted methods which allow for the quantification of targeted PFAS in air and biota. The EPA's Office of Research and Development (ORD) is currently developing methods which allow for air emissions characterization of PFAS, including both targeted and non-targeted analysis of PFAS. Consult with the DER project manager and the DER chemist for assistance on analyzing biota/tissue and air samples.

Data Assessment and Application to Site Cleanup

Until such time as Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.

Water Sample Results

NYSDEC has adopted ambient water quality guidance values for PFOA and PFOS. Groundwater samples should be compared to the human health criteria of 6.7 ng/l (ppt) for PFOA and 2.7 ng/l (ppt) for PFOS. These human health criteria should also be applied to surface water that is used as a water supply. This guidance also includes criteria for surface water for PFOS applicable for aquatic life, which may be applicable at some sites. Drinking water sample results should be compared to the NYS maximum contaminant level (MCL) of 10 ng/l (ppt). Analysis to determine if PFOA and PFOS concentrations are attributable to the site should include a comparison between upgradient and downgradient levels, and the presence of soil source areas, as defined below.

If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.

Soil Sample Results

NYSDEC will delay adding soil cleanup objectives for PFOA and PFOS to 6 NYCRR Part 375-6 until the PFAS rural soil background study has been completed. Until SCOs are in effect, the following are to be used as guidance values:

Guidance Values for Anticipated Site Use	PFOA (ppb)	PFOS (ppb)
Unrestricted	0.66	0.88
Residential	6.6	8.8
Restricted Residential	33	44
Commercial	500	440
Industrial	600	440
Protection of Groundwater[2]	0.8	1.0

PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These

[2] The Protection of Groundwater values are based on the above referenced ambient groundwater guidance values. Details on that calculation are available in the following document, prepared for the February 2022 proposed changes to Part 375 (https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375techsupport.pdf). The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).

additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP.

As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf.

Testing for Imported Soil

Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above the ambient water quality guidance values for groundwater, then the soil is not acceptable.

PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.

Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS

The following guidelines (general and PFAS-specific) can be used to assist with the development of a QAPP for projects within DER involving sampling and analysis of PFAS.

General Guidelines in Accordance with DER-10

- Document/work plan section title – Quality Assurance Project Plan
- Summarize project scope, goals, and objectives
- Provide project organization including names and resumes of the project manager, Quality Assurance Officer (QAO), field staff, and Data Validator
    - The QAO should not have another position on the project, such as project or task manager, that involves project productivity or profitability as a job performance criterion
- List the ELAP certified lab(s) to be used for analysis of samples
- Include a site map showing sample locations
- Provide detailed sampling procedures for each matrix
- Include Data Quality Usability Objectives
- List equipment decontamination procedures
- Include an "Analytical Methods/Quality Assurance Summary Table" specifying:
    - Matrix type
    - Number or frequency of samples to be collected per matrix
    - Number of field and trip blanks per matrix
    - Analytical parameters to be measured per matrix
    - Analytical methods to be used per matrix with minimum reporting limits
    - Number and type of matrix spike and matrix spike duplicate samples to be collected
    - Number and type of duplicate samples to be collected
    - Sample preservation to be used per analytical method and sample matrix
    - Sample container volume and type to be used per analytical method and sample matrix
    - Sample holding time to be used per analytical method and sample matrix
- Specify Category B laboratory data deliverables and preparation of a DUSR

Specific Guidelines for PFAS

- Include in the text that sampling for PFAS will take place
- Include in the text that PFAS will be analyzed by EPA Method 1633
- Include the list of PFAS compounds to be analyzed (*PFAS Analyte List*)
- Include the laboratory SOP for PFAS analysis
- List the minimum method-achievable Reporting Limits for PFAS
    - Reporting Limits should be less than or equal to:
        - Aqueous – 2 ng/L (ppt)
        - Solids – 0.5 µg/kg (ppb)
- Include the laboratory Method Detection Limits for the PFAS compounds to be analyzed
-
- Include detailed sampling procedures
    - Precautions to be taken
    - Pump and equipment types
    - Decontamination procedures
    - Approved materials only to be used
- Specify that regular ice only will be used for sample shipment
- Specify that equipment blanks should be collected at a minimum frequency of 1 per day per site for each matrix

Appendix B - Sampling Protocols for PFAS in Soils, Sediments and Solids

General

The objective of this protocol is to give general guidelines for the collection of soil, sediment and other solid samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Containers

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in to contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel spoon
- stainless steel bowl
- steel hand auger or shovel without any coatings

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Sampling is often conducted in areas where a vegetative turf has been established. In these cases, a pre-cleaned trowel or shovel should be used to carefully remove the turf so that it may be replaced at the conclusion of sampling. Surface soil samples (e.g. 0 to 6 inches below surface) should then be collected using a pre-cleaned, stainless steel spoon. Shallow subsurface soil samples (e.g. 6 to ~36 inches below surface) may be collected by digging a hole using a pre-cleaned hand auger or shovel. When the desired subsurface depth is reached, a pre-cleaned hand auger or spoon shall be used to obtain the sample.

When the sample is obtained, it should be deposited into a stainless steel bowl for mixing prior to filling the sample containers. The soil should be placed directly into the bowl and mixed thoroughly by rolling the material into the middle until the material is homogenized. At this point the material within the bowl can be placed into the laboratory provided container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A soil log or sample log shall document the location of the sample/borehole, depth of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix C - Sampling Protocols for PFAS in Monitoring Wells

General

The objective of this protocol is to give general guidelines for the collection of groundwater samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including plumbers tape and sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel inertia pump with HDPE tubing
- peristaltic pump equipped with HDPE tubing and silicone tubing
- stainless steel bailer with stainless steel ball
- bladder pump (identified as PFAS-free) with HDPE tubing

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Monitoring wells should be purged in accordance with the sampling procedure (standard/volume purge or low flow purge) identified in the site work plan, which will determine the appropriate time to collect the sample. If sampling using standard purge techniques, additional purging may be needed to reduce turbidity levels, so samples contain a limited amount of sediment within the sample containers. Sample containers that contain sediment may cause issues at the laboratory, which may result in elevated reporting limits and other issues during the sample preparation that can compromise data usability. Sampling personnel should don new nitrile gloves prior to sample collection due to the potential to contact PFAS containing items (not related to the sampling equipment) during the purging activities.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Additional equipment blank samples may be collected to assess other equipment that is utilized at the monitoring well
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A purge log shall document the location of the sample, sampling equipment, groundwater parameters, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix D - Sampling Protocols for PFAS in Surface Water

General

The objective of this protocol is to give general guidelines for the collection of surface water samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel cup

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Where conditions permit, (e.g. creek or pond) sampling devices (e.g. stainless steel cup) should be rinsed with site medium to be sampled prior to collection of the sample. At this point the sample can be collected and poured into the sample container.

If site conditions permit, samples can be collected directly into the laboratory container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A sample log shall document the location of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix E - Sampling Protocols for PFAS in Private Water Supply Wells

General

The objective of this protocol is to give general guidelines for the collection of water samples from private water supply wells (with a functioning pump) for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101. The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials (e.g. plumbers tape), including sample bottle cap liners with a PTFE layer.

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Locate and assess the pressure tank and determine if any filter units are present within the building. Establish the sample location as close to the well pump as possible, which is typically the spigot at the pressure tank. Ensure sampling equipment is kept clean during sampling as access to the pressure tank spigot, which is likely located close to the ground, may be obstructed and may hinder sample collection.

Prior to sampling, a faucet downstream of the pressure tank (e.g., washroom sink) should be run until the well pump comes on and a decrease in water temperature is noted which indicates that the water is coming from the well. If the homeowner is amenable, staff should run the water longer to purge the well (15+ minutes) to provide a sample representative of the water in the formation rather than standing water in the well and piping system including the pressure tank. At this point a new pair of nitrile gloves should be donned and the sample can be collected from the sample point at the pressure tank.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- If equipment was used, collect one equipment blank per day per site and a minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers.
- A field reagent blank (FRB) should be collected at a rate of one per 20 samples. The lab will provide a FRB bottle containing PFAS free water and one empty FRB bottle. In the field, pour the water from the one bottle into the empty FRB bottle and label appropriately.
- Request appropriate data deliverable (Category B) and an electronic data deliverable
- For sampling events where multiple private wells (homes or sites) are to be sampled per day, it is acceptable to collect QC samples at a rate of one per 20 across multiple sites or days.

Documentation

A sample log shall document the location of the private well, sample point location, owner contact information, sampling equipment, purge duration, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate and available (e.g. well construction, pump type and location, yield, installation date). Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appendix F - Sampling Protocols for PFAS in Fish

This appendix contains a copy of the current SOP developed by the Division of Fish and Wildlife (DFW) entitled "General Fish Handling Procedures for Contaminant Analysis" (Ver. 8). This SOP should be followed when collecting fish for contaminant analysis. Note, however, that the Bureau of Ecosystem Health will not be supplying bags or tags. All supplies are the responsibility of the collector

Procedure Name: General Fish Handling Procedures for Contaminant Analysis

Number: FW-005

Purpose: This procedure describes data collection, fish processing and delivery of fish collected for contaminant monitoring. It contains the chain of custody and collection record forms that should be used for the collections.

Organization: Environmental Monitoring Section
Bureau of Ecosystem Health
Division of Fish and Wildlife (DFW)
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, New York 12233-4756

Version: 8

Previous Version Date: 21 March 2018

Summary of Changes to this Version: Updated bureau name to Bureau of Ecosystem Health. Added direction to list the names of all field crew on the collection record. Minor formatting changes on chain of custody and collection records.

Originator or Revised by: Wayne Richter, Jesse Becker

Date: 26 April 2019

Quality Assurance Officer and Approval Date: Jesse Becker, 26 April 2019

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GENERAL FISH HANDLING PROCEDURES FOR CONTAMINANT ANALYSES

A. Original copies of all continuity of evidence (i.e., Chain of Custody) and collection record forms must accompany delivery of fish to the lab. A copy shall be directed to the Project Leader or as appropriate, Wayne Richter. <u>All necessary forms will be supplied by the Bureau of Ecosystem Health.</u> Because some samples may be used in legal cases, it is critical that each section is filled out completely. Each Chain of Custody form has three main sections:

1. The top box is to be filled out **<u>and signed</u>** by the person responsible for the fish collection (e.g., crew leader, field biologist, researcher). This person is responsible for delivery of the samples to DEC facilities or personnel (e.g., regional office or biologist).

2. The second section is to be filled out **<u>and signed</u>** by the person responsible for the collections while being stored at DEC, before delivery to the analytical lab. This may be the same person as in (1), but it is still required that they complete the section. Also important is the **range of identification numbers** (i.e., tag numbers) included in the sample batch.

3. Finally, the bottom box is to record any transfers between DEC personnel and facilities. Each subsequent transfer should be **identified, signed, and dated**, until laboratory personnel take possession of the fish.

B. The following data are required on <u>each</u> **Fish Collection Record** form:

1. Project and Site Name.

2. DEC Region.

3. All personnel (and affiliation) involved in the collection.

4. Method of collection (gill net, hook and line, etc.)

5. Preservation Method.

C. The following data are to be taken on <u>each</u> fish collected and recorded on the **Fish Collection Record** form:

1. Tag number - Each specimen is to be individually jaw tagged at time of collection with a unique number. Make sure the tag is turned out so that the number can be read without opening the bag. Use tags in sequential order. For small fish or composite samples place the tag inside the bag with the samples. The Bureau of Ecosystem Health can supply the tags.

2. Species identification (please be explicit enough to enable assigning genus and species). Group fish by species when processing.

3. Date collected.

4. Sample location (waterway and nearest prominent identifiable landmark).

5. Total length (nearest mm or smallest sub-unit on measuring instrument) and weight (nearest g or

smallest sub-unit of weight on weighing instrument). Take all measures as soon as possible with calibrated, protected instruments (e.g. from wind and upsets) and prior to freezing.

6. Sex - fish may be cut enough to allow sexing or other internal investigation, but do not eviscerate. Make any incision on the right side of the belly flap or exactly down the midline so that a left-side fillet can be removed.

D. General data collection recommendations:

1. It is helpful to use an ID or tag number that will be unique. It is best to use metal striped bass or other uniquely numbered metal tags. If uniquely numbered tags are unavailable, values based on the region, water body and year are likely to be unique: for example, R7CAY11001 for Region 7, Cayuga Lake, 2011, fish 1. If the fish are just numbered 1 through 20, we have to give them new numbers for our database, making it more difficult to trace your fish to their analytical results and creating an additional possibility for errors.

2. Process and record fish of the same species sequentially. Recording mistakes are less likely when all fish from a species are processed together. Starting with the bigger fish species helps avoid missing an individual.

3. If using Bureau of Ecosystem Health supplied tags or other numbered tags, use tags in sequence so that fish are recorded with sequential Tag Numbers. This makes data entry and login at the lab and use of the data in the future easier and reduces keypunch errors.

4. Record length and weight as soon as possible after collection and before freezing. Other data are recorded in the field upon collection. An age determination of each fish is optional, but if done, it is recorded in the appropriate "Age" column.

5. For composite samples of small fish, record the number of fish in the composite in the Remarks column. Record the length and weight of each individual in a composite. All fish in a composite sample should be of the same species and members of a composite should be visually matched for size.

6. Please submit photocopies of topographic maps or good quality navigation charts indicating sampling locations. GPS coordinates can be entered in the Location column of the collection record form in addition to or instead for providing a map. These records are of immense help to us (and hopefully you) in providing documented location records which are not dependent on memory and/or the same collection crew. In addition, they may be helpful for contaminant source trackdown and remediation/control efforts of the Department.

7. When recording data on fish measurements, it will help to ensure correct data recording for the data recorder to call back the numbers to the person making the measurements.

E. Each fish is to be placed in its own individual plastic bag. For small fish to be analyzed as a composite, put all of the fish for one composite in the same bag but use a separate bag for each composite. It is important to individually bag the fish to avoid difficulties or cross contamination when processing the fish for chemical analysis. Be sure to include the fish's tag number inside the bag, preferably attached to the fish with the tag number turned out so it can be read. Tie or otherwise secure the bag closed. **<u>The Bureau of Ecosystem Health will supply the bags.</u>** If necessary, food grade bags may be procured from a suitable vendor (e.g., grocery store). It is preferable to redundantly label each bag with a manila tag tied between the knot and the body of the bag. This tag should be labeled with the project name, collection location, tag number, collection date, and fish species. If scales are collected, the scale envelope should be labeled with the same information.

F. Groups of fish, by species, are to be placed in one large plastic bag per sampling location. **<u>The Bureau of Ecosystem Health will supply the larger bags</u>.** Tie or otherwise secure the bag closed. Label the site bag with a manila tag tied between the knot and the body of the bag. The tag should contain: project, collection location, collection date, species and **tag number ranges**. Having this information on the manila tag enables lab staff to know what is in the bag without opening it.

G. Do not eviscerate, fillet or otherwise dissect the fish unless specifically asked to. If evisceration or dissection is specified, the fish must be cut along the exact midline or on the right side so that the left side fillet can be removed intact at the laboratory. If filleting is specified, the procedure for taking a standard fillet (SOP PREPLAB 4) must be followed, including removing scales.

H. Special procedures for PFAS: Unlike legacy contaminants such as PCBs, which are rarely found in day to day life, PFAS are widely used and frequently encountered. Practices that avoid sample contamination are therefore necessary. While no standard practices have been established for fish, procedures for water quality sampling can provide guidance. The following practices should be used for collections when fish are to be analyzed for PFAS:

    No materials containing Teflon.
    No Post-it notes.
    No ice packs; only water ice or dry ice.
    Any gloves worn must be powder free nitrile.
    No Gore-Tex or similar materials (Gore-Tex is a PFC with PFOA used in its manufacture).
    No stain repellent or waterproof treated clothing; these are likely to contain PFCs.
    Avoid plastic materials, other than HDPE, including clipboards and waterproof notebooks.
    Wash hands after handling any food containers or packages as these may contain PFCs. Keep pre-wrapped food containers and wrappers isolated from fish handling.
    Wear clothing washed at least six times since purchase.
    Wear clothing washed without fabric softener.
    Staff should avoid cosmetics, moisturizers, hand creams and similar products on the day of sampling as many of these products contain PFCs (Fujii et al. 2013). Sunscreen or insect repellent should not contain ingredients with "fluor" in their name. Apply any sunscreen or insect repellent well downwind from all materials. Hands must be washed after touching any of these products.

I. All fish must be kept at a temperature <45° F (<8° C) immediately following data processing. As soon as possible, freeze at -20° C ± 5° C. Due to occasional freezer failures, daily freezer temperature logs are required. The freezer should be locked or otherwise secured to maintain chain of custody.

J. In most cases, samples should be delivered to the Analytical Services Unit at the Hale Creek field station. Coordinate delivery with field station staff and send copies of the collection records, continuity of evidence forms and freezer temperature logs to the field station. For samples to be analyzed elsewhere, non-routine collections or other questions, contact Wayne Richter, Bureau of Ecosystem Health, NYSDEC, 625 Broadway, Albany, New York 12233-4756, 518-402-8974, or the project leader about sample transfer. Samples will then be directed to the analytical facility and personnel noted on specific project descriptions.

K. A recommended equipment list is at the end of this document.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF FISH AND WILDLIFE
FISH COLLECTION RECORD

Project and Site Name ____ DEC Region ____________

Collections made by (include all crew) ____

Sampling Method: ☐Electrofishing ☐Gill netting ☐Trap netting ☐Trawling ☐Seining ☐Angling ☐Other ____________________

Preservation Method: ☐Freezing ☐Other ______________________ Notes (SWFDB survey number): ____________________

FOR LAB USE ONLY- LAB ENTRY NO.	COLLECTION OR TAG NO.	SPECIES	DATE TAKEN	LOCATION	AGE	SEX &/OR REPROD. CONDIT	LENGTH ( )	WEIGHT ( )	REMARKS

richter: revised 2011, 5/7/15, 10/4/16, 3/20/17; becker: 3/23/17, 4/26/19

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CHAIN OF CUSTODY

I, ______________________________, of ____ collected the
(Print Name) (Print Business Address)

following on ____________________, 20____ from ____
(Date) (Water Body)

in the vicinity of ____
(Landmark, Village, Road, etc.)

Town of ____, in _________________________________ County.

Item(s) ____

____

Said sample(s) were in my possession and handled according to standard procedures provided to me prior to collection. The sample(s) were placed in the custody of a representative of the New York State Department of Environmental Conservation on ____________________________________, 20______.

____ ___________________________
Signature Date

I, __________________________________, received the above mentioned sample(s) on the date specified and assigned identification number(s) ____ to the sample(s). I have recorded pertinent data for the sample(s) on the attached collection records. The sample(s) remained in my custody until subsequently transferred, prepared or shipped at times and on dates as attested to below.

