Remedial Investigation/ Alternatives Analysis Report

389 Manhattan Avenue Site
NYSDEC BCP #C915369
389 Manhattan Avenue
Buffalo, New York

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Certification

I, Thomas H. Forbes, certify that I am currently a NYS registered Professional Engineer and that this Remedial Investigation/Alternatives Analysis Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

NYS Professional Engineer #	Date	Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

1. Introduction

This Remedial Investigation/Alternatives Analysis (RI/AA) Report has been prepared by Roux Environmental Engineering and Geology, D.P.C. (Roux), on behalf of 389 Manhattan, LLC (389 Manhattan), for 389 Manhattan Avenue located in the City of Buffalo, Erie County, New York (Site, see Figures 1 and 2).

389 Manhattan elected to pursue investigation, cleanup, and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in June 2021 (Index No. C915377-04-21). The RI/AA Work Plan (Ref. 1) was approved by the NYSDEC with concurrence of the New York State Department of Health (NYSDOH) on July 29, 2022.

1.1 Background

The BCP Site subject to the BCA, is ±1.56-acres in size and is a large portion of the parcel addressed as 389 Manhattan Avenue (SBL# 79.78-1-1.11), which is approximately 1.82-acres in size, as shown on Figure 2.

The Site and the adjacent parcel to the south, addressed as 375 Manhattan Avenue, were once a 2.9-acre parcel addressed as 389 Manhattan Avenue (SBL#79.78-1-1.1) prior to sub-division and were owned by Buffalo Meter Company, Inc., a water meter manufacturer, from approximately 1915 through 1971 when it was purchased by the University at Buffalo in 1971 to house their Department of Art and Architecture Department. It was purchased in 2006 by Bethune Hall, LLC and is currently owned by Upstate Economic Opportunity Inc. since purchase in February 2022. The proposed redevelopment plan for the Site is the construction of a multi-family 4-story affordable housing development.

Historic records indicate rail spurs adjacent to the Site along the northeast boundary that were associated with adjacent properties along Main Street (former Buffalo Meter Company and former McDougall Butler Company/Keystone Corporation) connecting to the adjacent former Erie Railroad and Delaware, Lackawanna, and Western Railroad (DL&W RR) main lines. The property is zoned mixed-use core (N-1C), which supports residential, commercial, and industrial use, and is currently vacant. Two (2) properties to the north/northwest, 2917 Main Street and 2929/2939 Main Street, have been subject to remedial action. The 2929/2939 Main Street property is a BCP Site (NYSDEC Site No. C915318).

Previous investigations were completed at 389 Manhattan Avenue and identified elevated levels of semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals at concentrations exceeding 6 NYCRR Part 375 Unrestricted, Restricted-Residential, Commercial, and Industrial Soil Cleanup Objectives (SCOs) (Ref. 2). Details of the previous investigation are presented in Section 1.2 below.

1.2 Previous Investigations

March 2020 – Limited Phase II Site Investigation Report

Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark) completed a Limited Phase II Environmental Investigation Report (Phase II, Ref. 3) on the 2.8-acre 389 Manhattan Avenue parcel, prior to its subdivision. The Phase II activities consisted of fourteen (14) test pits (TPs) and submittal of six (6) subsurface soil/fill samples for laboratory analysis for Target Compound List (TCL) semi-volatile organic compounds (SVOCs), RCRA 8 metals, and polychlorinated biphenyls (PCB). No VOC analysis was completed during the Phase II, as no photoionization detector (PID) field screening measurements were noted above background (0 parts per million (ppm)) during the test pit activities.

Ten (10) of the 14 test pits were advanced within the BCP Site footprint (TP-2, TP-3, TP-4, TP-5, TP-6, TP-7, TP-11, TP-12, TP-13, and TP-14, see Figure 3). Four (4) of the six (6) analytical samples were collected from the BCP Site area (TP-6, TP-7, TP-11, and TP-13). Findings of the Benchmark Phase II as it pertains to the BCP Site are detailed below:

- The surface of the Site consists of gravel and visible urban fill such as broken brick and concrete. The north, western and eastern portions of the Site are covered in light vegetation.
- The subsurface conditions encountered at the Site consist of soil/fill material over bedrock. Fill materials were encountered across the entire Site and varied from dark granular fill material to sandy soil containing man-made constituents (brick, cinders, ash, plastic debris, etc.). Native soil was not encountered. The fill material varies in thickness from 1.5 to 7 feet.
- Bedrock was encountered at the 14 test pit locations.
- Groundwater was not encountered during the Phase II. Saturated subsurface soils were encountered at TP-3. These conditions were likely caused by nearby surface conditions (ponding water from recent rain events).
- Semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs) were detected in all four (4) soil/fill samples exceeding their respective Unrestricted Soil Cleanup Objectives (USCOs), Restricted Residential SCOs (RRSCOs), Commercial SCOs (CSCOs), and/or Industrial SCOs (ISCOs).
- Arsenic was detected in the soil/fill exceeding its USCO (13 mg/kg) at TP-6 (13.5 mg/kg) and its ISCO (16 mg/kg) at TP-7 (29 mg/kg) and TP-11 (108 mg/kg).
- Lead was detected in the soil/fill exceeding its USCO (63 mg/kg) at TP-7 (108 m/gkg) and TP-11 (257 mg/kg) and its RRSCO (400 mg/kg) at TP-6 (689 mg/kg).
- Mercury was detected in the soil/fill exceeding its USCO (0.18 mg/kg) at TP-6 (0.378 mg/kg), TP-7 (0.284 mg/kg), and TP-11 (0.354 mg/kg).
- Total PCBs were detected in the soil/fill exceeding its USCO (0.1 m/kg) at TP-6 (0.296 mg/kg) and TP-11 (0.198 mg/kg).

The Phase II soil/fill analytical results have been included on Table 5 with the RI subsurface soil/fill results. Previous sample locations (TP-2 through TP-7 and TP-11 through TP-13) are shown on Figure 3 along with the RI investigation locations.

September 2020 – Phase I Environmental Site Assessment (ESA)

Benchmark Civil/Environmental Engineering & Geology, PLLC completed a Phase I Environmental Site Assessment (Phase I, Ref. 4) on the 2.8-acre 389 Manhattan Avenue parcel, prior to its subdivision. Benchmark identified the following Recognized Environmental Conditions (REC):

- The history of the Site with former railroad tracks, coal storage, and disturbances (apparently from historic import and reworking of on-Site materials) as a previous Phase II Environmental Investigation by Benchmark identified the presence of on-Site fill materials impacted by SVOCs and metals.
- Miscellaneous materials, including mounds of discarded tires, wooded pallets, piles of concrete, etc., as such will require segregation and proper off-site disposal.
- The history of industrial operations in the area of the Site due to the potential for additional subsurface impacts.
- The "closed" and "inactive" spill incidents identified for adjacent/nearby properties are considered historical RECs (HRECs) and as such have been addressed to the satisfaction of the NYSDEC.

1.3 Purpose and Scope

This RI/AA Report has been prepared on behalf of 389 Manhattan to describe and present the findings of the RI activities, and to evaluate the remedial alternative implemented for the Site.

This report contains the following sections:

- Section 2 presents the approach for the RI;
- Section 3 describes the physical characteristics of the Site as they pertain to the investigation findings;
- Section 4 presents the investigation results by media;
- Section 5 describes the fate and transport of the constituents of concern (COCs);
- Section 6 presents the qualitative exposure assessment;
- Section 7 evaluates remedial alternatives for the Site;
- Section 8 presents the RI/AA Report summary and conclusions;
- Section 9 present the proposed Remedial Plan to address the contamination present at the Site; and
- Section 10 provides a list of references for this report.

2. Remedial Investigation Approach

The Remedial Investigation (RI) scope of work focused on further defining the nature and extent of contamination, identifying if other potential source(s) or types of contamination exist, defining chemical constituent migration pathways, qualitatively assessing human health and ecological exposures (if necessary), and obtaining data of sufficient quantity and quality to perform the remedial alternatives evaluation in accordance with NYSDEC DER-10 (Ref. 5).

The RI was performed to supplement the previous Phase II and to further characterize surface/subsurface soil/fill materials, soil vapor, and bedrock groundwater within the Site boundaries. The RI tasks were performed in accordance with the NYSDEC-approved RI/AA Work Plan dated May 2022. RI activities were completed at the Site in June and July 2023.

Field team personnel collected environmental samples (i.e., subsurface soil/fill and groundwater) in accordance with the rationale and protocols described in the Sampling and Analysis Plan (SAP) of the Quality Assurance Project Plan (QAPP, included in the RI/AA Work Plan) as detailed on Table 2. Representative environmental samples collected during the RI were placed in pre-cleaned laboratory provided sample containers, placed on ice in the field, and transported under chain-of-custody command to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified analytical laboratory (Alpha Analytical).

Samples for chemical analysis were analyzed in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies to meet the definitive-level data requirements. A Category B deliverable package was provided for each sample delivery group to allow independent third-party data validation and provide defensible data. Analytical results were evaluated by a third-party data validation expert in accordance with provisions described in the QAPP. The investigation activities are described below. Figure 3 presents RI investigation locations, along with the Phase II test pit shown in the background. Appendix A contains photographs of field activities.