_______________________________________ ___________________
Signature Date

SECOND RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
THIRD RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
FOURTH RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
RECEIVED IN LABORATORY BY (Print Name)	TIME & DATE	REMARKS
SIGNATURE	UNIT	
LOGGED IN BY (Print Name)	TIME & DATE	ACCESSION NUMBERS
SIGNATURE	UNIT	

richter: revised 21 April 2014; becker: 23 March 2017, 26 April, 2019

NOTICE OF WARRANTY

By signature to the chain of custody (reverse), the signatory warrants that the information provided is truthful and accurate to the best of his/her ability. The signatory affirms that he/she is willing to testify to those facts provided and the circumstances surrounding the same. Nothing in this warranty or chain of custody negates responsibility nor liability of the signatories for the truthfulness and accuracy of the statements provided.

HANDLING INSTRUCTIONS

On day of collection, collector(s) name(s), address(es), date, geographic location of capture (attach a copy of topographic map or navigation chart), species, number kept of each species, and description of capture vicinity (proper noun, if possible) along with name of Town and County must be indicated on reverse.

Retain organisms in manila tagged plastic bags to avoid mixing capture locations. Note appropriate information on each bag tag.

Keep samples as cool as possible. Put on ice if fish cannot be frozen within 12 hours. If fish are held more than 24 hours without freezing, they will not be retained or analyzed.

Initial recipient (either DEC or designated agent) of samples from collector(s) is responsible for obtaining and recording information on the collection record forms which will accompany the chain of custody. This person will seal the container using packing tape and writing his signature, the time and the date across the tape onto the container with indelible marker. Any time a seal is broken, for whatever purpose, the incident must be recorded on the Chain of Custody (reason, time, and date) in the purpose of transfer block. Container then is resealed using new tape and rewriting signature, with time and date.

EQUIPMENT LIST

Scale or balance of appropriate capacity for the fish to be collected.

Fish measuring board.

Plastic bags of an appropriate size for the fish to be collected and for site bags.

Individually numbered metal tags for fish.

Manila tags to label bags.

Small envelops, approximately 2” x 3.5”, if fish scales are to be collected.

Knife for removing scales.

Chain of custody and fish collection forms.

Clipboard.

Pens or markers.

Paper towels.

Dish soap and brush.

Bucket.

Cooler.

Ice.

Duct tape.

Appendix G – PFAS Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonic acids	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluoropentanesulfonic acid	PFPeS	2706-91-4
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorononanesulfonic acid	PFNS	68259-12-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
	Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
	Perfluorooctanoic acid	PFOA	335-67-1
	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUnA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTeDA	376-06-7
Per- and Polyfluoroether carboxylic acids	Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
	Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
	Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2-FTS	757124-72-4
	6:2 Fluorotelomer sulfonic acid	6:2-FTS	27619-97-2
	8:2 Fluorotelomer sulfonic acid	8:2-FTS	39108-34-4
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	356-02-5
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	914637-49-3
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	812-70-4
Perfluorooctane sulfonamides	Perfluorooctane sulfonamide	PFOSA	754-91-6
	N-methylperfluorooctane sulfonamide	NMeFOSA	31506-32-8
	N-ethylperfluorooctane sulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids	N-methylperfluorooctane sulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethylperfluorooctane sulfonamidoacetic acid	N-EtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	24448-09-7
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	1691-99-2

Group	Chemical Name	Abbreviation	CAS Number
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	756426-58-1
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	763051-92-9
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	113507-82-7

Appendix H - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids

General

These guidelines are intended to be used for the validation of PFAS using EPA Method 1633 for projects within the Division of Environmental Remediation (DER). Data reviewers should understand the methodology and techniques utilized in the analysis. Consultation with the end user of the data may be necessary to assist in determining data usability based on the data quality objectives in the Quality Assurance Project Plan. A familiarity with the laboratory's Standard Operating Procedure may also be needed to fully evaluate the data. If you have any questions, please contact DER's Quality Assurance Officer, Dana Barbarossa, at dana.barbarossa@dec.ny.gov.

Preservation and Holding Time

Samples should be preserved with ice to a temperature of less than 6°C upon arrival at the lab. The holding time is 28 days to extraction for aqueous and solid samples. The time from extraction to analysis for aqueous samples is 28 days and 40 days for solids.

Temperature greatly exceeds 6ºC upon arrival at the lab*	Use professional judgement to qualify detects and non-detects as estimated or rejected
Holding time exceeding 28 days to extraction	Use professional judgement to qualify detects and non-detects as estimated or rejected if holding time is grossly exceeded

*Samples that are delivered to the lab immediately after sampling may not meet the thermal preservation guidelines. Samples are considered acceptable if they arrive on ice or an attempt to chill the samples is observed.

Initial Calibration

The initial calibration should contain a minimum of six standards for linear fit and six standards for a quadratic fit. The relative standard deviation (RSD) for a quadratic fit calibration should be less than 20%.

The low-level calibration standard should be within 50% - 150% of the true value, and the mid-level calibration standard within 70% - 130% of the true value.

%RSD >20%	J flag detects and UJ non detects

Continuing Calibration Verification

Continuing calibration verification (CCV) checks should be analyzed at a frequency of one per ten field samples. If CCV recovery is very low, where detection of the analyte could be in question, ensure a low level CCV was analyzed and use to determine data quality.

CCV recovery <70 or >130%	J flag results

Blanks

There should be no detections in the method blanks above the reporting limits. Equipment blanks, field blanks, rinse blanks etc. should be evaluated in the same manner as method blanks. Use the most contaminated blank to evaluate the sample results.

Blank Result	Sample Result	Qualification
Any detection	<Reporting limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting limit	>Reporting limit and <10x blank result	J+ biased high

Field Duplicates

A blind field duplicate should be collected at rate of one per twenty samples. The relative percent difference (RPD) should be less than 30% for analyte concentrations greater than two times the reporting limit. Use the higher result for final reporting.

RPD >30%	Apply J qualifier to parent sample

Lab Control Spike

Lab control spikes should be analyzed with each extraction batch or one for every twenty samples. In the absence of lab derived criteria, use 70% - 130% recovery criteria to evaluate the data.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects

Matrix Spike/Matrix Spike Duplicate

One matrix spike and matrix spike duplicate should be collected at a rate of one per twenty samples. Use professional judgement to reject results based on out of control MS/MSD recoveries.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only
RPD >30%	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only

Extracted Internal Standards (Isotope Dilution Analytes)

Problematic analytes (e.g. PFBA, PFPeA, fluorotelomer sulfonates) can have wider recoveries without qualification. Qualify corresponding native compounds with a J flag if outside of the range.

Recovery <50% or >150%	Apply J qualifier
Recovery <25% or >150% for poor responding analytes	Apply J qualifier
Isotope Dilution Analyte (IDA) Recovery <10%	Reject results

Signal to Noise Ratio

The signal to noise ratio for the quantifier ion should be at least 3:1. If the ratio is less than 3:1, the peak is discernable from the baseline noise and symmetrical, the result can be reported. If the peak appears to be baseline noise and/or the shape is irregular, qualify the result as tentatively identified.

Reporting Limits

If project-specific reporting limits were not met, please indicate that in the report along with the reason (e.g. over dilution, dilution for non-target analytes, high sediment in aqueous samples).

Peak Integrations

Target analyte peaks should be integrated properly and consistently when compared to standards. Ensure branched isomer peaks are included for PFAS where standards are available. Inconsistencies should be brought to the attention of the laboratory or identified in the data review summary report.

Appendix B

NYSDOH Indoor Air Quality Questionnaire and Building Inventory Form

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name ______________________________________ Date/Time Prepared _______________

Preparer's Affiliation __________________________________ Phone No.________________________

Purpose of Investigation____

1. OCCUPANT:

Interviewed: Y / N

Last Name: ___________________________ First Name: ___________________________

Address: ____

County: __________________

Home Phone: _____________________ Office Phone: _____________________

Number of Occupants/persons at this location _______ Age of Occupants ________________________

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: ___________________________ First Name: ___________________________

Address: ____

County: __________________

Home Phone: _____________________ Office Phone: _____________________

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: __________________

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_______________

If multiple units, how many? ________

If the property is commercial, type?

Business Type(s) ______________________________________

Does it include residences (i.e., multi-use)? Y / N If yes, how many? ______

Other characteristics:

Number of floors______ Building age______

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

____

____

____

Airflow near source

____

____

____

Outdoor air infiltration

____

____

____

Infiltration into air ducts

____

____

____

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other ________
c. Basement floor:	concrete	dirt	stone	other ________
d. Basement floor:	uncovered	covered	covered with _______________	
e. Concrete floor:	unsealed	sealed	sealed with ________________	
f. Foundation walls:	poured	block	stone	other ________
g. Foundation walls:	unsealed	sealed	sealed with ________________	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: ________(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

____

____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other ___________

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: ____________________________

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other___________
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

____

____

____

____

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	____
1st Floor	____
2nd Floor	____
3rd Floor	____
4th Floor	____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA
Please specify____________________

d. Has the building ever had a fire? Y / N When?__________________

e. Is a kerosene or unvented gas space heater present? Y / N Where? _________________

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _________________

g. Is there smoking in the building? Y / N How frequently? ________________

h. Have cleaning products been used recently? Y / N When & Type? _________________

i. Have cosmetic products been used recently? Y / N When & Type? _________________

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _______________

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _______________

l. Have air fresheners been used recently? Y / N When & Type? ________________

m. Is there a kitchen exhaust fan? Y / N If yes, where vented?____________

n. Is there a bathroom exhaust fan? Y / N If yes, where vented?____________

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type?_________________

Are there odors in the building? Y / N
If yes, please describe: ____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? ____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: ____________
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _______

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _______

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____________________________________

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ______________________________________

List specific products found in the residence that have the potential to affect indoor air quality.

Location	**Product Description**	**Size** (units)	**Condition***	**Chemical Ingredients**	**Field Instrument Reading** (units)	**Photo ** Y / N**

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Appendix F

Data Usability Summary Report

Data Usability Summary Report

Vali-Data of WNY, LLC
89 Morningside Dr.
Grand Island, NY 14072

Old Erie Commons
Pace Analytical Services SDG#L2547832
October 21, 2025
Sampling date: 7/30/2025

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
89 Morningside Dr.
Grand Island, NY 14072

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for C&S Engineers, project located at 160 Center St., Canastota, NY, SDG#L2547832 submitted to Vali-Data of WNY, LLC on August 27, 2025. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using USEPA method Volatile Organics (8260D), Semi-Volatile Organics (8270E), Inorganics/Mercury (6010D, 7471B) and in accordance with wet chemistry methods.

ID	Sample ID	Laboratory ID
1	SS-111	L2547832-01
2	SS-112	L2547832-02
3	SS-105	L2547832-03

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Laboratory Control Samples.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except a target analyte was outside QC limits in the laboratory control samples and should be qualified as estimated.

LCS ID	Target Analyte	%Rec LCS	%Rec LCSD	Qualifier	Associated Sample
WG2103003	2-Hexanone	68	67	UJ	1-3

The %Rec of some target analyte was outside QC limits in the laboratory control sample or the laboratory control sample duplicate but not both, so no further action is required.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate regression was used on target analytes in which the %RSD >20% with acceptable results, so no further action is required.

CONTINUING CALIBRATION
All criteria were met.

Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMIVOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Laboratory Control Samples and Continuing Calibration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All the criteria were met,

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except a target analyte was outside QC limits in the laboratory control samples and should be qualified as estimated.

LCS ID	Target Analyte	%Rec LCS	%Rec LCSD	Qualifier	Associated Sample
WG2100994	Carbazole	49	47	J	1-3

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.

CONTINUING CALIBRATION
All criteria were met except several target analytes were outside QC limits in the continuing calibrations and should be qualified in the associated samples, blanks and spikes.

CCal ID	Target Analyte	%D	Qualifier	Associated Sample
WG2101178-3	Bis(2-chloroisopropyl)ether	-26.5	UJ/J	WG2100994
WG2101178-3	4,6-Dinitro-2-methylphenol	-34.7	UJ/J	WG2100994
WG2101178-3	2-Nitrophenol	-34.5	UJ/J	WG2100994
WG2101478-3	2-Nitrophenol	-25.7	UJ	1-3
WG2101478-3	Butylbenzylphthalate	-27.8	UJ	1-3
WG2101478-3	Bis(2-ethylhexyl)phthalate	-30	UJ	1-3
WG2101478-3	4,6-Dinitro-2-methylphenol	-33.5	UJ/J	1-3
WG2101478-3	Hexachlorobutadiene	21.8	UJ	1-3

Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

GC/MS PERFORMANCE CHECK
All criteria were met.

METALS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Blanks
-Laboratory Control Sample
-MS/MSD/Duplicate
-Field Duplicate
-Serial Dilution
-Compound Quantitation
-Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use but are qualified below in Blanks and Calibration.

Samples: DUSR ID#1-3 were diluted in analysis 6010D.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

BLANKS
All criteria were met except a target analyte was detected in a blank and should be qualified in the associated samples in which it was detected.

Blank ID	Target Analyte	Concentration	Qualifier	Associated Sample
WG2101434	Fe	1.22mg/kg	JH	1-3

LABORATORY CONTROL SAMPLE
All criteria were met.

MS/MSD/DUPLICATE
No MS/MSD/Duplicate was acquired.

FIELD DUPLICATE
No field duplicate was acquired.

SERIAL DILUTION
No serial dilution was performed.

COMPOUND QUANTITATION
All criteria were met.

CALIBRATION
All criteria were met except a target analyte was outside QC limits in the interference check and should be qualified in the associated samples, blanks and spikes.

Calibration ID	Target Analyte	%Rec	Qualifier	Associated Sample
R1998183-24	Na	116	JH	2

GENERAL CHEMISTRY

The following items/criteria were reviewed for this analytical suite:

- Cyanide
- %Solids

The items listed above were technically in compliance with the method and SOP criteria with any exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below.

CYANIDE
All criteria were met except Cn was outside QC limits in the laboratory control sample but was

within limits in the laboratory control samples duplicate, so no further action is required.

%SOLIDS
All criteria were met.

Case Narrative

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

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

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

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

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

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

Case Narrative (continued)

Report Submission

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

Total Metals

L2547832-01, -02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

Cyanide, Total

The WG2100359-2 LCS recovery associated with L2547832-01 and -02 is outside our in-house acceptance criteria for cyanide, total (75%), but within the vendor-certified acceptance limits. The results of the original analysis are reported.

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

Authorized Signature: Caitlin Walukevich Report Date: 08/14/25

Title: Technical Director/Representative

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Matrix (Level)	: SOIL (LOW)		
LCS Sample ID	: WG2103003-3 Analysis Date : 08/13/25 06:37	**File ID**	: V11250813A01
LCSD Sample ID	: WG2103003-4 Analysis Date : 08/13/25 07:03	**File ID**	: V11250813A02

	Laboratory Control Sample				Laboratory Control Duplicate						
Parameter	True (ug/kg)	Found (ug/kg)	%R		True (ug/kg)	Found (ug/kg)	%R		RPD	Recovery Limits	RPD Limit
Trichloroethene	40	43	107		40	42	105		2	70-130	30
1,2-Dichlorobenzene	40	41	102		40	41	102		0	70-130	30
1,3-Dichlorobenzene	40	42	105		40	42	105		0	70-130	30
1,4-Dichlorobenzene	40	41	102		40	40	101		1	70-130	30
Methyl tert butyl ether	40	35	88		40	35	88		0	66-130	30
p/m-Xylene	80	85	106		80	84	104		2	70-130	30
o-Xylene	80	82	103		80	81	101		2	70-130	30
cis-1,2-Dichloroethene	40	39	98		40	39	98		0	70-130	30
Styrene	80	80	100		80	79	98		2	70-130	30
Dichlorodifluoromethane	40	44	109		40	42	105		4	30-146	30
Acetone	40	40	100		40	39	97		3	54-140	30
Carbon disulfide	40	35	86		40	34	84		2	59-130	30
2-Butanone	40	31	78		40	25	64	Q	20	70-130	30
4-Methyl-2-pentanone	40	29	73		40	28	70		4	70-130	30
2-Hexanone	40	27	68	Q	40	27	67	Q	1	70-130	30
1,2-Dibromoethane	40	34	84		40	34	84		0	70-130	30
n-Butylbenzene	40	42	105		40	41	102		3	70-130	30
sec-Butylbenzene	40	42	105		40	41	103		2	70-130	30
tert-Butylbenzene	40	44	109		40	43	108		1	70-130	30
1,2-Dibromo-3-chloropropane	40	35	87		40	36	90		3	68-130	30
Isopropylbenzene	40	42	106		40	42	104		2	70-130	30
p-Isopropyltoluene	40	45	112		40	44	110		2	70-130	30
Naphthalene	40	36	90		40	37	91		1	70-130	30
n-Propylbenzene	40	40	101		40	40	100		1	70-130	30
1,2,4-Trichlorobenzene	40	42	106		40	43	108		2	70-130	30
1,3,5-Trimethylbenzene	40	41	103		40	41	102		1	70-130	30

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:31
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A10	Instrument ID	: VOA111
Sample Amount	: 4.7 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 94
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	5.7	2.6	U
75-34-3	1,1-Dichloroethane	ND	1.1	0.16	U
67-66-3	Chloroform	ND	1.7	0.16	U
56-23-5	Carbon tetrachloride	ND	1.1	0.26	U
78-87-5	1,2-Dichloropropane	ND	1.1	0.14	U
124-48-1	Dibromochloromethane	ND	1.1	0.16	U
79-00-5	1,1,2-Trichloroethane	ND	1.1	0.30	U
127-18-4	Tetrachloroethene	ND	0.57	0.22	U
108-90-7	Chlorobenzene	ND	0.57	0.14	U
75-69-4	Trichlorofluoromethane	ND	4.6	0.79	U
107-06-2	1,2-Dichloroethane	ND	1.1	0.29	U
71-55-6	1,1,1-Trichloroethane	ND	0.57	0.19	U
75-27-4	Bromodichloromethane	ND	0.57	0.12	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.1	0.31	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.57	0.18	U
75-25-2	Bromoform	ND	4.6	0.28	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.57	0.19	U
71-43-2	Benzene	ND	0.57	0.19	U
108-88-3	Toluene	ND	1.1	0.62	U
100-41-4	Ethylbenzene	ND	1.1	0.16	U
74-87-3	Chloromethane	ND	4.6	1.1	U
74-83-9	Bromomethane	ND	2.3	0.66	U
75-01-4	Vinyl chloride	ND	1.1	0.38	U
75-00-3	Chloroethane	ND	2.3	0.52	U
75-35-4	1,1-Dichloroethene	ND	1.1	0.27	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:31
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A10	Instrument ID	: VOA111
Sample Amount	: 4.7 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 94
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	1.7	0.16	U
79-01-6	Trichloroethene	ND	0.57	0.16	U
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.16	U
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.17	U
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.20	U
1634-04-4	Methyl tert butyl ether	ND	2.3	0.23	U
179601-23-1	p/m-Xylene	ND	2.3	0.64	U
95-47-6	o-Xylene	ND	1.1	0.33	U
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.20	U
100-42-5	Styrene	ND	1.1	0.22	U
75-71-8	Dichlorodifluoromethane	ND	11	1.0	U
67-64-1	Acetone	ND	11	5.5	U
75-15-0	Carbon disulfide	ND	11	5.2	U
78-93-3	2-Butanone	ND	11	2.5	U
108-10-1	4-Methyl-2-pentanone	ND	11	1.5	U
591-78-6	2-Hexanone	ND	11	1.3	U
106-93-4	1,2-Dibromoethane	ND	1.1	0.32	U
104-51-8	n-Butylbenzene	ND	1.1	0.19	U
135-98-8	sec-Butylbenzene	ND	1.1	0.17	U
98-06-6	tert-Butylbenzene	ND	2.3	0.13	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.4	1.1	U
98-82-8	Isopropylbenzene	ND	1.1	0.12	U
99-87-6	p-Isopropyltoluene	ND	1.1	0.12	U
91-20-3	Naphthalene	ND	4.6	0.74	U
103-65-1	n-Propylbenzene	ND	1.1	0.20	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:31
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A10	Instrument ID	: VOA111
Sample Amount	: 4.7 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 94
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	2.3	0.31	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.22	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	0.38	U
79-20-9	Methyl Acetate	ND	4.6	1.1	U
110-82-7	Cyclohexane	ND	11	0.62	U
76-13-1	Freon-113	ND	4.6	0.79	U
108-87-2	Methyl cyclohexane	ND	4.6	0.69	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A11	Instrument ID	: VOA111
Sample Amount	: 3.6 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 90
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	7.7	3.5	U
75-34-3	1,1-Dichloroethane	ND	1.5	0.22	U
67-66-3	Chloroform	ND	2.3	0.21	U
56-23-5	Carbon tetrachloride	ND	1.5	0.35	U
78-87-5	1,2-Dichloropropane	ND	1.5	0.19	U
124-48-1	Dibromochloromethane	ND	1.5	0.21	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.41	U
127-18-4	Tetrachloroethene	ND	0.77	0.30	U
108-90-7	Chlorobenzene	ND	0.77	0.19	U
75-69-4	Trichlorofluoromethane	ND	6.1	1.1	U
107-06-2	1,2-Dichloroethane	ND	1.5	0.39	U
71-55-6	1,1,1-Trichloroethane	ND	0.77	0.26	U
75-27-4	Bromodichloromethane	ND	0.77	0.17	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	0.42	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.77	0.24	U
75-25-2	Bromoform	ND	6.1	0.38	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.77	0.25	U
71-43-2	Benzene	ND	0.77	0.25	U
108-88-3	Toluene	ND	1.5	0.83	U
100-41-4	Ethylbenzene	ND	1.5	0.22	U
74-87-3	Chloromethane	ND	6.1	1.4	U
74-83-9	Bromomethane	ND	3.1	0.89	U
75-01-4	Vinyl chloride	ND	1.5	0.51	U
75-00-3	Chloroethane	ND	3.1	0.69	U
75-35-4	1,1-Dichloroethene	ND	1.5	0.36	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A11	Instrument ID	: VOA111
Sample Amount	: 3.6 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 90
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.21	U
79-01-6	Trichloroethene	ND	0.77	0.21	U
95-50-1	1,2-Dichlorobenzene	ND	3.1	0.22	U
541-73-1	1,3-Dichlorobenzene	ND	3.1	0.23	U
106-46-7	1,4-Dichlorobenzene	ND	3.1	0.26	U
1634-04-4	Methyl tert butyl ether	ND	3.1	0.31	U
179601-23-1	p/m-Xylene	ND	3.1	0.86	U
95-47-6	o-Xylene	ND	1.5	0.45	U
156-59-2	cis-1,2-Dichloroethene	ND	1.5	0.27	U
100-42-5	Styrene	ND	1.5	0.30	U
75-71-8	Dichlorodifluoromethane	ND	15	1.4	U
67-64-1	Acetone	ND	15	7.4	U
75-15-0	Carbon disulfide	ND	15	7.0	U
78-93-3	2-Butanone	ND	15	3.4	U
108-10-1	4-Methyl-2-pentanone	ND	15	2.0	U
591-78-6	2-Hexanone	ND	15	1.8	U
106-93-4	1,2-Dibromoethane	ND	1.5	0.43	U
104-51-8	n-Butylbenzene	ND	1.5	0.26	U
135-98-8	sec-Butylbenzene	ND	1.5	0.22	U
98-06-6	tert-Butylbenzene	ND	3.1	0.18	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	1.5	U
98-82-8	Isopropylbenzene	ND	1.5	0.17	U
99-87-6	p-Isopropyltoluene	ND	1.5	0.17	U
91-20-3	Naphthalene	ND	6.1	1.0	U
103-65-1	n-Propylbenzene	ND	1.5	0.26	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 10:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A11	Instrument ID	: VOA111
Sample Amount	: 3.6 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 90
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	3.1	0.42	U
108-67-8	1,3,5-Trimethylbenzene	ND	3.1	0.30	U
95-63-6	1,2,4-Trimethylbenzene	ND	3.1	0.51	U
79-20-9	Methyl Acetate	ND	6.1	1.4	U
110-82-7	Cyclohexane	ND	15	0.83	U
76-13-1	Freon-113	ND	6.1	1.1	U
108-87-2	Methyl cyclohexane	ND	6.1	0.92	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 11:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A12	Instrument ID	: VOA111
Sample Amount	: 5.2 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 95
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	5.0	2.3	U
75-34-3	1,1-Dichloroethane	ND	1.0	0.15	U
67-66-3	Chloroform	ND	1.5	0.14	U
56-23-5	Carbon tetrachloride	ND	1.0	0.23	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.12	U
124-48-1	Dibromochloromethane	ND	1.0	0.14	U
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.27	U
127-18-4	Tetrachloroethene	ND	0.50	0.20	U
108-90-7	Chlorobenzene	ND	0.50	0.13	U
75-69-4	Trichlorofluoromethane	ND	4.0	0.70	U
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.17	U
75-27-4	Bromodichloromethane	ND	0.50	0.11	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.28	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	U
75-25-2	Bromoform	ND	4.0	0.25	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.17	U
108-88-3	Toluene	ND	1.0	0.55	U
100-41-4	Ethylbenzene	ND	1.0	0.14	U
74-87-3	Chloromethane	ND	4.0	0.94	U
74-83-9	Bromomethane	ND	2.0	0.58	U
75-01-4	Vinyl chloride	ND	1.0	0.34	U
75-00-3	Chloroethane	ND	2.0	0.46	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 11:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A12	Instrument ID	: VOA111
Sample Amount	: 5.2 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 95
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.14	U
79-01-6	Trichloroethene	ND	0.50	0.14	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.14	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.15	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	U
1634-04-4	Methyl tert butyl ether	ND	2.0	0.20	U
179601-23-1	p/m-Xylene	ND	2.0	0.56	U
95-47-6	o-Xylene	ND	1.0	0.29	U
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	U
100-42-5	Styrene	ND	1.0	0.20	U
75-71-8	Dichlorodifluoromethane	ND	10	0.92	U
67-64-1	Acetone	11	10	4.8	
75-15-0	Carbon disulfide	ND	10	4.6	U
78-93-3	2-Butanone	6.5	10	2.2	J
108-10-1	4-Methyl-2-pentanone	ND	10	1.3	U
591-78-6	2-Hexanone	ND	10	1.2	U
106-93-4	1,2-Dibromoethane	ND	1.0	0.28	U
104-51-8	n-Butylbenzene	ND	1.0	0.17	U
135-98-8	sec-Butylbenzene	ND	1.0	0.15	U
98-06-6	tert-Butylbenzene	ND	2.0	0.12	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.0	1.0	U
98-82-8	Isopropylbenzene	ND	1.0	0.11	U
99-87-6	p-Isopropyltoluene	ND	1.0	0.11	U
91-20-3	Naphthalene	ND	4.0	0.66	U
103-65-1	n-Propylbenzene	ND	1.0	0.17	U

Pace®

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/13/25 11:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: JIC
Lab File ID	: V11250813A12	Instrument ID	: VOA111
Sample Amount	: 5.2 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 95
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.27	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.19	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.34	U
79-20-9	Methyl Acetate	ND	4.0	0.96	U
110-82-7	Cyclohexane	ND	10	0.55	U
76-13-1	Freon-113	ND	4.0	0.70	U
108-87-2	Methyl cyclohexane	ND	4.0	0.61	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2103003-5	Date Collected	: NA
Client ID	: WG2103003-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/13/25 08:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MNF
Lab File ID	: V11250813A05	Instrument ID	: VOA111
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	5.0	2.3	U
75-34-3	1,1-Dichloroethane	ND	1.0	0.14	U
67-66-3	Chloroform	ND	1.5	0.14	U
56-23-5	Carbon tetrachloride	ND	1.0	0.23	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.12	U
124-48-1	Dibromochloromethane	ND	1.0	0.14	U
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.27	U
127-18-4	Tetrachloroethene	ND	0.50	0.20	U
108-90-7	Chlorobenzene	ND	0.50	0.13	U
75-69-4	Trichlorofluoromethane	ND	4.0	0.70	U
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.17	U
75-27-4	Bromodichloromethane	ND	0.50	0.11	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.27	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	U
75-25-2	Bromoform	ND	4.0	0.25	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.17	U
108-88-3	Toluene	ND	1.0	0.54	U
100-41-4	Ethylbenzene	ND	1.0	0.14	U
74-87-3	Chloromethane	ND	4.0	0.93	U
74-83-9	Bromomethane	ND	2.0	0.58	U
75-01-4	Vinyl chloride	ND	1.0	0.34	U
75-00-3	Chloroethane	ND	2.0	0.45	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2103003-5	Date Collected	: NA
Client ID	: WG2103003-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/13/25 08:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MNF
Lab File ID	: V11250813A05	Instrument ID	: VOA111
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.14	U
79-01-6	Trichloroethene	ND	0.50	0.14	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.14	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.15	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	U
1634-04-4	Methyl tert butyl ether	ND	2.0	0.20	U
179601-23-1	p/m-Xylene	ND	2.0	0.56	U
95-47-6	o-Xylene	ND	1.0	0.29	U
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	U
100-42-5	Styrene	ND	1.0	0.20	U
75-71-8	Dichlorodifluoromethane	ND	10	0.92	U
67-64-1	Acetone	ND	10	4.8	U
75-15-0	Carbon disulfide	ND	10	4.6	U
78-93-3	2-Butanone	ND	10	2.2	U
108-10-1	4-Methyl-2-pentanone	ND	10	1.3	U
591-78-6	2-Hexanone	ND	10	1.2	U
106-93-4	1,2-Dibromoethane	ND	1.0	0.28	U
104-51-8	n-Butylbenzene	ND	1.0	0.17	U
135-98-8	sec-Butylbenzene	ND	1.0	0.15	U
98-06-6	tert-Butylbenzene	ND	2.0	0.12	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.0	1.0	U
98-82-8	Isopropylbenzene	ND	1.0	0.11	U
99-87-6	p-Isopropyltoluene	ND	1.0	0.11	U
91-20-3	Naphthalene	ND	4.0	0.65	U
103-65-1	n-Propylbenzene	ND	1.0	0.17	U

Results Summary
Form 1
Volatile Organics by EPA 5035

Client	:	C&S Companies	Lab Number	:	L2547832
Project Name	:	OLD ERIE COMMONS	Project Number	:	W96.013.001
Lab ID	:	WG2103003-5	Date Collected	:	NA
Client ID	:	WG2103003-5BLANK	Date Received	:	NA
Sample Location	:		Date Analyzed	:	08/13/25 08:21
Sample Matrix	:	SOIL	Dilution Factor	:	1
Analytical Method	:	1,8260D	Analyst	:	MNF
Lab File ID	:	V11250813A05	Instrument ID	:	VOA111
Sample Amount	:	5.0 g	GC Column	:	RTX-VMS
Level	:	LOW	%Solids	:	NA
Extract Volume (MeOH)	:	N/A	Injection Volume	:	N/A

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.27	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.19	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.33	U
79-20-9	Methyl Acetate	ND	4.0	0.95	U
110-82-7	Cyclohexane	ND	10	0.54	U
76-13-1	Freon-113	ND	4.0	0.69	U
108-87-2	Methyl cyclohexane	ND	4.0	0.60	U

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Matrix (Level)	: SOIL (LOW)		
LCS Sample ID	: WG2100994-2 Analysis Date : 08/10/25 11:18	File ID	: 100994-2
LCSD Sample ID	: WG2100994-3 Analysis Date : 08/10/25 11:39	File ID	: 100994-3

	Laboratory Control Sample				Laboratory Control Duplicate						
Parameter	True (ug/kg)	Found (ug/kg)	%R		True (ug/kg)	Found (ug/kg)	%R		RPD	Recovery Limits	RPD Limit
2,4-Dimethylphenol	1300	740	56		1300	680	52		7	30-130	50
2-Nitrophenol	1300	930	70		1300	880	66		6	30-130	50
4-Nitrophenol	1300	850	64		1300	810	61		5	11-114	50
2,4-Dinitrophenol	1300	780	59		1300	740	56		5	4-130	50
4,6-Dinitro-o-cresol	1300	890	67		1300	860	65		3	10-130	50
Pentachlorophenol	1300	700	52		1300	670	51		2	17-109	50
Phenol	1300	680	52		1300	650	49		6	26-90	50
2-Methylphenol	1300	740	56		1300	700	53		6	30-130	50
3-Methylphenol/4-Methylphenol	1300	810	61		1300	740	56		9	30-130	50
2,4,5-Trichlorophenol	1300	800	60		1300	760	58		3	30-130	50
Carbazole	1300	650	49	Q	1300	620	47	Q	4	54-128	50
Atrazine	1300	910	69		1300	870	66		4	40-140	50
Benzaldehyde	1300	700	53		1300	650	49		8	40-140	50
Caprolactam	1300	930	70		1300	840	64		9	15-130	50
2,3,4,6-Tetrachlorophenol	1300	740	56		1300	720	55		2	40-140	50
1,4-Dioxane	1300	580	43		1300	520	40		7	40-140	50