2.1 RI Soil/Fill Investigation

A soil/fill investigation was completed across the Site to supplement the environmental data collected during the Phase II and to further investigate contamination at the Site. The soil/fill investigation included collection of surface soil/fill samples and excavation of test pits to collect subsurface soil/fill samples overlying shallow bedrock. Figure 3 presents the RI investigation locations.

2.1.1 Surface Soil/Fill Investigation

Three (3) surface soil/fill samples were collected during the RI. The sample locations were identified as SS-1 through SS-3.

The surface soil/fill samples were collected from the upper 2-inches of soil/fill present below the vegetative cover. The locations of the surface soil/fill samples are identified on Figure 3.

2.1.2 Subsurface Soil/Fill Investigation

The RI subsurface soil/fill investigation included the advancement of seven (7) test pits, identified as TP-15 through TP-21 and four (4) soil borings, identified as MW-1 through MW-4. The test pits and soil borings were completed between June 21 and 29, 2023.

The test pits were advanced to a refusal, apparent top of bedrock at each test pit location. We note that, in addition to the test pits, the RI/AA Work Plan required soil/fill samples be collected from the soil borings for the monitoring well installations. Due to the shallow nature of bedrock (1 to 3 fbgs) at the Site, a test pit was completed at each soil boring location to collect the subsurface soil/fill sample, in advance of completing the borings to install the bedrock monitoring wells that the four (4) locations.

Soil/fill samples were retrieved from the test pits for visual, olfactory, and PID assessment of subsurface conditions. Subsurface soil/fill samples were collected from the test pits for laboratory analysis. Test pit excavation logs are provided in Appendix B.

2.1.3 Surface and Subsurface Soil/Fill Sample Collection and Analysis

A total of 14 soil/fill samples (excluding QA/QC) were collected during the RI. Samples were selected to assess surface and subsurface soil/fill encountered over the top of shallow bedrock across the Site.

Representative soil/fill samples were analyzed in accordance with the NYSDEC-approved RI/AA Work Plan, for analyses which included Total Compound List (TCL) VOCs, TCL SVOCs, Target Analyte List (TAL) metals, polychlorinated biphenyls (PCBs), pesticides, herbicides, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS) as shown on Table 2. Soil/fill samples collected were placed in pre-cleaned, pre-preserved laboratory provided sample bottles, placed on ice in the field, and transported under chain-of-custody command to Alpha Analytical laboratory in Westborough, Massachusetts. Samples were collected and analyzed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

2.2 Groundwater Investigation

Benchmark personnel provided oversight for the installation of four (4) bedrock groundwater monitoring wells, identified as MW-1 through MW-4, to investigate on-Site bedrock groundwater flow direction and quality (see Figure 3 for locations). Details of well installation, well development, and groundwater sampling are provided below. Monitoring well logs are provided in Appendix B.

2.2.1 RI Monitoring Well Installation

The four (4) RI bedrock monitoring wells were installed by Benchmark's subcontractor, NW Contracting (NWC), between June 26, 2023 and June 29, 2023. NWC mobilized a drill rig to advance 4¼-inch hollow-stem augers (HSA) to the top of bedrock to install and grout in-place a 4-inch diameter PVC casing at each well location to facilitate bedrock coring. A HQ core barrel (approximately 3.8-inch core hole) was used to core the bedrock at the Site. The four (4) monitoring wells were installed into the upper groundwater zone encountered in the bedrock below the Site.

Potable water used in the bedrock coring process was taken from a fire hydrant located at along Manhattan Avenue under a hydrant permit obtained by Benchmark from Buffalo Water (Appendix C). During the bedrock coring some potable water was lost in the process. Water recovered from the coring process was containerized in 55-gallon drums and staged on-Site. The estimated volume of water lost has been included on Table 3 along with well development volumes and well construction details.

After completion of the four (4) bedrock borings, a 2-inch inner diameter (ID) flush-joint Schedule 40 PVC monitoring well was installed at each boring location. Each well was constructed with a flush-joint Schedule 40 PVC, 0.010-inch machine slotted well screen. Each well screen and attached riser were placed at the bottom of each borehole and a silica sand filter pack (size #00N) was installed from the bottom of the well to 1 to 2 feet above the top of the screen. A bentonite chip seal was installed from the top of the sand pack to the top of bedrock surface and hydrated to mitigate the potential for downhole contamination. The annulus space around the riser pipe from top of bedrock to ground surface encased in the 4-inch diameter PVC casing was filled with grout.

The overburden soil/fill material spoils generated were placed in drums and staged on-Site. The monitoring wells were completed as stickups with lockable J-plugs. A summary of the monitoring well constructions is included in Table 3.