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 15:40
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-01	Analyst	: SMZ
Sample Amount	: 30.83 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 94
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	300	140	18.	
118-74-1	Hexachlorobenzene	ND	100	19.	U
111-44-4	Bis(2-chloroethyl)ether	ND	160	23.	U
91-58-7	2-Chloronaphthalene	ND	170	17.	U
91-94-1	3,3'-Dichlorobenzidine	ND	170	46.	U
121-14-2	2,4-Dinitrotoluene	ND	170	34.	U
606-20-2	2,6-Dinitrotoluene	ND	170	30.	U
206-44-0	Fluoranthene	2500	100	20.	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	18.	U
101-55-3	4-Bromophenyl phenyl ether	ND	170	26.	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	210	29.	U
111-91-1	Bis(2-chloroethoxy)methane	ND	190	17.	U
87-68-3	Hexachlorobutadiene	ND	170	25.	U
77-47-4	Hexachlorocyclopentadiene	ND	490	160	U
67-72-1	Hexachloroethane	ND	140	28.	U
78-59-1	Isophorone	ND	160	22.	U
91-20-3	Naphthalene	280	170	21.	
98-95-3	Nitrobenzene	ND	160	26.	U
86-30-6	NDPA/DPA	ND	140	20.	U
621-64-7	n-Nitrosodi-n-propylamine	ND	170	27.	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	170	60.	U
85-68-7	Butyl benzyl phthalate	ND	170	43.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 15:40
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-01	Analyst	: SMZ
Sample Amount	: 30.83 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 94
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
84-74-2	Di-n-butylphthalate	ND	170	33.	U
117-84-0	Di-n-octylphthalate	ND	170	59.	U
84-66-2	Diethyl phthalate	ND	170	16.	U
131-11-3	Dimethyl phthalate	ND	170	36.	U
56-55-3	Benzo(a)anthracene	1300	100	19.	
50-32-8	Benzo(a)pyrene	1200	140	42.	
205-99-2	Benzo(b)fluoranthene	1500	100	29.	
207-08-9	Benzo(k)fluoranthene	490	100	28.	
218-01-9	Chrysene	1200	100	18.	
208-96-8	Acenaphthylene	240	140	27.	
120-12-7	Anthracene	720	100	34.	
191-24-2	Benzo(ghi)perylene	690	140	20.	
86-73-7	Fluorene	350	170	17.	
85-01-8	Phenanthrene	2300	100	21.	
53-70-3	Dibenzo(a,h)anthracene	180	100	20.	
193-39-5	Indeno(1,2,3-cd)pyrene	680	140	24.	
129-00-0	Pyrene	1900	100	17.	
92-52-4	Biphenyl	29	390	22.	J
106-47-8	4-Chloroaniline	ND	170	31.	U
88-74-4	2-Nitroaniline	ND	170	33.	U
99-09-2	3-Nitroaniline	ND	170	32.	U
100-01-6	4-Nitroaniline	ND	170	71.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 15:40
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-01	Analyst	: SMZ
Sample Amount	: 30.83 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 94
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
132-64-9	Dibenzofuran	200	170	16.	
91-57-6	2-Methylnaphthalene	100	210	21.	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	18.	U
98-86-2	Acetophenone	ND	170	21.	U
88-06-2	2,4,6-Trichlorophenol	ND	100	33.	U
59-50-7	p-Chloro-m-cresol	ND	170	26.	U
95-57-8	2-Chlorophenol	ND	170	20.	U
120-83-2	2,4-Dichlorophenol	ND	160	28.	U
105-67-9	2,4-Dimethylphenol	ND	170	57.	U
88-75-5	2-Nitrophenol	ND	370	65.	U
100-02-7	4-Nitrophenol	ND	240	70.	U
51-28-5	2,4-Dinitrophenol	ND	830	80.	U
534-52-1	4,6-Dinitro-o-cresol	ND	450	83.	U
87-86-5	Pentachlorophenol	ND	140	38.	U
108-95-2	Phenol	ND	170	26.	U
95-48-7	2-Methylphenol	ND	170	27.	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	32	250	27.	J
95-95-4	2,4,5-Trichlorophenol	ND	170	33.	U
86-74-8	Carbazole	300	170	17.	
1912-24-9	Atrazine	ND	140	60.	U
100-52-7	Benzaldehyde	ND	230	46.	U
105-60-2	Caprolactam	ND	170	52.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 15:40
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-01	Analyst	: SMZ
Sample Amount	: 30.83 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 94
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	35.	U
123-91-1	1,4-Dioxane	ND	26	7.9	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:04
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-02	Analyst	: SMZ
Sample Amount	: 30.18 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 90
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	ug/Kg RL	ug/Kg MDL	Qualifier
83-32-9	Acenaphthene	170	150	19.	
118-74-1	Hexachlorobenzene	ND	110	21.	U
111-44-4	Bis(2-chloroethyl)ether	ND	170	25.	U
91-58-7	2-Chloronaphthalene	ND	180	18.	U
91-94-1	3,3'-Dichlorobenzidine	ND	180	49.	U
121-14-2	2,4-Dinitrotoluene	ND	180	37.	U
606-20-2	2,6-Dinitrotoluene	ND	180	32.	U
206-44-0	Fluoranthene	2300	110	21.	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	20.	U
101-55-3	4-Bromophenyl phenyl ether	ND	180	28.	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	220	32.	U
111-91-1	Bis(2-chloroethoxy)methane	ND	200	18.	U
87-68-3	Hexachlorobutadiene	ND	180	27.	U
77-47-4	Hexachlorocyclopentadiene	ND	530	170	U
67-72-1	Hexachloroethane	ND	150	30.	U
78-59-1	Isophorone	ND	170	24.	U
91-20-3	Naphthalene	210	180	22.	
98-95-3	Nitrobenzene	ND	170	27.	U
86-30-6	NDPA/DPA	ND	150	21.	U
621-64-7	n-Nitrosodi-n-propylamine	ND	180	28.	U
117-81-7	Bis(2-ethylhexyl)phthalate	75	180	64.	J
85-68-7	Butyl benzyl phthalate	ND	180	47.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:04
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-02	Analyst	: SMZ
Sample Amount	: 30.18 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 90
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
84-74-2	Di-n-butylphthalate	ND	180	35.	U
117-84-0	Di-n-octylphthalate	ND	180	63.	U
84-66-2	Diethyl phthalate	ND	180	17.	U
131-11-3	Dimethyl phthalate	ND	180	39.	U
56-55-3	Benzo(a)anthracene	1300	110	21.	
50-32-8	Benzo(a)pyrene	1100	150	45.	
205-99-2	Benzo(b)fluoranthene	1600	110	31.	
207-08-9	Benzo(k)fluoranthene	440	110	30.	
218-01-9	Chrysene	1200	110	19.	
208-96-8	Acenaphthylene	230	150	28.	
120-12-7	Anthracene	550	110	36.	
191-24-2	Benzo(ghi)perylene	770	150	22.	
86-73-7	Fluorene	200	180	18.	
85-01-8	Phenanthrene	1700	110	22.	
53-70-3	Dibenzo(a,h)anthracene	210	110	21.	
193-39-5	Indeno(1,2,3-cd)pyrene	760	150	26.	
129-00-0	Pyrene	1900	110	18.	
92-52-4	Biphenyl	26	420	24.	J
106-47-8	4-Chloroaniline	ND	180	34.	U
88-74-4	2-Nitroaniline	ND	180	36.	U
99-09-2	3-Nitroaniline	ND	180	35.	U
100-01-6	4-Nitroaniline	ND	180	77.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:04
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-02	Analyst	: SMZ
Sample Amount	: 30.18 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 90
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	ug/Kg RL	ug/Kg MDL	Qualifier
132-64-9	Dibenzofuran	140	180	18.	J
91-57-6	2-Methylnaphthalene	120	220	22.	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	19.	U
98-86-2	Acetophenone	ND	180	23.	U
88-06-2	2,4,6-Trichlorophenol	ND	110	35.	U
59-50-7	p-Chloro-m-cresol	ND	180	28.	U
95-57-8	2-Chlorophenol	ND	180	22.	U
120-83-2	2,4-Dichlorophenol	ND	170	30.	U
105-67-9	2,4-Dimethylphenol	ND	180	61.	U
88-75-5	2-Nitrophenol	ND	400	70.	U
100-02-7	4-Nitrophenol	ND	260	76.	U
51-28-5	2,4-Dinitrophenol	ND	890	86.	U
534-52-1	4,6-Dinitro-o-cresol	ND	480	89.	U
87-86-5	Pentachlorophenol	ND	150	41.	U
108-95-2	Phenol	ND	180	28.	U
95-48-7	2-Methylphenol	ND	180	29.	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	270	29.	U
95-95-4	2,4,5-Trichlorophenol	ND	180	35.	U
86-74-8	Carbazole	200	180	18.	
1912-24-9	Atrazine	ND	150	65.	U
100-52-7	Benzaldehyde	85	240	50.	J
105-60-2	Caprolactam	ND	180	56.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:04
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-02	Analyst	: SMZ
Sample Amount	: 30.18 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 90
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	37.	U
123-91-1	1,4-Dioxane	ND	28	8.5	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:27
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-03	Analyst	: SMZ
Sample Amount	: 30.76 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 95
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	90	140	18.	J
118-74-1	Hexachlorobenzene	ND	100	19.	U
111-44-4	Bis(2-chloroethyl)ether	ND	150	23.	U
91-58-7	2-Chloronaphthalene	ND	170	17.	U
91-94-1	3,3'-Dichlorobenzidine	ND	170	45.	U
121-14-2	2,4-Dinitrotoluene	ND	170	34.	U
606-20-2	2,6-Dinitrotoluene	ND	170	29.	U
206-44-0	Fluoranthene	3400	100	20.	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	18.	U
101-55-3	4-Bromophenyl phenyl ether	ND	170	26.	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	200	29.	U
111-91-1	Bis(2-chloroethoxy)methane	ND	180	17.	U
87-68-3	Hexachlorobutadiene	ND	170	25.	U
77-47-4	Hexachlorocyclopentadiene	ND	490	150	U
67-72-1	Hexachloroethane	ND	140	28.	U
78-59-1	Isophorone	ND	150	22.	U
91-20-3	Naphthalene	890	170	21.	
98-95-3	Nitrobenzene	ND	150	25.	U
86-30-6	NDPA/DPA	ND	140	19.	U
621-64-7	n-Nitrosodi-n-propylamine	ND	170	26.	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	170	59.	U
85-68-7	Butyl benzyl phthalate	ND	170	43.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:27
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-03	Analyst	: SMZ
Sample Amount	: 30.76 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 95
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
84-74-2	Di-n-butylphthalate	ND	170	32.	U
117-84-0	Di-n-octylphthalate	ND	170	58.	U
84-66-2	Diethyl phthalate	ND	170	16.	U
131-11-3	Dimethyl phthalate	ND	170	36.	U
56-55-3	Benzo(a)anthracene	3200	100	19.	
50-32-8	Benzo(a)pyrene	3100	140	42.	
205-99-2	Benzo(b)fluoranthene	4000	100	29.	
207-08-9	Benzo(k)fluoranthene	1400	100	27.	
218-01-9	Chrysene	2800	100	18.	
208-96-8	Acenaphthylene	1600	140	26.	
120-12-7	Anthracene	1200	100	33.	
191-24-2	Benzo(ghi)perylene	2000	140	20.	
86-73-7	Fluorene	200	170	16.	
85-01-8	Phenanthrene	1200	100	21.	
53-70-3	Dibenzo(a,h)anthracene	520	100	20.	
193-39-5	Indeno(1,2,3-cd)pyrene	2000	140	24.	
129-00-0	Pyrene	3100	100	17.	
92-52-4	Biphenyl	52	390	22.	J
106-47-8	4-Chloroaniline	ND	170	31.	U
88-74-4	2-Nitroaniline	ND	170	33.	U
99-09-2	3-Nitroaniline	ND	170	32.	U
100-01-6	4-Nitroaniline	ND	170	70.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:27
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 47832-03	Analyst	: SMZ
Sample Amount	: 30.76 g	Instrument ID	: MORK
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: 95
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	ug/Kg RL	ug/Kg MDL	Qualifier
132-64-9	Dibenzofuran	160	170	16.	J
91-57-6	2-Methylnaphthalene	290	200	20.	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	18.	U
98-86-2	Acetophenone	ND	170	21.	U
88-06-2	2,4,6-Trichlorophenol	ND	100	32.	U
59-50-7	p-Chloro-m-cresol	ND	170	25.	U
95-57-8	2-Chlorophenol	ND	170	20.	U
120-83-2	2,4-Dichlorophenol	ND	150	27.	U
105-67-9	2,4-Dimethylphenol	ND	170	56.	U
88-75-5	2-Nitrophenol	ND	370	64.	U
100-02-7	4-Nitrophenol	ND	240	70.	U
51-28-5	2,4-Dinitrophenol	ND	820	79.	U
534-52-1	4,6-Dinitro-o-cresol	ND	440	82.	U
87-86-5	Pentachlorophenol	ND	140	37.	U
108-95-2	Phenol	59	170	26.	J
95-48-7	2-Methylphenol	ND	170	26.	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	110	240	27.	J
95-95-4	2,4,5-Trichlorophenol	ND	170	33.	U
86-74-8	Carbazole	140	170	16.	J
1912-24-9	Atrazine	ND	140	60.	U
100-52-7	Benzaldehyde	48	220	46.	J
105-60-2	Caprolactam	ND	170	52.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: L2547832-03	**Date Collected**	: 07/30/25 10:00
Client ID	: SS-105	**Date Received**	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	: 08/11/25 16:27
Sample Matrix	: SOIL	**Date Extracted**	: 08/09/25
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 47832-03	**Analyst**	: SMZ
Sample Amount	: 30.76 g	**Instrument ID**	: MORK
Extraction Method	: EPA 3546	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: 95
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	34.	U
123-91-1	1,4-Dioxane	ND	26	7.8	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100994-1	Date Collected	: NA
Client ID	: WG2100994-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/10/25 10:57
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 100994-1	Analyst	: SLR
Sample Amount	: 30.18 g	Instrument ID	: SV103
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: NA
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	130	17.	U
118-74-1	Hexachlorobenzene	ND	99	18.	U
111-44-4	Bis(2-chloroethyl)ether	ND	150	22.	U
91-58-7	2-Chloronaphthalene	ND	160	16.	U
91-94-1	3,3'-Dichlorobenzidine	ND	160	44.	U
121-14-2	2,4-Dinitrotoluene	ND	160	33.	U
606-20-2	2,6-Dinitrotoluene	ND	160	28.	U
206-44-0	Fluoranthene	ND	99	19.	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	160	18.	U
101-55-3	4-Bromophenyl phenyl ether	ND	160	25.	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	200	28.	U
111-91-1	Bis(2-chloroethoxy)methane	ND	180	17.	U
87-68-3	Hexachlorobutadiene	ND	160	24.	U
77-47-4	Hexachlorocyclopentadiene	ND	470	150	U
67-72-1	Hexachloroethane	ND	130	27.	U
78-59-1	Isophorone	ND	150	22.	U
91-20-3	Naphthalene	ND	160	20.	U
98-95-3	Nitrobenzene	ND	150	24.	U
86-30-6	NDPA/DPA	ND	130	19.	U
621-64-7	n-Nitrosodi-n-propylamine	ND	160	26.	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	160	57.	U
85-68-7	Butyl benzyl phthalate	ND	160	42.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100994-1	Date Collected	: NA
Client ID	: WG2100994-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/10/25 10:57
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 100994-1	Analyst	: SLR
Sample Amount	: 30.18 g	Instrument ID	: SV103
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: NA
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
84-74-2	Di-n-butylphthalate	ND	160	31.	U
117-84-0	Di-n-octylphthalate	ND	160	56.	U
84-66-2	Diethyl phthalate	ND	160	15.	U
131-11-3	Dimethyl phthalate	ND	160	35.	U
56-55-3	Benzo(a)anthracene	ND	99	19.	U
50-32-8	Benzo(a)pyrene	ND	130	40.	U
205-99-2	Benzo(b)fluoranthene	ND	99	28.	U
207-08-9	Benzo(k)fluoranthene	ND	99	26.	U
218-01-9	Chrysene	ND	99	17.	U
208-96-8	Acenaphthylene	ND	130	26.	U
120-12-7	Anthracene	ND	99	32.	U
191-24-2	Benzo(ghi)perylene	ND	130	19.	U
86-73-7	Fluorene	ND	160	16.	U
85-01-8	Phenanthrene	ND	99	20.	U
53-70-3	Dibenzo(a,h)anthracene	ND	99	19.	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	23.	U
129-00-0	Pyrene	ND	99	16.	U
92-52-4	Biphenyl	ND	380	22.	U
106-47-8	4-Chloroaniline	ND	160	30.	U
88-74-4	2-Nitroaniline	ND	160	32.	U
99-09-2	3-Nitroaniline	ND	160	31.	U
100-01-6	4-Nitroaniline	ND	160	68.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100994-1	Date Collected	: NA
Client ID	: WG2100994-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/10/25 10:57
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 100994-1	Analyst	: SLR
Sample Amount	: 30.18 g	Instrument ID	: SV103
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: NA
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
132-64-9	Dibenzofuran	ND	160	16.	U
91-57-6	2-Methylnaphthalene	ND	200	20.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	17.	U
98-86-2	Acetophenone	ND	160	20.	U
88-06-2	2,4,6-Trichlorophenol	ND	99	31.	U
59-50-7	p-Chloro-m-cresol	ND	160	25.	U
95-57-8	2-Chlorophenol	ND	160	20.	U
120-83-2	2,4-Dichlorophenol	ND	150	27.	U
105-67-9	2,4-Dimethylphenol	ND	160	55.	U
88-75-5	2-Nitrophenol	ND	360	62.	U
100-02-7	4-Nitrophenol	ND	230	68.	U
51-28-5	2,4-Dinitrophenol	ND	800	77.	U
534-52-1	4,6-Dinitro-o-cresol	ND	430	80.	U
87-86-5	Pentachlorophenol	ND	130	36.	U
108-95-2	Phenol	ND	160	25.	U
95-48-7	2-Methylphenol	ND	160	26.	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	240	26.	U
95-95-4	2,4,5-Trichlorophenol	ND	160	32.	U
86-74-8	Carbazole	ND	160	16.	U
1912-24-9	Atrazine	ND	130	58.	U
100-52-7	Benzaldehyde	ND	220	45.	U
105-60-2	Caprolactam	ND	160	50.	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100994-1	Date Collected	: NA
Client ID	: WG2100994-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/10/25 10:57
Sample Matrix	: SOIL	Date Extracted	: 08/09/25
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 100994-1	Analyst	: SLR
Sample Amount	: 30.18 g	Instrument ID	: SV103
Extraction Method	: EPA 3546	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: NA
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/Kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	33.	U
123-91-1	1,4-Dioxane	ND	25	7.6	U

Calibration Verification Summary
Form 7
Semivolatiles

Client	: C&S Companies	Lab Number	: L2547832		
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001		
Instrument ID	: SV103	Calibration Date	: 08/10/25 09:55		
Lab File ID	: ABN0810	Init. Calib. Date(s)	: 06/03/25	06/04/25	
Sample No	: WG2101178-3	Init. Calib. Times	: 20:16	07:25	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	100	0
n-Nitrosodimethylamine	0.844	0.858	-	-1.7	20	100	0
Pyridine	1.411	1.516	-	-7.4	20	102	0
2-Fluorophenol	1.267	1.346	-	-6.2	20	106	0
Aniline	2.27	2.272	-	-0.1	20	101	0
2-Chlorophenol	1.383	1.451	-	-4.9	20	102	0
Phenol-d6	1.611	1.633	-	-1.4	20	101	0
Phenol	1.929	1.805	-	6.4	20	93	0
Bis(2-chloroethyl)ether	1.355	1.357	-	-0.1	20	103	0
1,3-Dichlorobenzene	1.577	1.542	-	2.2	20	101	0
1,4-Dichlorobenzene	1.62	1.565	-	3.4	20	100	0
1,2-Dichlorobenzene	1.541	1.506	-	2.3	20	102	0
Benzyl alcohol	1.201	1.277	-	-6.3	20	103	0
Bis(2-chloroisopropyl)ethe	1.82	2.302	-	-26.5*	20	128	0
2-Methylphenol	1.29	1.288	-	0.2	20	100	0
Hexachloroethane	0.616	0.626	-	-1.6	20	102	0
n-Nitrosodi-n-propylamine	1.068	1.125	-	-5.3	20	103	0
3-Methylphenol/4-Methylphe	1.384	1.368	-	1.2	20	98	0
Nitrobenzene-d5	1.496	1.567	-	-4.7	20	101	0
Nitrobenzene	1.54	1.568	-	-1.8	20	99	0
Isophorone	2.84	2.964	-	-4.4	20	102	0
2-Nitrophenol	0.571	0.768	-	-34.5*	20	123	0
2,4-Dimethylphenol	1.485	1.499	-	-0.9	20	99	0
Bis(2-chloroethoxy)methane	1.786	1.797	-	-0.6	20	102	0
2,4-Dichlorophenol	1.155	1.223	-	-5.9	20	101	0
1,2,4-Trichlorobenzene	1.304	1.295	-	0.7	20	103	0
IS1_Naphthalene-d8	1	1	-	0	20	103	0
Naphthalene	1.095	1.006	-	8.1	20	98	0
Benzoic Acid	50	54.926	-	-9.9	20	124	0
4-Chloroaniline	0.151	0.147	-	2.6	20	101	0
Hexachlorobutadiene	0.199	0.187	-	6	20	100	0
p-Chloro-m-cresol	0.322	0.33	-	-2.5	20	103	0
2-Methylnaphthalene	0.657	0.626	-	4.7	20	101	0
1-Methylnaphthalene	0.267	0.238	-	10.9	20	94	0
Hexachlorocyclopentadiene	0.233	0.253	-	-8.6	20	110	0
2,4,6-Trichlorophenol	0.2	0.236	-	-18	20	114	0
2,4,5-Trichlorophenol	0.225	0.249	-	-10.7	20	108	0
2-Fluorobiphenyl	0.826	0.765	-	7.4	20	98	0
2-Chloronaphthalene	0.691	0.666	-	3.6	20	103	0
2-Nitroaniline	0.207	0.242	-	-16.9	20	109	0
1,4-Dinitrobenzene	50	52.005	-	-4	20	113	0
1,3-Dinitrobenzene	0.105	0.123	-	-17.1	20	109	0
Dimethyl phthalate	0.824	0.825	-	-0.1	20	105	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: C&S Companies	Lab Number	: L2547832		
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001		
Instrument ID	: SV103	Calibration Date	: 08/10/25 09:55		
Lab File ID	: ABN0810	Init. Calib. Date(s)	: 06/03/25	06/04/25	
Sample No	: WG2101178-3	Init. Calib. Times	: 20:16	07:25	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.183	1.152	-	2.6	20	99	0
2,6-Dinitrotoluene	0.151	0.178	-	-17.9	20	112	0
1,2-Dinitrobenzene	0.068	0.076	-	-11.8	20	104	0
IS1_Acenaphthene-d10	1	1	-	0	20	108	0
3-Nitroaniline	0.354	0.373	-	-5.4	20	106	0
Acenaphthene	1.186	1.066	-	10.1	20	100	0
2,4-Dinitrophenol	50	65.233	-	-30.5*	20	155	0
Dibenzofuran	1.892	1.67	-	11.7	20	98	0
2,4-Dinitrotoluene	0.388	0.434	-	-11.9	20	109	0
4-Nitrophenol	0.275	0.328	-	-19.3	20	114	0
2,3,5,6-Tetrachlorophenol	0.323	0.376	-	-16.4	20	116	0
2,3,4,6-Tetrachlorophenol	0.327	0.36	-	-10.1	20	107	0
Diethyl phthalate	1.549	1.489	-	3.9	20	104	0
Fluorene	1.502	1.37	-	8.8	20	100	0
4-Chlorophenyl phenyl ethe	0.703	0.617	-	12.2	20	99	0
4-Nitroaniline	0.354	0.365	-	-3.1	20	105	0
4,6-Dinitro-o-cresol	50	67.339	-	-34.7*	20	156	0
NDPA/DPA	1.254	1.134	-	9.6	20	99	0
Azobenzene	1.602	1.431	-	10.7	20	96	0
2,4,6-Tribromophenol	0.213	0.248	-	-16.4	20	118	0
4-Bromophenyl phenyl ether	0.427	0.404	-	5.4	20	105	0
Hexachlorobenzene	0.514	0.487	-	5.3	20	108	0
Pentachlorophenol	50	49.996	-	0	20	120	0
IS1_Phenanthrene-d10	1	1	-	0	20	108	0
Phenanthrene	1.184	1.077	-	9	20	102	0
Anthracene	1.172	1.094	-	6.7	20	102	0
Carbazole	1.135	1.053	-	7.2	20	100	0
Di-n-butylphthalate	1.288	1.391	-	-8	20	106	0
Fluoranthene	1.302	1.247	-	4.2	20	101	0
Benzidine	0.83	0.901	-	-8.6	20	107	0
Pyrene	1.39	1.298	-	6.6	20	101	0
4-Terphenyl-d14	1.016	0.968	-	4.7	20	103	0
Butyl benzyl phthalate	50	47.498	-	5	20	111	0
IS1_Chrysene-d12	1	1	-	0	20	100	0
Benzo(a)anthracene	1.391	1.344	-	3.4	20	101	0
3,3'-Dichlorobenzidine	0.494	0.519	-	-5.1	20	99	0
Chrysene	1.269	1.21	-	4.6	20	103	0
Bis(2-ethylhexyl)phthalate	50	49.945	-	0.1	20	105	0
Di-n-octylphthalate	50	51.181	-	-2.4	20	112	0
Benzo(b)fluoranthene	1.248	1.284	-	-2.9	20	104	0
Benzo(k)fluoranthene	1.282	1.285	-	-0.2	20	103	0
Benzo(a)pyrene	1.166	1.242	-	-6.5	20	106	0
IS1_Perylene-d12	1	1	-	0	20	105	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: C&S Companies	Lab Number	: L2547832	
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001	
Instrument ID	: MORK	Calibration Date	: 08/11/25 09:20	
Lab File ID	: ABN0811	Init. Calib. Date(s)	: 11/10/24	11/11/24
Sample No	: WG2101478-3	Init. Calib. Times	: 21:39	10:02
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	137	0
n-Nitrosodimethylamine	0.69	0.672	-	2.6	20	145	0
Pyridine	1.046	1.24	-	-18.5	20	179	0
2-Fluorophenol	1.064	1.186	-	-11.5	20	163	0
Aniline	1.74	1.811	-	-4.1	20	152	0
2-Chlorophenol	1.252	1.414	-	-12.9	20	165	0
Phenol-d6	1.388	1.4	-	-0.9	20	146	0
Phenol	1.596	1.428	-	10.5	20	131	0
Bis(2-chloroethyl)ether	1.057	1.027	-	2.8	20	141	0
1,3-Dichlorobenzene	1.515	1.508	-	0.5	20	147	0
1,4-Dichlorobenzene	1.562	1.547	-	1	20	147	0
1,2-Dichlorobenzene	1.504	1.472	-	2.1	20	145	0
Benzyl alcohol	1.045	0.924	-	11.6	20	127	0
Bis(2-chloroisopropyl)ethe	1.197	1.06	-	11.4	20	131	0
2-Methylphenol	1.1	1.11	-	-0.9	20	146	0
Hexachloroethane	0.534	0.53	-	0.7	20	145	0
n-Nitrosodi-n-propylamine	0.885	0.783	-	11.5	20	132	0
3-Methylphenol/4-Methylphe	1.183	1.188	-	-0.4	20	146	0
Nitrobenzene-d5	1.237	1.194	-	3.5	20	138	0
Nitrobenzene	1.258	1.149	-	8.7	20	130	0
Isophorone	2.374	2.121	-	10.7	20	133	0
2-Nitrophenol	0.618	0.777	-	-25.7*	20	169	0
2,4-Dimethylphenol	1.181	1.243	-	-5.2	20	156	0
Bis(2-chloroethoxy)methane	1.439	1.362	-	5.4	20	139	0
2,4-Dichlorophenol	1.254	1.241	-	1	20	143	0
1,2,4-Trichlorobenzene	1.48	1.381	-	6.7	20	139	0
IS1_Naphthalene-d8	1	1	-	0	20	144	0
Naphthalene	1.064	1.02	-	4.1	20	149	0
Benzoic Acid	0.235	0.252	-	-7.2	20	149	0
4-Chloroaniline	0.121	0.1	-	17.4	20	129	0
Hexachlorobutadiene	0.284	0.222	-	21.8*	20	123	0
p-Chloro-m-cresol	0.306	0.29	-	5.2	20	144	0
2-Methylnaphthalene	0.729	0.652	-	10.6	20	140	0
1-Methylnaphthalene	0.248	0.201	-	19	20	125	0
Hexachlorocyclopentadiene	0.288	0.316	-	-9.7	20	161	0
2,4,6-Trichlorophenol	0.295	0.267	-	9.5	20	140	0
2,4,5-Trichlorophenol	0.308	0.276	-	10.4	20	134	0
2-Fluorobiphenyl	0.948	0.837	-	11.7	20	137	0
2-Chloronaphthalene	0.787	0.705	-	10.4	20	140	0
2-Nitroaniline	0.217	0.24	-	-10.6	20	157	0
1,4-Dinitrobenzene	0.096	0.11	-	-14.6	20	156	0
1,3-Dinitrobenzene	0.111	0.117	-	-5.4	20	147	0
Dimethyl phthalate	0.94	0.821	-	12.7	20	138	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Instrument ID	: MORK	Calibration Date	: 08/11/25 09:20
Lab File ID	: ABN0811	Init. Calib. Date(s)	: 11/10/24 11/11/24
Sample No	: WG2101478-3	Init. Calib. Times	: 21:39 10:02
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.21	1.175	-	2.9	20	152	0
2,6-Dinitrotoluene	0.188	0.181	-	3.7	20	141	0
1,2-Dinitrobenzene	0.07	0.072	-	-2.9	20	149	0
IS1_Acenaphthene-d10	1	1	-	0	20	133	0
3-Nitroaniline	0.313	0.359	-	-14.7	20	150	0
Acenaphthene	1.112	1.088	-	2.2	20	140	0
2,4-Dinitrophenol	0.168	0.235	-	-39.9*	20	175	0
Dibenzofuran	1.834	1.726	-	5.9	20	134	0
2,4-Dinitrotoluene	0.406	0.429	-	-5.7	20	142	0
4-Nitrophenol	0.217	0.207	-	4.6	20	126	0
2,3,5,6-Tetrachlorophenol	0.461	0.459	-	0.4	20	136	0
2,3,4,6-Tetrachlorophenol	0.447	0.437	-	2.2	20	134	0
Diethyl phthalate	1.467	1.466	-	0.1	20	142	0
Fluorene	1.465	1.442	-	1.6	20	140	0
4-Chlorophenyl phenyl ethe	0.76	0.691	-	9.1	20	131	0
4-Nitroaniline	0.322	0.361	-	-12.1	20	148	0
4,6-Dinitro-o-cresol	0.221	0.295	-	-33.5*	20	162	0
NDPA/DPA	1.234	1.203	-	2.5	20	140	0
Azobenzene	1.225	1.067	-	12.9	20	123	0
2,4,6-Tribromophenol	0.287	0.303	-	-5.6	20	142	0
4-Bromophenyl phenyl ether	0.541	0.5	-	7.6	20	134	0
Hexachlorobenzene	0.637	0.599	-	6	20	135	0
Pentachlorophenol	0.399	0.419	-	-5	20	136	0
IS1_Phenanthrene-d10	1	1	-	0	20	129	0
Phenanthrene	1.106	1.062	-	4	20	134	0
Anthracene	1.108	1.105	-	0.3	20	136	0
Carbazole	1.016	1.036	-	-2	20	141	0
Di-n-butylphthalate	1.165	1.279	-	-9.8	20	146	0
Fluoranthene	1.381	1.322	-	4.3	20	133	0
Benzidine	0.796	0.895	-	-12.4	20	150	0
Pyrene	1.441	1.365	-	5.3	20	131	0
4-Terphenyl-d14	1.119	1.1	-	1.7	20	138	0
Butyl benzyl phthalate	0.478	0.611	-	-27.8*	20	154	0
IS1_Chrysene-d12	1	1	-	0	20	118	0
Benzo(a)anthracene	1.344	1.311	-	2.5	20	126	0
3,3'-Dichlorobenzidine	0.495	0.555	-	-12.1	20	135	0
Chrysene	1.249	1.202	-	3.8	20	126	0
Bis(2-ethylhexyl)phthalate	0.636	0.827	-	-30*	20	151	0
Di-n-octylphthalate	1.08	1.466	-	-35.7*	20	151	0
Benzo(b)fluoranthene	1.382	1.441	-	-4.3	20	135	0
Benzo(k)fluoranthene	1.303	1.351	-	-3.7	20	126	0
Benzo(a)pyrene	1.251	1.37	-	-9.5	20	138	0
IS1_Perylene-d12	1	1	-	0	20	125	0

* Value outside of QC limits.

Form 1
METALS

Client	**: C&S Companies**	**Lab Number**	**: L2547832**
Project Name	**: OLD ERIE COMMONS**	**Project Number**	**: W96.013.001**
Lab ID	**: L2547832-01**	**Date Collected**	**: 07/30/25 09:40**
Client ID	**: SS-111**	**Date Received**	**: 07/30/25**
Sample Location	**: 160 CENTER STREET, CANASTOTA, NY**	**Date Analyzed**	**: 08/11/25 19:42**
Sample Matrix	**: SOIL**	**Dilution Factor**	**: 20**
Analytical Method	**: 1,6010D**	**Analyst**	**: CEY**
Lab File ID	**: WG2101513.pdf**	**Instrument ID**	**: TRACE8**
Sample Amount	**: 1.293g**	**%Solids**	**: 94**
Digestion Method	**: EPA 3050B**	**Date Digested**	**: 08/11/25**

CAS NO.	Parameter	mg/kg Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	1240	82.3	26.7	
7440-36-0	Antimony, Total	ND	41.1	31.7	U
7440-38-2	Arsenic, Total	ND	8.23	3.55	U
7440-39-3	Barium, Total	17.5	8.23	0.872	
7440-41-7	Beryllium, Total	ND	4.11	0.452	U
7440-43-9	Cadmium, Total	ND	8.23	0.452	U
7440-70-2	Calcium, Total	270000	82.3	46.6	
7440-47-3	Chromium, Total	ND	8.23	6.98	U
7440-48-4	Cobalt, Total	ND	16.4	2.04	U
7440-50-8	Copper, Total	7.70	8.23	1.87	J
7439-89-6	Iron, Total	3210	41.1	8.64	
7439-92-1	Lead, Total	18.6	41.1	1.96	J
7439-95-4	Magnesium, Total	6600	82.3	13.4	
7439-96-5	Manganese, Total	137	8.23	4.41	
7440-02-0	Nickel, Total	ND	20.6	6.65	U
7782-49-2	Selenium, Total	ND	16.4	2.71	U
7440-22-4	Silver, Total	ND	4.11	2.45	U
7440-23-5	Sodium, Total	ND	1640	872.	U
7440-28-0	Thallium, Total	ND	16.4	7.42	U
7440-62-2	Vanadium, Total	4.00	8.23	1.24	J
7440-66-6	Zinc, Total	19.0	41.1	4.98	J

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 19:15
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: CEY
Lab File ID	: WG2101513.pdf	Instrument ID	: TRACE8
Sample Amount	: 1.323g	%Solids	: 90
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	5230	8.44	2.74	
7440-36-0	Antimony, Total	ND	4.22	3.25	U
7440-38-2	Arsenic, Total	6.49	0.844	0.365	
7440-39-3	Barium, Total	85.8	0.844	0.090	
7440-41-7	Beryllium, Total	0.340	0.422	0.046	J
7440-43-9	Cadmium, Total	0.245	0.844	0.046	J
7440-70-2	Calcium, Total	40800	8.44	4.79	
7440-47-3	Chromium, Total	8.50	0.844	0.716	
7440-48-4	Cobalt, Total	7.89	1.69	0.209	
7440-50-8	Copper, Total	89.8	0.844	0.192	
7439-89-6	Iron, Total	11400	4.22	0.887	
7439-92-1	Lead, Total	92.5	4.22	0.201	
7439-95-4	Magnesium, Total	11900	8.44	1.38	
7439-96-5	Manganese, Total	302	0.844	0.453	
7440-02-0	Nickel, Total	14.1	2.11	0.682	
7782-49-2	Selenium, Total	ND	1.69	0.278	U
7440-22-4	Silver, Total	ND	0.422	0.252	U
7440-23-5	Sodium, Total	176	169	89.5	
7440-28-0	Thallium, Total	ND	1.69	0.762	U
7440-62-2	Vanadium, Total	11.9	0.844	0.128	
7440-66-6	Zinc, Total	77.0	4.22	0.512	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 19:46
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6010D	Analyst	: CEY
Lab File ID	: WG2101513.pdf	Instrument ID	: TRACE8
Sample Amount	: 1.321g	%Solids	: 95
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	2880	39.7	12.9	
7440-36-0	Antimony, Total	ND	19.8	15.3	U
7440-38-2	Arsenic, Total	3.72	3.97	1.71	J
7440-39-3	Barium, Total	36.6	3.97	0.420	
7440-41-7	Beryllium, Total	ND	1.98	0.218	U
7440-43-9	Cadmium, Total	ND	3.97	0.218	U
7440-70-2	Calcium, Total	150000	39.7	22.5	
7440-47-3	Chromium, Total	5.10	3.97	3.36	
7440-48-4	Cobalt, Total	2.86	7.94	0.984	J
7440-50-8	Copper, Total	27.8	3.97	0.901	
7439-89-6	Iron, Total	6220	19.8	4.16	
7439-92-1	Lead, Total	42.2	19.8	0.944	
7439-95-4	Magnesium, Total	15200	39.7	6.47	
7439-96-5	Manganese, Total	260	3.97	2.13	
7440-02-0	Nickel, Total	6.91	9.92	3.20	J
7782-49-2	Selenium, Total	ND	7.94	1.30	U
7440-22-4	Silver, Total	ND	1.98	1.18	U
7440-23-5	Sodium, Total	ND	794	420.	U
7440-28-0	Thallium, Total	ND	7.94	3.58	U
7440-62-2	Vanadium, Total	8.64	3.97	0.599	
7440-66-6	Zinc, Total	38.3	19.8	2.40	

Form 1
METALS

Client	:	C&S Companies	Lab Number	:	L2547832
Project Name	:	OLD ERIE COMMONS	Project Number	:	W96.013.001
Lab ID	:	WG2101434-1	Date Collected	:	NA
Client ID	:	WG2101434-1BLANK	Date Received	:	NA
Sample Location	:		Date Analyzed	:	08/11/25 16:56
Sample Matrix	:	SOIL	Dilution Factor	:	1
Analytical Method	:	1,6010D	Analyst	:	CEY
Lab File ID	:	WG2101513.pdf	Instrument ID	:	TRACE8
Sample Amount	:	1.25g	%Solids	:	NA
Digestion Method	:	EPA 3050B	Date Digested	:	08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	ND	4.00	1.30	U
7440-36-0	Antimony, Total	ND	2.00	1.54	U
7440-38-2	Arsenic, Total	ND	0.400	0.173	U
7440-39-3	Barium, Total	ND	0.400	0.042	U
7440-41-7	Beryllium, Total	ND	0.200	0.022	U
7440-43-9	Cadmium, Total	ND	0.400	0.022	U
7440-70-2	Calcium, Total	ND	4.00	2.27	U
7440-47-3	Chromium, Total	ND	0.400	0.339	U
7440-48-4	Cobalt, Total	ND	0.800	0.099	U
7440-50-8	Copper, Total	ND	0.400	0.091	U
7439-89-6	Iron, Total	1.22	2.00	0.420	J
7439-92-1	Lead, Total	ND	2.00	0.095	U
7439-95-4	Magnesium, Total	ND	4.00	0.652	U
7439-96-5	Manganese, Total	ND	0.400	0.214	U
7440-02-0	Nickel, Total	ND	1.00	0.323	U
7440-09-7	Potassium, Total	ND	100	20.3	U
7782-49-2	Selenium, Total	ND	0.800	0.132	U
7440-22-4	Silver, Total	ND	0.200	0.119	U
7440-23-5	Sodium, Total	ND	80.0	42.4	U
7440-28-0	Thallium, Total	ND	0.800	0.361	U
7440-62-2	Vanadium, Total	ND	0.400	0.060	U
7440-66-6	Zinc, Total	ND	2.00	0.242	U

Form 1
METALS

Client	**: C&S Companies**	**Lab Number**	**: L2547832**
Project Name	**: OLD ERIE COMMONS**	**Project Number**	**: W96.013.001**
Lab ID	**: L2547832-01**	**Date Collected**	**: 07/30/25 09:40**
Client ID	**: SS-111**	**Date Received**	**: 07/30/25**
Sample Location	**: 160 CENTER STREET, CANASTOTA, NY**	**Date Analyzed**	**: 08/12/25 10:07**
Sample Matrix	**: SOIL**	**Dilution Factor**	**: 20**
Analytical Method	**: 1,6010D**	**Analyst**	**: LRS**
Lab File ID	**: WG2101798.csv**	**Instrument ID**	**: TRACE8**
Sample Amount	**: 1.293g**	**%Solids**	**: 94**
Digestion Method	**: EPA 3050B**	**Date Digested**	**: 08/11/25**

CAS NO.	Parameter	mg/kg Results	RL	MDL	Qualifier
7440-09-7	Potassium, Total	ND	2060	417.	U

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/12/25 12:25
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: LRS
Lab File ID	: WG2101798.csv	Instrument ID	: TRACE8
Sample Amount	: 1.323g	%Solids	: 90
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

CAS NO.	Parameter	mg/kg Results	mg/kg RL	mg/kg MDL	Qualifier
7440-09-7	Potassium, Total	572	211	42.8	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/12/25 10:04
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6010D	Analyst	: LRS
Lab File ID	: WG2101798.csv	Instrument ID	: TRACE8
Sample Amount	: 1.321g	%Solids	: 95
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-09-7	Potassium, Total	348	992	201.	J

Form 2A
Initial and Continuing Calibration Verification

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Instrument ID	: TRACE8	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1998183-24						
Date Analyzed :				08/11/25 19:53						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				0.5000	0.510	102				
Antimony				0.5000	0.480	96				
Arsenic				0.5000	0.460	92				
Barium				0.5000	0.538	108				
Beryllium				0.5000	0.484	97				
Cadmium				0.5000	0.460	92				
Calcium				0.5000	0.460	92				
Chromium				0.5000	0.480	96				
Cobalt				0.5000	0.484	97				
Copper				0.5000	0.503	101				
Iron				0.5000	0.459	92				
Lead				0.5000	0.484	97				
Magnesium				0.5000	0.472	94				
Manganese				0.5000	0.464	93				
Nickel				0.5000	0.483	97				
Potassium				5.0000	5.90	118				
Selenium				0.5000	0.479	96				
Silver				0.5000	0.489	98				
Sodium				10.0000	11.6	116				
Thallium				0.5000	0.485	97				
Vanadium				0.5000	0.487	97				
Zinc				0.5000	0.463	93				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	77-123%	(Method 1631)	76-113%	(Method 245.7)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)		
	85-115%	(Method 200.8)	80-120%	(Methods 7470, 7471)
	77-123%	(Method 1631)	76-113%	(Method 245.7)

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,7471B	Analyst	: CME
Lab File ID	: WG2101441.pdf	Instrument ID	: NIC2
Sample Amount	: 0.388g	%Solids	: 94
Digestion Method	: EPA 7471B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	0.147	0.069	0.045	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/11/25 16:08
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,7471B	Analyst	: CME
Lab File ID	: WG2101441.pdf	Instrument ID	: NIC2
Sample Amount	: 0.313g	%Solids	: 90
Digestion Method	: EPA 7471B	Date Digested	: 08/11/25

CAS NO.	Parameter	mg/kg Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	0.106	0.089	0.058	

Form 1
METALS

Client	: C&S Companies	**Lab Number**	:	L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	:	W96.013.001
Lab ID	: L2547832-03	**Date Collected**	:	07/30/25 10:00
Client ID	: SS-105	**Date Received**	:	07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	:	08/11/25 16:11
Sample Matrix	: SOIL	**Dilution Factor**	:	1
Analytical Method	: 1,7471B	**Analyst**	:	CME
Lab File ID	: WG2101441.pdf	**Instrument ID**	:	NIC2
Sample Amount	: 0.392g	**%Solids**	:	95
Digestion Method	: EPA 7471B	**Date Digested**	:	08/11/25

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.076	0.067	0.044	

Form 1
METALS

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: WG2101439-1	**Date Collected**	: NA
Client ID	: WG2101439-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/11/25 14:38
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,7471B	**Analyst**	: CME
Lab File ID	: WG2101441.pdf	**Instrument ID**	: NIC2
Sample Amount	: 0.3g	**%Solids**	: NA
Digestion Method	: EPA 7471B	**Date Digested**	: 08/11/25

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.083	0.054	U

Form 1
WETCHEM

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: L2547832-01	**Date Collected**	: 07/30/25 09:40
Client ID	: SS-111	**Date Received**	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	: 08/08/25 13:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,9010C/9012B	**Analyst**	: JER
Lab File ID	: TCN080825-A	**Instrument ID**	: LACHAT6
Sample Amount	: 1.014g	**%Solids**	: 94
Digestion Method	:	**Date Digested**	: 08/07/25

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-12-5	Cyanide, Total	ND	1.0	0.22	U

Form 1
WETCHEM

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: L2547832-02	**Date Collected**	: 07/30/25 09:50
Client ID	: SS-112	**Date Received**	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	: 08/08/25 13:12
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,9010C/9012B	**Analyst**	: JER
Lab File ID	: TCN080825-A	**Instrument ID**	: LACHAT6
Sample Amount	: 1.0034g	**%Solids**	: 90
Digestion Method	:	**Date Digested**	: 08/07/25

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-12-5	Cyanide, Total	ND	1.1	0.24	U

Form 1
WETCHEM

Client	: C&S Companies	**Lab Number**	: L2547832
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: L2547832-03	**Date Collected**	: 07/30/25 10:00
Client ID	: SS-105	**Date Received**	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	: 08/11/25 15:44
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,9010C/9012B	**Analyst**	: JER
Lab File ID	: TCN081125-C1	**Instrument ID**	: LACHAT6
Sample Amount	: 1.0104g	**%Solids**	: 95
Digestion Method	:	**Date Digested**	: 08/08/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
57-12-5	Cyanide, Total	ND	1.0	0.22	U

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100359-1	Date Collected	: NA
Client ID	: WG2100359-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/08/25 13:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,9010C/9012B	Analyst	: JER
Lab File ID	: TCN080825-A	Instrument ID	: LACHAT6
Sample Amount	: 1.0191g	%Solids	: NA
Digestion Method	:	Date Digested	: 08/07/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
57-12-5	Cyanide, Total	ND	0.96	0.20	U

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-01	Date Collected	: 07/30/25 09:40
Client ID	: SS-111	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/07/25 03:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: JMN
Lab File ID	: WG2100028.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 94
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	94.0	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-02	Date Collected	: 07/30/25 09:50
Client ID	: SS-112	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/07/25 03:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: JMN
Lab File ID	: WG2100028.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 90
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	Results (%)	RL (%)	MDL (%)	Qualifier
NONE	Solids, Total	89.5	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547832-03	Date Collected	: 07/30/25 10:00
Client ID	: SS-105	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/07/25 04:27
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: JMN
Lab File ID	: WG2100049.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 95
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	95.4	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547832
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2100028-1	Date Collected	: 07/22/25 09:48
Client ID	: WG2100028-1 DUP	Date Received	: 07/22/25
Sample Location	:	Date Analyzed	: 08/07/25 03:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: JMN
Lab File ID	: WG2100028.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 83
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	81.3	0.100	NA	

Data Usability Summary Report

Vali-Data of WNY, LLC
89 Morningside Dr.
Grand Island, NY 14072

Old Erie Commons
Pace Analytical Services SDG#L2547833
October 21, 2025
Sampling date: 7/30/2025

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
89 Morningside Dr.
Grand Island, NY 14072

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for C&S Engineers, project located at 160 Center St., Canastota, NY, SDG#L2547833 submitted to Vali-Data of WNY, LLC on August 27, 2025. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using USEPA method Inorganics (6010D) and in accordance with wet chemistry methods.

ID	Sample ID	Laboratory ID
1	SS-113	L2547833-01
2	SS-114	L2547833-02
3	SS-115	L2547833-03
4	SS-116	L2547833-04

METALS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Blanks
-Laboratory Control Sample
-MS/MSD/Duplicate
-Field Duplicate
-Serial Dilution
-Compound Quantitation
-Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use.

Samples: DUSR ID#1-4 were diluted.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

BLANKS
All criteria were met.

LABORATORY CONTROL SAMPLE
All criteria were met.

MS/MSD/DUPLICATE
All criteria were met.

FIELD DUPLICATE
No field duplicate was acquired.

SERIAL DILUTION
All criteria were met.

COMPOUND QUANTITATION
All criteria were met.

CALIBRATION
All criteria were met.

GENERAL CHEMISTRY

The following items/criteria were reviewed for this analytical suite:

- %Solid

The items listed above were technically in compliance with the method and SOP criteria with any exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below.

%SOLID
All criteria were met.

Case Narrative

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

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

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

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

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

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

Case Narrative (continued)

Report Submission

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

Total Metals

L2547833-01 through -04: The sample has an elevated detection limit for lead due to the dilution required by the sample matrix.

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

Authorized Signature: Caitlin Walukevich Report Date: 08/13/25

Title: Technical Director/Representative

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-04	Date Collected	: 07/30/25 10:30
Client ID	: SS-116	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/12/25 16:09
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: DHL
Lab File ID	: WG2101804.pdf	Instrument ID	: TRACE9
Sample Amount	: 1.325g	%Solids	: 71
Digestion Method	: EPA 3050B	Date Digested	: 08/12/25

CAS NO.	Parameter	mg/kg Results	mg/kg RL	mg/kg MDL	Qualifier
7439-92-1	Lead, Total	212	5.33	0.254	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2101994-1	Date Collected	: NA
Client ID	: WG2101994-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/12/25 16:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010D	Analyst	: DHL
Lab File ID	: WG2101804.pdf	Instrument ID	: TRACE9
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 08/12/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-92-1	Lead, Total	ND	2.00	0.095	U

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2101994-4	Date Collected	: 07/30/25 10:30
Client ID	: SS-116DUP	Date Received	: 07/30/25
Sample Location	:	Date Analyzed	: 08/12/25 16:16
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: DHL
Lab File ID	: WG2101804.pdf	Instrument ID	: TRACE9
Sample Amount	: 1.271g	%Solids	: 71
Digestion Method	: EPA 3050B	Date Digested	: 08/12/25

CAS NO.	Parameter	mg/kg Results	RL	MDL	Qualifier
7439-92-1	Lead, Total	204.	5.56	0.264	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: WG2101994-6	Date Collected	:
Client ID	: Serial Dilution	Date Received	:
Sample Location	:	Date Analyzed	: 08/12/25 16:22
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6010D	Analyst	: DHL
Lab File ID	: WG2101804.pdf	Instrument ID	: TRACE9
Sample Amount	: 1.325g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 08/12/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-92-1	Lead, Total	219.	26.6	1.27	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-01	Date Collected	: 07/30/25 10:15
Client ID	: SS-113	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/12/25 08:52
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: JMF
Lab File ID	: WG2101803.pdf	Instrument ID	: TRACE5
Sample Amount	: 1.301g	%Solids	: 85
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-92-1	Lead, Total	81.9	4.54	0.216	

Form 1
METALS

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-02	Date Collected	: 07/30/25 10:20
Client ID	: SS-114	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/12/25 09:44
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010D	Analyst	: JMF
Lab File ID	: WG2101803.pdf	Instrument ID	: TRACE5
Sample Amount	: 1.293g	%Solids	: 83
Digestion Method	: EPA 3050B	Date Digested	: 08/11/25

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-92-1	Lead, Total	33.1	4.67	0.222	

Form 1
METALS

Client	: C&S Companies	**Lab Number**	: L2547833
Project Name	: OLD ERIE COMMONS	**Project Number**	: W96.013.001
Lab ID	: L2547833-03	**Date Collected**	: 07/30/25 10:25
Client ID	: SS-115	**Date Received**	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	**Date Analyzed**	: 08/12/25 09:51
Sample Matrix	: SOIL	**Dilution Factor**	: 2
Analytical Method	: 1,6010D	**Analyst**	: JMF
Lab File ID	: WG2101803.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.255g	**%Solids**	: 81
Digestion Method	: EPA 3050B	**Date Digested**	: 08/11/25

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-92-1	Lead, Total	63.7	4.92	0.234	

Form 1
METALS

Client	:	**C&S Companies**	**Lab Number**	:	**L2547833**
Project Name	:	**OLD ERIE COMMONS**	**Project Number**	:	**W96.013.001**
Lab ID	:	**WG2101678-1**	**Date Collected**	:	**NA**
Client ID	:	**WG2101678-1BLANK**	**Date Received**	:	**NA**
Sample Location	:		**Date Analyzed**	:	**08/12/25 08:33**
Sample Matrix	:	**SOIL**	**Dilution Factor**	:	**1**
Analytical Method	:	**1,6010D**	**Analyst**	:	**JMF**
Lab File ID	:	**WG2101803.pdf**	**Instrument ID**	:	**TRACE5**
Sample Amount	:	**1.25g**	**%Solids**	:	**NA**
Digestion Method	:	**EPA 3050B**	**Date Digested**	:	**08/11/25**

CAS NO.	Parameter	mg/kg Results	mg/kg RL	mg/kg MDL	Qualifier
7439-92-1	Lead, Total	ND	2.00	0.095	U

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-01	Date Collected	: 07/30/25 10:15
Client ID	: SS-113	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/05/25 11:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: ROI
Lab File ID	: WG2099137.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 85
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	Results (%)	RL (%)	MDL (%)	Qualifier
NONE	Solids, Total	84.6	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-02	Date Collected	: 07/30/25 10:20
Client ID	: SS-114	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/05/25 11:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: ROI
Lab File ID	: WG2099137.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 83
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	82.8	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-03	Date Collected	: 07/30/25 10:25
Client ID	: SS-115	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/05/25 11:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: ROI
Lab File ID	: WG2099137.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 81
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	80.9	0.100	NA	

Form 1
WETCHEM

Client	: C&S Companies	Lab Number	: L2547833
Project Name	: OLD ERIE COMMONS	Project Number	: W96.013.001
Lab ID	: L2547833-04	Date Collected	: 07/30/25 10:30
Client ID	: SS-116	Date Received	: 07/30/25
Sample Location	: 160 CENTER STREET, CANASTOTA, NY	Date Analyzed	: 08/05/25 11:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: ROI
Lab File ID	: WG2099137.pdf	Instrument ID	: BALANCE#53
Sample Amount	:	%Solids	: 71
Digestion Method	:	Date Digested	:

		%			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total	70.8	0.100	NA	

Appendix G

Health and Safety Plan

C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

Health and Safety Plan

Old Erie Commons
160 Center Street, Canastota, New York
BCP Site No. C727015

Prepared for:

HOUSINGVISIONS
Real Plans. Real People. Real Progress.

Old Erie Commons, LLC
1201 East Fayette Street
Syracuse, New York

November 2025

C&S Project No. W96.013.001

Health and Safety Plan

Old Erie Commons
160 Center Street
Canastota, Madison County, New York
BCP Site No. C727015

Prepared for:

Old Erie Commons LLC
1201 East Fayette Street
Syracuse, New York

Prepared by:
C&S Engineers, Inc.
499 Col. Eileen Collins Boulevard
Syracuse, New York 13212

November 2025

C&S Project#: W96.013.001

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TABLES WITHIN REPORT

APPENDICES

EMERGENCY PHONE NUMBERS

Emergency Service	911
Police: Canastota Village Police Department	(315) 697-8888
Fire: Canastota Village Fire Department	(315) 697-3341
Hospital: Oneida Health Emergency Room	(315) 361-2024
Village of Canastota Department of Public Works	(315) 697-7042
National Response Center	(800) 424-8802
Poison Control Center	(800) 222-1222
Center for Disease Control	(800) 311-3435
NYSDEC Region 7 (Syracuse, New York)	(315) 426-7551
Brittany O'Brien-Drake (NYSDEC Project Manager)	(518) 402-9672
Aaron Keegan (NYSDOH Public Health Specialist)	(518) 402-1943
C&S Engineers	(315) 455-2000
Jamie Kowalczk (Madison County)	(315) 366-2376
Diana Jakimoski (Old Erie Commons LLC)	(315) 472-3820

1.0 GENERAL INFORMATION

This Health and Safety Plan (HASP) addresses health and safety considerations for the activities that personnel employed by C&S Engineers, Inc., may be engaged in during site investigation and remedial activities at the Old Erie Commons BCP Site located at 160 Center Street, in the Village of Canastota, Madison County, New York; hereby, referred to as (Site). This HASP will be implemented by the Health and Safety Officer (HSO) during site work. All personnel engaged in the Phase II Environmental Site Investigation are required to maintain current HAZWOPER training, including initial 40-hour training, on-the-job training, and consistent annual 8-hour refresher training, as per the requirements of 29 CFR 1910.120.

Compliance with this HASP is required of C&S personnel who enter this Site. The content of the HASP may change or undergo revision based upon additional information made available to the health, safety, and training (H&S) committee, monitoring results or changes in the technical scope of work. Any changes proposed must be reviewed by the H&S committee.

1.1 Responsibilities

Project Manager...Matt Walker
Phone: (315) 703-4323
Cell: (315) 200-5872

C&S Health and Safety Director..Mike Sherlock
Phone: (315) 703-4210
Cell: (315) 420-3455

Site Health and Safety Officer...Nick Coulombe
Phone: (315) 703-4281
Cell: (315) 720-8682

Emergency Coordinator..Nick Coulombe
Phone: (315) 703-4281
Cell: (315) 720-8682

1.2 Applicable Standards and Regulations References

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. Where a conflict or overlap among regulations and/or these specifications exist, the most stringent requirements shall apply. C&S's Project Manager will determine which requirements are most stringent.

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
  - ANSI Z89.1, Personnel Protective Equipment-Protective Headwear for Industrial Workers-Requirements (Latest Revision)

- ANSI Z87.1, Occupational and Educational Personal Eye and Face Protection Devices
- ANSI Z9.2, Fundamentals Governing the Design and Operation of Local Exhaust Systems
- ANSI Z88.2-80, Practices for Respiratory Protection

- **CODE OF FEDERAL REGULATIONS (CFR)**
  - 29 CFR Subpart D Walking-Working Surfaces
  - 29 CFR 1910 Occupational Safety and Health Standards-All Sections
  - 29 CFR 1926 Safety and Health Regulations for Construction-All Sections
  - 40 CFR 50.6 National Primary and Secondary Ambient Air Quality Standards for Particulate Matter
  - 40 CFR 61 National Emissions Standards for Hazardous Air Pollutants (NESHAPS)-Subpart A-General Provisions
  - 49 CFR 172 Hazardous Material Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements

- **NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)**
  - Publication Number 87-108 Respiratory Decision Logic
  - NIOSH/OSHA Booklet 3142 Lead in Construction
  - Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH Publication 85-115)

- **U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)**
  - PUB 3126 Working with Lead in the Construction Industry
  - 29 CFR 1910, Subpart I, Appendix B-Non-Mandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection

2.0 HEALTH AND SAFETY PERSONNEL

The following information briefly describes the health and safety designations and general responsibilities for this Site.

2.1 Project Manager (PM)

The PM is responsible for the overall project including the implementation of the HASP. Specifically, this includes allocating adequate manpower, equipment, and time resources to conduct Site activities safely.

2.2 Health and Safety Manager

- Has the overall responsibility for coordinating and reporting health and safety activities and the health and safety of Site Workers.
- Must have completed, at a minimum, the OSHA 30-Hour Construction Safety Training, and either the 24-Hour training course for the Occasional Hazardous Waste Site Worker or the 40-Hour training course for the Hazardous Waste Operations Worker that meets OHSA 29 CFR 1910.
- Must have completed the 8-Hour Site supervisor/manager's course for supervisors and managers having responsibilities for hazardous waste Site operations and management.
- Directs and coordinates health and safety monitoring activities.
- Ensures that field teams utilize proper personal protective equipment (PPE).
- Conducts initial on-site specific training prior to Site Workers commencing work.
- Conducts and documents daily and periodic safety briefings.
- Ensures that field team members comply with this HASP.
- Immediately notifies the Project Manager of all accident / incidents.
- Determines upgrading or downgrading of PPE based on Site conditions and/or real time monitoring results.
- Ensures that monitoring instruments are calibrated daily or as the manufacturer's instructions determine.
- Provides daily summaries of field operations and progress to the Project Manager.

- Submits and maintains all documentation required in this HASP and any other pertinent health and safety documentation.

2.3 Health and Safety Officer (HSO)

- Must be designated by the Health and Safety Manager and at a minimum, have the OSHA 10-Hour Construction Safety Training.
- Must schedule and attend a Pre-Construction Safety Meeting with the Health and Safety Manager to discuss the Subcontractor Safety Requirements and must attend the Weekly Subcontractor Coordination Meeting.
- Responsible for ensuring subcontractors and their lower tier contractors comply with project safety requirements.
- Must make frequent and regular inspections of their work areas and activities and ensure hazards that are under their control are corrected immediately and all other hazards are reported to the Project Manager and Health and Safety Manager.
- Must report all work-related injuries, regardless of severity, to the Project Manager and the Health and Safety Manager within 24 hours after they occur.

2.4 Emergency Coordinator

- The Emergency Coordinator or his on-site designee will, in coordination with the Authority / Agency having Jurisdiction, implement the emergency response procedures outlined in Section 12 whenever conditions at the Site warrant such action.
- The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel as necessary, and notification of emergency response units (refer to phone listing in the beginning of this HASP) and the appropriate management staff.

2.5 Site Workers

- Report any unsafe or potentially hazardous conditions to the HSO and the Health and Safety Manager.
- Maintain knowledge of the information, instructions, and emergency response actions contained in the HASP.
- Comply with rules, regulations, and procedures as set forth in this HASP, including any revisions that are instituted.
- Prevent unauthorized personnel from entering work Site.

3.0 SITE HAZARDS EVALUATION

3.1 Chemical Hazards

3.1.1 Nature of Chemical Hazards

The specific contaminants currently known to exist in each media are as follows:

Media	Contaminant Class	Identified Compounds
Soil	VOCs	Acetone
	SVOCs	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene
	Pesticides	4,4'-DDD, 4,4-DDE, 4,4'-DDT
	PCBs	Aroclor 1254
	Metals	Arsenic, barium, copper, lead, mercury, zinc
	PFAS	PFOS, PFOA
Groundwater	SVOCs	Benzo(a)anthracene
	Metals	Iron, magnesium, sodium
	PFAS	PFOS

3.1.2 Common Routes of Exposure

The contaminants at the Site may enter the human body in a variety of ways. Based on the nature of site contaminants, the chemical routes of exposure anticipated from the remedial activities at this site include:

Table 3-1: Routes of Exposure

Route	Mechanism	Control
Absorption	Dermal (skin) contact with impacted soil on-site resulting in absorption of chemicals of concern through the skin and into the blood stream.	Proper use of PPE will minimize risks of exposure at the site.
Ingestion	Chemicals / materials of concern can come in direct contact with the mouth from soil or other contaminated areas (PPE, skin, tools, etc.) and enter the bloodstream through the stomach lining.	Proper care in handling PPE and tools, refraining from eating and drinking at the Site, and frequent hand washing with soap and water will minimize risks of exposure.

Route	Mechanism	Control
Inhalation	Volatile vapors and/or contaminants attached to dust and particulates can be entrained by wind and become airborne across the site and be subsequently inhaled through the nose and / or mouth. This exposure route is the most likely way for worker exposure to occur.	Conduct monitoring of air quality for VOCs in worker breathing zones. Employ methods that minimize the creation of dust and utilize dust suppression techniques to minimize dust and particulates. Respirators with appropriate filtration and organic adsorption cartridges should be available to on-site workers in case volatile compounds become a nuisance or health hazard.

3.2 Physical Hazards

Based upon the anticipated field activities, the following potential physical hazardous conditions may exist:

Table 3-2: Physical Hazards

Category	Mechanism	Control
Mechanical Equipment	The use of typical mechanical equipment such as drill rigs and sampling vehicles can create a potential for crushing and pinching hazards due to movement and positioning of the equipment, movement of lever arms and hydraulics, and entanglement of clothing and appendages in exposed drives and tracks. Mechanical equipment can also create a potential for impact of steel tools, masts, and cables should equipment rigging fail, or other structural failures occur during hydraulic equipment operation.	Heavy equipment work must be conducted only by trained, experienced personnel. If possible, personnel must remain outside the turning radius of large, moving equipment. At a minimum, personnel must maintain visual contact with the equipment operator. When not operational, equipment must be set and locked so that it cannot be activated, released, dropped, etc. The mechanical equipment stated above represents typical equipment that is ordinarily used during this scope of work, but is not meant to be an all-inclusive list. Similar precautions should be used around other mechanical equipment deployed to the Site that is not listed above.

Category	Mechanism	Control
Excavations and Trenches	The use of excavation/trenching such as removal of overburden soils, installation of utilities, and site grading operations can cause potential for suffocation, crushing, or other injury from falling material. Advancement of excavation and trenches can also create possible damage/failure of any installed underground utility services and create hazards. Other hazards created can included tripping, slipping, or falling. Entering an excavation or trench could have the possibility of an explosive, flammable, toxic, or oxygen-deficient atmosphere within the excavation or trench.	Ensure compliance with OSHA's construction standard for excavations (29 CFR 1926 Subpart P). Designate a Competent Person responsible for selecting and implementing the appropriate protective system(s), assuring appropriate means of access and egress for excavations greater than four (4) feet in depth, and for ensuring that potential atmospheric and physical hazards associated with any excavation / trenching activities are completed in accordance with Subpart P and other applicable OSHA Standards.
Noise	Work around large equipment often creates excessive noise. Noise can cause workers to be startled, annoyed, and/or distracted; as well as causing pain, physical damage to the ear, and temporary and/or permanent hearing loss; and can interfere with communication.	If workers are subjected to noise exceeding an 8-hour time-weighted average sound level of 85 dBA, hearing protection will be required with an appropriate noise reduction rating to comply with 29 CFR 1910.95 and to reduce noise levels below levels of concern.
Slips/Trips/Falls	Personnel may encounter slip, trip, and fall hazards associated with excavations, manways, and construction debris and materials. Precautionary measures should be taken by identifying and removing slip, trip, and fall hazards prior to commencing work.	In the event slip, trip, and fall hazards cannot be removed or minimized, site workers will be shown the location of the physical hazard and be asked to avoid it during work activities.
Fire/Explosion	The potential for fire and/or explosion emergencies is always present on the Site.	Field vehicles will be equipped with a fire extinguisher. Employees, contractors and workers must be trained in the proper use of fire suppression equipment. However, large fires that cannot be controlled with a fire extinguisher shall be handled by professionals. The proper authorities shall be notified in these instances, as well as the HSO and Health and Safety Manager.

Category	Mechanism	Control
Cold Exposure	Persons working in the outdoors in temperatures at or below freezing may be subject to frostbite. Extreme cold for a short time may cause injury to exposed body surfaces or result in a profound generalized cooling which can cause death. Areas of the body such as fingers, toes, and ears, are the most susceptible to cold stress. Ambient air temperature and wind velocity are two factors which influence the development of a cold weather injury. Local injury resulting from exposure to cold temperatures is known as "frostbite." There are several degrees of damage in which frostbite of the extremities can be categorized, as follows: • Frost nip or incipient frostbite is characterized by sudden bleaching or whitening of the skin. • Superficial frostbite occurs when the skin has a waxy or white appearance and is firm to the touch, but tissue beneath is resilient. • Deep frostbite is characterized by tissues that are cold, pale, and solid; this is an extremely serious injury.	Wear several layers of dry clothes so that you can vary the amount of clothing to match the conditions. If there is wind, wear a windbreaker, since wind increases the effects of cold air and in turn lowers your body's core temperature even faster. Don't get overheated. Sweat can dampen clothing and in turn lead to over-cooling. Keep hands, feet, ears, and face warm. These are the areas of the body where frostbite tends to strike first. Heart disease and the use of sedatives or excessive alcohol will make you more susceptible to cold stress. If you feel chilly or sleepy, or have pain in your extremities, go to a warm shelter to recover.

Category	Mechanism	Control
Heat Exposure/Stress	Heat stress can result from a number of contributing factors, including environmental conditions, clothing, and workload as well as the physical condition of the individual. Since heat stress is one of the most common injuries / symptoms associated with outdoor work conducted with direct solar load, and, in particular, because wearing PPE can increase the risk of developing heat stress, workers must be capable of recognizing the signs and symptoms of heat-related illnesses. Signs and symptoms of heat-related illnesses which all on-site personnel should be aware, include the following: • Heat rash may result from continuous exposure to heat or humid air. • Heat cramps are caused by heavy sweating and may include muscle spasms and pain in the hands, feet, and abdomen. • Heat exhaustion is indicated by pale, cool, and moist skin; heavy sweating; dizziness; nausea; and fainting. • Heat stroke is indicated by red, hot, and unusually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; rapid pulse; and coma. Immediate action must be taken to cool the body before serious injury or death occurs.	The following will steps will be taken to limit heat exposure: adjust schedules, take breaks, limit heavy work in protective clothing or in a hot environment may require more time resting than working. Schedule heavy work in the coolest part of the day. Have shaded rest shelters with chairs or benches. Drink Fluids. Sweating cools the body, but it also robs the body of fluid. Drink enough fluids to replace what you lose. You may not feel thirsty until you've become dehydrated. Drink regularly throughout the day. Don't wait until you're thirsty. Monitor for signs of potential heat exposure and stress through use of the "buddy system', with frequent communication between site personnel. Take scheduled breaks and hydrate frequently throughout the day. Maintain an adequate supply of cold water and electrolyte containing drinks in support zone of site. In the event that personnel are observed to exhibit dizziness, disorientation, heat rash, slurred speech, dry mouth, heat cramps, or other symptoms of heat stress, discontinue work immediately and move affected person(s) to a location that is free from direct sunlight and provide fluids (preferably "Gatorade" or similar product that will replenish electrolytes). Monitor condition during to evaluate whether there is notable improvement in their condition.
Utilities	Overhead and underground utilities may exist within the Work Area, which may expose workers to electrocution hazards, explosive hazards, and volatile vapors.	Dig Safely New York shall be contacted a minimum of three business days prior to initiating the field activities, to arrange for the identification and markout of buried utilities at the site. The contact number for Dig Safely New York is 1-800-962-7962. In the event of inadvertent damage to buried utilities, all work shall cease, and the situation shall be evaluated by the HSO.

3.3 Environmental Hazards

Based upon the anticipated field activities, the following potential environmental hazardous conditions may exist:

Table 3-3: Environmental Hazards

Category	Hazard	Control
Biological	Ticks, bees/wasps, mosquitos, spiders, snakes, rabid animals	There are no known species of poisonous spiders or snakes common to the area. Minimize potential exposure to by wearing wear long pants and safety shoes. Change clothing and carefully examine for evidence of insects and ticks upon undressing, immediately following return from the site. Avoid contact with any animals, either wild or domestic, that may be encountered while conducting the field activities, and notify the local office of the New York State Department of Health (NYSDOH) in the event that animals are observed to elicit strange behavior. In the event of contact with an animal that is behaving in a strange manner, the NYSDOH should be contacted immediately.
Biological	Poison Ivy, Poison Oak	Familiarize yourself with the characteristics and appearance of poison ivy and poison oak. Be cognizant of vegetation while conducting work activities. Minimize potential exposure to by wearing wear long pants and safety shoes. Change clothing immediately following return from the site.
Weather	Wet surfaces, lighting, high winds (falling objects, contaminated dust), hail, excessive heat, extreme cold, snow and ice.	Remain cognizant of weather conditions, forecasts, and changing weather conditions. Exercise extra caution during wet and inclement site conditions to minimize risk of slips and falls. Avoid work during periods of high winds to reduce risk of injury from falling objects and airborne contaminant migration. Cease work and monitor conditions in the event that lightning is observed or suspected in the area, or in the event that other weather conditions pose a health or safety hazard.

4.0 TRAINING

4.1 Site-Specific Training

Training will be provided that specifically addresses the activities, procedures, monitoring, and equipment for the Site operations prior to going on Site. Training will include familiarization with Site and facility layout, known and potential hazards, and emergency services at the Site, and details all provisions contained within this HASP. This training will also allow Site Workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity.

4.2 Task-Specific Training

For projects involving asbestos sampling, personnel will be trained to collect bulk asbestos samples using the requirements set forth in 40 CFR Part 763.92(a) (1) and (2) and 40 CFR Part. 763, Subpart. E, App. C. The training incorporates many sections of 40 CFR Part 763, but should focus on the sampling method listed in 40 CFR Part 763.86. The training includes inspection planning, bulk sampling, personal protection, and reporting. Personnel must demonstrate proficiency by identifying areas where asbestos may be found and properly collecting a bulk sample using proper methodology.

4.3 Safety Briefings

C&S project personnel will be given briefings by the HSO on a daily or as needed basis to further assist Site workers in conducting their activities safely. Pertinent information will be provided when new operations are to be conducted. Changes in work practices must be implemented due to new information made available, or if Site or environmental conditions change. Briefings will also be given to facilitate conformance with prescribed safety practices. When conformance with these practices is not occurring or if deficiencies are identified during safety audits, the project manager will be notified.

4.4 Daily Tailgate Safety Meeting

The HSO or the HSO designee will be responsible for conducting a daily tailgate safety meeting prior to start of any work activities. The contractor and workers will be responsible for attending daily tailgate safety meetings, as well as providing any additional insight into any possible hazards which might be anticipated or encountered throughout the day on the Site. The meeting will discuss any measures which will be implemented throughout the day to mitigate any hazards. The meetings are designed to create awareness of any hazards and their associated mitigation measures at the Site. If conditions at the Site change and new hazards are determined to be present, work will be stopped and an additional safety meeting will be conducted. The daily tailgate meetings discussions will be logged, as well as all who attended.

5.0 COMMUNICATIONS

A phone will be located on Site to be utilized by personnel conducting investigation. Cell phones will be the primary means of communicating with emergency support services/facilities.

6.0 PERSONAL PROTECTIVE EQUIPMENT

6.1 Personal Protective Equipment – General

The level of protection to be worn by field personnel will be defined and controlled by the HSO. Depending upon the type and levels of material present or anticipated at the site, varying degrees of protective equipment will be needed. If the possible hazards are unknown, a reasonable level of protection will be taken until sampling and monitoring results can ascertain potential risks. The levels of protection listed below are based on USEPA Guidelines. A list of the appropriate clothing for each level is also provided.

- Level A protection must be worn when a reasonable determination has been made that the highest available level of respiratory, skin, eye, and mucous membrane protection is needed. It should be noted that while Level A provides maximum available protection, it does not protect against all possible hazards. Consideration of the heat stress that can arise from wearing Level A protection should also enter into the decision-making process. Level A protection includes:
    - Open circuit, pressure-demand self-contained breathing apparatus (SCBA)
    - Totally encapsulated chemical resistant suit
    - Gloves, inner (surgical type)
    - Gloves, outer, chemical protective
    - Boots, chemical protective

- Level B protection must be used when the highest level of respiratory protection is needed, but hazardous material exposure to the few unprotected areas of the body (e.g., the back of the neck) is unlikely. Level B protection includes:
    - Open circuit, pressure-demand SCBA or pressure airline with escape air bottle
    - Chemical protective clothing: Overalls and long sleeved jacket; disposal chemical resistant coveralls; coveralls; one or two piece chemical splash suit with hood
    - Gloves, inner (surgical type)
    - Gloves, outer, chemical protective
    - Boots, chemical protective

- Level C must be used when the required level of respiratory protection is known, or reasonably assumed to be, not greater than the level of protection afforded by air purifying respirators; and hazardous materials exposure to the few unprotected areas of the body (e.g. the back of the neck) is unlikely. Level C protection includes:
    - Full or half face air-purifying respirator
    - Chemical protective clothing: Overalls and long-sleeve jacket; disposable chemical resistant coveralls; coveralls; one- or two-piece chemical splash suit
    - Gloves, inner (surgical type)
    - Gloves, outer, chemical protective
    - Boots, chemical protective

- Level D is the basic work uniform. It cannot be worn on any site where respiratory or skin hazards exist. Level D protection includes:
    - Safety boots/shoes
    - Safety glasses
    - Hard hat with optional face shield

Note that the use of SCBA and airline equipment is contingent upon the user receiving special training in the proper use and maintenance of such equipment.

6.2 Personal Protective Equipment – Site Specific

Level D with some modification will be required when working on this Site. In addition to the basic work uniform specified by Level D protection, Nitrile gloves will be required when contact with soil and/or groundwater is likely. Hearing protection will be worn when power equipment is used to perform subsurface work. An upgrade to a higher level (Level C) of protection may occur if determined necessary by the HSO.

7.0 MONITORING PROCEDURES

7.1 Monitoring During Site Operations

All Site environmental monitoring should be accompanied by periodic meteorological monitoring of appropriate climatic conditions.

7.1.1 Surface Soil Operation

Monitoring will be performed by the HSO or field personnel during the conduct of work. A photoionization detector (PID) equipped with a 10.6 eV lamp will be utilized to monitor for the presence of volatile organic vapors within the breathing zone, the surface soil holes, and subsurface samples upon their retrieval. The PID will be field checked for calibration accuracy three times per day (morning, lunch, and end of day).

7.1.2 Drilling / Test Pit Operations

Monitoring will be performed by the HSO or drilling observer during the conduct of work. A photoionization detector (PID) equipped with a 10.6 eV lamp will be utilized to monitor for the presence of volatile organic vapors within the breathing zone, the borehole, and subsurface samples upon their retrieval. Drill cuttings and excavation spoils will also be monitored by use of the PID. The PID will be field checked for calibration accuracy three times per day (morning, lunch, and end of day. If subsurface conditions warrant, a combustible gas indicator (CGI) with oxygen alarm may also be used to monitor the borehole for the presence of combustible gases. Similar monitoring of fluids produced during well development will also be conducted.

7.1.3 Soil Excavation and Trenching Operation

Monitoring will be performed by the HSO or remedial observer during the conduct of work. A photoionization detector (PID) equipped with a 10.6 eV lamp will be utilized to monitor for the presence of volatile organic vapors within the breathing zone, the excavation or trench, and any subsurface samples upon their retrieval. Excavation and trenching spoils will also be monitored by use of the PID. The PID will be field checked for calibration accuracy three times per day (morning, lunch, and end of day. If subsurface conditions warrant, a CGI with oxygen alarm may also be used to monitor the borehole for the presence of combustible gases.

7.2 Action Levels

If readings on the PID exceed 10 ppm for more than fifteen minutes consecutively, then personal protective equipment should be upgraded to Level C. The air purifying respirator used with Level C protective equipment must be equipped with organic vapor cartridges. If readings on the explosive gas meter are within a range of 10%-25% of the lower exposure limit (LEL) then continuous monitoring will be implemented. Readings above 25% of the LEL indicate the potential for an explosive condition. Sources of ignition should be removed and the Site should be evacuated.

7.3 Personal Monitoring Procedures

Personal monitoring shall be performed as a contingency measure in the event that VOC concentrations are consistently above the 10-ppm action level as detected by the PID. If the concentration of VOCs is above this action level, then amendments to the HASP must be made before work can continue at the Site.

8.0 SECTION 8 – SAFETY CONSIDERATIONS FOR SITE OPERATIONS

8.1 General

Standard safe work practices that will be followed include:

- Do not climb over/under drums, or other obstacles.
- Do not work on the Site alone.
- Practice contamination avoidance, on and off-site.
- Plan activities ahead of time, and use caution when conducting concurrently running activities.
- No eating, drinking, chewing or smoking is permitted on the Site.
- Due to the unknown nature of waste placement at the Site, extreme caution should be practiced during excavation activities.
- Apply immediate first aid to any and all cuts, scratches, abrasions, etc.
- Be alert to your own physical condition. Watch your buddy for signs of fatigue, exposure, etc.
- A work/rest regimen will be initiated when ambient temperatures and protective clothing create a potential heat or cold stress situation.
- No work will be conducted without adequate natural light or without appropriate supervision.
- Task safety briefings will be held prior to onset of task work.
- Ignition of flammable liquids within or through improvised heating devices (barrels, etc.) or space heaters is forbidden.
- Entry into areas of spaces where toxic or explosive concentrations of gases or dust may exist without proper equipment is prohibited.
- Any injury or unusual health effect must be reported to the Site HSO.
- Prevent splashing or spilling of potentially contaminated materials.
- Use of contact lenses is prohibited while on site.

- Beards and other facial hair that would impair the effectiveness of respiratory protection are prohibited if respiratory protection is necessary.

- Field crew members should be familiar with the physical characteristics of investigations, including but not limited to:
  - Wind direction in relation to potential sources
  - Accessibility to co-workers, equipment, and vehicles
  - Communication
  - Hot zones (areas of known or suspected contamination)
  - Site access
  - Nearest water sources

- The number of personnel and equipment in potentially contaminated areas should be minimized consistent with site operations.

8.2 Field Operations

The HSO or designee will be present on-site during all intrusive work, e.g., drilling operations, excavations, trenching, and will provide monitoring to oversee that appropriate levels of protection and safety procedures are utilized by C&S Engineers, Inc., personnel. The use of salamanders or other equipment with an open flame is prohibited and the use of protective clothing, especially hard hats and boots, will be required during drilling or other heavy equipment operations.

8.3 General Asbestos Safety

Asbestos exposure is primarily an inhalation hazard. OSHA compliant respiratory protection should be worn if there is risk of asbestos becoming airborne. Personal Protective Equipment including protective clothing (suits/gloves, etc.) may be necessary to avoid contaminating the worker and/or the site.

Procedural Precautions - The sampler should be aware that disruption of asbestos-containing materials can create the potential for cross contamination when conducting bulk asbestos sampling.

The Sampler should take the following precautions to avoid cross contamination as well as disruption of material while sampling:

- The sampling tool must be cleaned with amended water after every sample is collected, or a different clean tool must be used.

- The sampler must avoid touching the material being sampled (utilize gloves).

- The area being sampled must be sufficiently wet before collecting the sample.

- The space left after sampling must be sealed with repair/patch material to reduce the chance of airborne exposure.

The object or material sampled should be minimally disturbed during the sampling process.

9.0 SECTION 9 – DECONTAMINATION PROCEDURES

9.1 General Decontamination

Decontamination involves physically removing contaminants and/or converting them chemically into innocuous substances. Only general guidance can be given on methods and techniques for decontamination. Decontamination procedures are designed to:

- Remove contaminant(s).
- Avoid spreading the contamination off Site.
- Avoid exposing unprotected personnel off Site to contaminants.

9.2 Contamination Avoidance

Contamination avoidance is the first and best method for preventing spread of contamination from a hazardous site. Each person involved in site operations must practice the basic methods of contamination avoidance listed below. Additional precautions may be required in the HASP.

- Know the limitations of all protective equipment being used.
- Use the proper tools necessary to safely conduct the work.

9.3 Reducing Contamination

Specific methods that may reduce the chance of contamination are:

- Use of remote sampling techniques.
- Opening containers by non-manual means.
- Bagging monitoring instruments.
- Use of drum grapplers.
- Watering down dusty areas.

9.4 Equipment Decontamination

Equipment which will need to be decontaminated includes tools, monitoring equipment, and personal protective equipment. Items to be decontaminated will be brushed off, rinsed, and dropped into a plastic container supplied for that purpose. They will then be washed with a detergent solution and rinsed with clean water. Instrumentation that is contaminated during field operations will be carefully wiped down. Heavy equipment, if utilized for operations where it may be contaminated, will have prescribed decontamination procedures to prevent contaminant materials from potentially leaving the Site. On-site contractors, such as drillers or backhoe operators, will be responsible for decontaminating all construction equipment prior to demobilization.

10.0 DISPOSAL PROCEDURES

All discarded materials, waste materials, or other objects shall be handled in such a way as to reduce or eliminate the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left on-site. All potentially contaminated materials, e.g., clothing, gloves, etc., will be bagged or drummed as necessary and segregated for proper disposal. All contaminated waste materials shall be disposed of as required by the provisions included in the contract and consistent with regulatory provisions. All non-contaminated materials shall be collected and bagged for appropriate disposal.

Investigation derived waste (IDW) that is free from physical indications of contamination such as odors, staining, and sheens will be placed back into the borehole of origin or in the case of well water allowed to infiltrate the Site surface. In cases where physical indications of contamination are evident, the affected media will be containerized per NYSDOT requirements pending proper disposal. Samples may be analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, SVOCs, pesticides, herbicides, and metals; PCBs; pH (corrosivity), flash point (ignitability); reactivity; and paint filter (free liquids).

11.0 EMERGENCY RESPONSE PROCEDURES

As a result of the hazards at the Site, and the conditions under which operations are conducted, there is the possibility of emergency situations. This section establishes procedures for the implementation of an emergency plan.

11.1 Emergency Coordinator

Emergency Coordinator:.......................... Nick Coulombe............................. Work Phone: (315) 703-4281

The Emergency Coordinator or his on-site designee will, in coordination with the Authority / Agency having Jurisdiction, implement the emergency response procedures whenever conditions at the site warrant such action. The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel or workers as necessary, and notification of emergency response units (**refer to phone listing** in the beginning of this HASP) and the appropriate management staff.

11.2 Evacuation

In the event of an emergency situation, such as fire, explosion, significant release of toxic gases, etc., all personnel will evacuate and assemble in a designated assembly area. The Emergency Coordinator or his on-site designee will have authority to contact outside services as required. Under no circumstances will incoming personnel or visitors be allowed to proceed into the area once the emergency signal has been given. The Emergency Coordinator or his on-site designee must see that access for emergency equipment is provided and that all ignition sources have been shut down once the emergency situation is established. Once the safety of all personnel is established, the Fire Department and other emergency response groups will be notified by telephone of the emergency.

11.3 Potential / Actual Fire or Explosion

Immediately evacuate the Site and notify local fire and police departments, and other appropriate emergency response groups, if LEL values are above 25% in the work zone or if an actual fire or explosion has taken place.

11.4 Environmental Incident (Spread or Release of Contamination)

Control or stop the spread of contamination if possible. Notify the Emergency Coordinator and the Project Manager. Other appropriate response groups will be notified as appropriate.

11.5 Personnel Injury

Emergency first aid shall be applied on-site as necessary. Then, decontaminate (en route if necessary) and transport the individual to nearest medical facility if needed. The ambulance/rescue squad shall be contacted for transport as necessary in an emergency. A map of directions to the nearest hospital is shown in **Appendix A**.

11.6 Personnel Exposure

- Skin Contact: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, and then provide appropriate medical attention. Eyes should be thoroughly rinsed with water for at least 15 minutes.

- Inhalation: Move to fresh air and/or, if necessary, decontaminate and transport to emergency medical facility.

- Ingestion: Decontaminate and transport to emergency medical facility.

- Puncture Wound/Laceration: Decontaminate, if possible, and transport to emergency medical facility.

11.7 Adverse Weather Conditions

In the event of adverse weather conditions, the HSO will determine if work can continue without sacrificing the health and safety of field workers.

11.8 Incident Investigation and Reporting

In the event of an incident, procedures discussed in the Medical Emergency/Incident Response Protocol, presented in **Appendix B** of this HASP, shall be followed.

Appendices

Appendix A

Map and Directions to Hospital

Google Maps

160 Center St, Canastota, NY 13032 to Oneida Health Emergency Room, 321 Genesee St, Oneida, NY 13421

Drive 5.9 miles, 12 min

Map data ©2025 Google 1000 ft

160 Center St
Canastota, NY 13032

1. Head west on E Center St toward Diamond St

0.2 mi

2. Turn left onto S Peterboro St

0.6 mi

3. Turn left onto NY-5 E/E Seneca Ave/Seneca Turnpike

Continue to follow NY-5 E

5.0 mi

4. Turn right onto Fields Dr

0.1 mi

5. Turn right

62 ft

6. Turn right

Destination will be on the right

66 ft

Oneida Health Emergency Room
321 Genesee St, Oneida, NY 13421

Appendix B

Guidance on Incident Investigation and Reporting

Medical Emergency / Incident Response Protocol

Prepared by:

C&S Engineers, Inc.
499 Col Eileen Collins Blvd.
Syracuse, New York 13212

SECTION 1 – PURPOSE

From time to time employees of C&S Engineers, Inc. will sustain an injury while working on the job. While every effort is being made to prevent this, in the event of an injury or illness on the job, the following procedures will be implemented. This format may also be utilized in the event of a property damage incident.

SECTION 2 – SCOPE

This guideline applies to all C&S Engineers, Inc. job sites and employees.

SECTION 3 – GUIDELINES

3.1 First Response Procedures

Upon notification or awareness of an incident/accident with injuries or illness the Emergency Coordinator or his On-Site Designee will:

1. Ensure that the injured employee is receiving immediate first aid and medical care.
2. Notify Emergency Services (911) if injuries are severe.
3. Stabilize the work area; ensure that no one else can be injured.
4. Notify the Project Manager at the earliest possible convenience.
5. Notify the Owner/Client at the earliest possible convenience.

To assist the Health and Safety Manager in the root cause analysis, the Emergency Coordinator or his On-Site Designee will also make an attempt to:

1. Obtain the names and phone numbers of witnesses.
2. Preserve the accident scene if possible for analysis.

3.2 Injury Management

1. If the patient is stable with non-life threatening injuries, the foreman will ensure the employee is transported to the emergency medical facility listed in Section 1 of the HASP. Directions to the nearest emergency medical facility are located in **Attachment A** of the HASP.

At no time will an injured employee drive themselves to medical care.

2. If the patient has serious or life threatening injuries, the emergency coordinator or his on- site designee will notify the emergency services for the area for treatment and transport to a hospital or emergency room. Serious injuries can be considered but not limited to head injuries, loss of consciousness, severe laceration or amputation, fractured bones, burns and eye injuries.

3. Following the treatment and care of the injured employee, the emergency coordinator or his on-site designee and the project manager will initiate the completion of the first injury report. The Health & Safety Manager will assist.

3.3 Project Manager

1. Upon notification of a personal injury or illness on the job site, will notify C&S Engineers, Inc, President and Corporate Legal and C&S Companies Health and Safety Manager.
2. Will report to the worksite to initiate the first injury report.
3. Will report to the treatment facility to check on the well being of the injured employee.
4. The project manager will ensure that the treatment facility is aware that this is a workers compensation case.
5. Will assist the Health and Safety Manager in the analysis of the incident.

3.4 Health & Safety Manager

1. Upon notification of the personal injury will determined if it is necessary to report to the treatment facility or the accident site, depending on the nature of the injuries and the circumstances of the accident.
2. Will report to the worksite to begin a root cause analysis investigation of the accident.
3. The investigation may include interview of witnesses, field crew , and project manager, the photographing of the scene, reconstruction of the accident scene, using test instruments and taking measurements. The Health and Safety Manager may draw diagrams from the information learned.
4. The Health and Safety Manager will work with the owner/client as necessary to investigate the accident.
5. The Health & Safety manager will ensure that the site is safe to resume work.
6. The Health & Safety Manager shall initiate the New York State Compensation form requirements (C-2) and forward a copy of the C-2 to the C & S Engineers, Inc. controller for transmittal to the Compensation Carrier within 8 hrs of notification of the incident or by the end of the next business day.
7. The Health and Safety manager, upon completion of the investigation, will provide the
8. Project Manager with a written investigative report (copy to the President)
9. The accident will be reviewed at the next Project Managers meeting with the intent to prevent further or similar events on other projects.
10. The Health & Safety Manager will assess the incident to determine OSHA record ability and make record if necessary on the OSHA 300 form, within five working days.

SECTION 4 - INCIDENT RESPONSE

4.1 Purpose

To prevent the occurrence of accidents on C&S Engineers, Inc., work sites and to establish a procedure for investigation and reporting of incidents occurring in, or related to C&S work activities.

4.2 Scope

Applies to all incidents related to C&S Engineers, Inc. work activities.

4.3 Definitions

Accident - An undesired event resulting in personal injury and/or property damage, and/or equipment failure.

Fatality - An injury or illness resulting in death of the individual.

Incident - Any occurrence which results in, or could potentially result in, the need for medical care or property damage. Such incidents shall include lost time accidents or illness, medical treatment cases, unplanned exposure to toxic materials or any other significant occurrence resulting in property damage or in "near misses."

Incidence Rate - the number of injuries, illnesses, or lost workdays related to a common exposure base of 100 full-time workers. The rate is calculated as:

N/EH x 200,000

N = number of injuries and illnesses or lost workday cases; EH = total hours worked by all associates during calendar year. 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

Injury - An injury such as a cut, fracture, sprain, amputation, etc. which results from a work accident or from a single instantaneous event in the work environment.

Lost Workday Case - A lost workday case occurs when an injured or ill employee experiences days away from work beginning with the next scheduled work day. Lost workday cases do not occur unless the employee is effected beyond the day of injury or onset of illness.

Recordable Illness - An illness that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These illnesses require medical treatment and evaluation of work related injury. For example, dermatitis, bronchitis, irritation of eyes, nose, and throat can result from work and non-work related incidents.

Recordable Injury - An injury that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These injuries require medical treatment; may involve loss of consciousness; may result in restriction of work or motion or transfer to another job; or result in a fatality.

Near Miss - An incident which, if occurring at a different time or in a different personnel or equipment configuration, would have resulted in an incident.

4.4 Responsibilities

Employees - It shall be the responsibility of all C&S Engineers, Inc. employees to report all incidents as soon as possible to the HSC, regardless of the severity.

Human Resources - has overall responsibility for maintaining accident/ incident reporting and investigations according to current regulations and recording injuries/ illness on the OSHA 300 log, and posting the OSHA 300 log.

Emergency Coordinator - It is the responsibility of the Emergency Coordinator to investigate and prepare an appropriate report of all accidents, illnesses, and incidents occurring on or related to C&S Engineers, Inc. work. The Emergency Coordinator shall complete Attachment A within 24 hours of the incident occurrence.

Health and Safety Manager (HSM) - It is the responsibility of the HSM to investigate and prepare an appropriate report of all lost time injuries and illnesses and significant incidents occurring on or related to C&S Companies. The HSM shall maintain the OSHA 300 form.

Project Managers (PM) - It shall be the PM's responsibility to promptly correct any deficiencies in personnel, training, actions, or any site or equipment deficiencies that were determined to cause or contribute to the incident investigated.

SECTION 5 – GUIDELINES

5.1 Incident Investigation

The Project Manager will immediately investigate the circumstances surrounding the incident and will make recommendations to prevent recurrence. The HSM shall be immediately notified by telephone if a serious accident/ incident occurs. The incident shall be evaluated to determine whether it is OSHA recordable. If the incident is determined to be OSHA 300 recordable, it shall be entered on the OSHA 300 form.

The Project Manager with assistance from the HSM must submit to the office an incident report form pertaining to any incident resulting in injury or property damage.

5.2 Incident Report

The completed incident report must be completed by the Project Manager within 12 hours of the incident and distributed to the HSM, and Human Resources. This form shall be maintained by Human Resources for at least five years for all OSHA recordable cases. This form serves as an equivalent to the OSHA 101 form.

5.3 Incident Follow-up Report

The Incident Follow-Up Report (Attachment B) shall be distributed with the Incident Report within one week of the incident. Delay in filing this report shall be explained in a brief memorandum.

5.4 Reporting of Fatalities or Multiple Hospitalization Accidents

Fatalities or accidents resulting in the hospitalization of three or more employees must be reported to OSHA verbally or in writing within 8 hours. The report must contain 1) circumstances surrounding the accident(s), 2) the number of fatalities, and 3) the extent of any injuries.

5.5 OSHA 300A Summary Form

Recordable cases must be entered on the log within six workdays of receipt of the information that a recordable case has occurred. The OSHA log must be kept updated to within 45 calendar days.

OSHA 300 forms must be updated during the 5 year retention period, if there is a change in the extent or outcome of an injury or illness which affects an entry on a log. If a change is necessary, the original entry should be lined out and a corrected entry made on that log. New entries should be made for previously unrecorded cases that are discovered or for cases that initially weren't recorded but were found to be recordable after the end of the year. Log totals should also be modified to reflect these changes.

5.6 Posting

The log must be summarized at the end of the calendar year and the summary must be posted from February 1 through May 31.

5.7 OSHA 300A

Facilities selected by the Bureau of Labor Statistics (BLS) to participate in surveys of occupational injuries and illnesses will receive the OSHA 300A. The data from the annual summary on the OSHA 300 log should be transferred to the OSHA 300A, other requested information provided and the form returned as instructed by the BLS.

5.8 Access to OSHA Records

All OSHA records (accident reporting forms and OSHA 300 logs) should be available for inspection and copying by authorized Federal and State government officials.

Employees, former employees, and their representatives must be given access for inspection and copying to only the log, OSHA No. 300, for the establishment in which the employee currently works or formerly worked.

SECTION 6 – REFERENCES

29 CFR Part 1904

7.0 ATTACHMENTS

Attachment A - Incident Investigation Form
Attachment B - Incident Follow-Up Report
Attachment C - Establishing Recordability

ATTACHMENT A

INCIDENT INVESTIGATION FORM

Accident investigation should include:

Location: ____

Time of Day: ____

Accident Type: ____

Victim:____

Nature of Injury:____

Released Injury:____

Hazardous Material:____

Unsafe Acts:____

Unsafe Conditions:____

Policies, Decisions:____

____

Personal Factors:____

____

Environmental Factors:____

____

____

ATTACHMENT B

INCIDENT FOLLOW-UP REPORT

Date ____

Foreman: ____

Date of Incident: ____

Site:____

Brief description of incident: ____

____

____

____

____

Outcome of incident: ____

____

____

____

Physician's recommendations: ____

____

____

____

Date the injured returned to work:____

Project Manager Signature: ____

Date: ____

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

ATTACHMENT C

ATTACHMENT ESTABLISHING RECORDABILITY

1. Deciding whether to record a case and how to classify the case.

Determine whether a fatality, injury or illness is recordable.

A fatality is recordable if:

- Results from employment

An injury is recordable if:

- Results from employment and
- It requires medical treatment beyond first aid or
- Results in restricted work activity or job transfer, or
- Results in lost work day or
- Results in loss of consciousness

An illness is recordable if:

- It results from employment

2. Definition of "Resulting from Employment"

Resulting from employment is when the injury or illness results from an event or exposure in the work environment. The work environment is primarily composed of: 1) The employer's premises, and 2) other locations where associates are engaged in work- related activities or are present as a condition of their employment.

The employer's premises include company rest rooms, hallways, cafeterias, sidewalks and parking lots. Injuries occurring in these places are generally considered work related.

The employer's premises EXCLUDES employer controlled ball fields, tennis courts, golf courses, parks, swimming pools, gyms, and other similar recreational facilities, used by associates on a voluntary basis for their own benefit, primarily during off work hours.

Ordinary and customary commute, is not generally considered work related.

Employees injured or taken ill while engaged in consuming food, as part of a normal break or activity is not considered work related. Employees injured or taken ill as the result of smoking, consuming illegal drugs, alcohol or applying make up are generally not considered work related. Employee injured by un authorized horseplay is generally not considered work related, however, an employee injured as a result of a fight or other workplace violence act, may be considered work related. Associates who travel on company business are considered to be engaged in work related activities all the time they spend in the interest of the company. This includes travel to and from customer contacts, and entertaining or being entertained for purpose of promoting or discussing business. Incidents occurring during normal living activities (eating, sleeping, recreation) or if the associate deviates from a reasonably direct route of travel are not considered OSHA recordable.

3. Distinction between Medical Treatment and First Aid.

First aid:

Any one-time treatment, and any follow up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, etc., which do not ordinarily require medical care. Such one time treatment, and follow up visit for the purpose of observation, is considered first aid even though provided by a physician or registered professional personnel.

Medical Treatment (recordable):

a) Must be treated only by a physician or licensed medical personnel.
b) Impairs bodily function (i.e. normal use of senses, limbs, etc.).
c) Results in damage to physical structure of a non-superficial nature (fractures).
d) Involves complications requiring follow up medical treatment.