2.2.2 Monitoring Well Development

The monitoring wells were developed in accordance with Benchmark and NYSDEC protocols provided in the RI/AA Work Plan. Development of the monitoring wells was completed with dedicated disposable polyethylene bailers via surge and purge methodology.

Field parameters including pH, temperature, turbidity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and specific conductance were measured during development until they became relatively stable. Stability was defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements; or a minimum of three (3) well volumes were removed if the well went dry. MW-1 went dry during development; 8 well volumes were removed from the well. MW-2, MW-3, and MW-4 did not go dry; approximately 55 gallons were removed from each well during development. Field forms from well development are included in Appendix C. The groundwater generated during the well development was drummed and staged on-site. No visual, olfactory or PID measurements were observed in association with the well development water, which was containerized and staged on-site.

2.2.3 Groundwater Sample Collection and Analysis

MW-2, MW-3, and MW-4 were purged and sampled via low flow methodology on July 13, 2023. MW-1 was purged dry on July 13, 2023 and field staff returned the next day, within 24 hours, to collect groundwater samples using a bailer. Field forms from well sampling are included in Appendix C. Visual and olfactory field observations were made on the groundwater removed from the wells. No indications of impacts (sheen or odors) were noted during groundwater sampling. Purge water was drummed with the water generated from the well installation and development activities.

Groundwater samples were collected from the four (4) monitoring wells at the Site on July 13 and 14, 2023. Each monitoring well was analyzed in accordance with the NYSDEC-approved RI/AA Work Plan for analyses which included TCL VOCs, TCL SVOCs, TAL metals, PCBs, pesticides, herbicides, 1,4-dioxane, and PFAS, as shown on Table 2.

Groundwater samples collected were placed in pre-cleaned, pre-preserved laboratory-provided sample bottles, placed on ice in the field, and transported under chain-of-custody command to Alpha Analytical in Westborough, Massachusetts. Samples were collected and analyzed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

2.3 Soil Vapor Points

Three (3) soil vapor points, identified as SV-1 through SV-3, were installed on August 17, 2023, within the proposed building footprint at the Site, as shown on Figure 3. The soil vapor probes were installed to 2 fbgs at each location using a hand drill with an approximate 3-inch drill bit. The drill bit was advanced to top of rock refusal before installing the stainless-steel vapor point (6-inches in length) which was attached to polyethylene tubing and placed at the bottom of the hole. Glass beads were installed in the anulus space around the stainless-steel soil vapor point screen and a bentonite seal installed above the glass beads to ground surface and hydrated.

The three (3) soil vapor samples and one (1) ambient air sample (OA-1) were collected using laboratory provided pre-cleaned and certified air sampling cannisters equipped with 4-hr regulators. Samples were submitted under chain of custody to Alpha Analytical, in Mansfield, Massachusetts for VOC analysis via EPA Method TO-15 with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

2.4 Field Specific Quality Assurance/Quality Control Sampling

In addition to the subsurface soil/fill and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples were collected and analyzed to ensure the reliability of the generated data as described in the QAPP and to support the required third-party data usability assessment effort. Site-specific QA/QC samples included matrix spikes (MS), matrix spike duplicates (MSD), and blind duplicates (BD).

Two (2) site specific QA/QC samples (MS, MDS, and BD) were collected during the RI. One (1) set of QA/QC samples were collected from the soil/fill media and one (1) set was collected from the groundwater media. The site-specific QA/QC samples were collected at a frequency of one (1) for every twenty (20) samples that were submitted to the laboratory for analysis. Additionally, one trip blank was submitted to the laboratory for each day aqueous VOC samples were collected, equipment blanks were collected with VOC and PFAS samples, and a field blank was collected with PFAS samples (see Table 2).

2.5 Site Mapping

A Site map was developed for the RI field investigation. Field personnel used a hand-held Trimble GPS unit to locate the test pit and monitoring well locations. The monitoring well locations were surveyed by

Benchmark to locate the monitoring wells and establish monitoring well elevations (ground surface and top of riser) to allow for assessing groundwater flow direction.

An isopotential map (see Figure 4) was prepared based on water level measurements collected July 13, 2023. A benchmark was established for the Site (northeast corner of storm sewer grate along Manhattan Avenue) and assigned an arbitrary vertical datum of 500.0 ft. The monitoring well risers were surveyed against this reference elevation, with depth to water measurements, and associated groundwater elevations established accordingly.

2.6 Decontamination & Investigation-Derived Waste Management

Every attempt was made to utilize dedicated sampling equipment during the RI; however, non-dedicated equipment that was required and/or used (e.g., groundwater pump) was decontaminated with a non-phosphate detergent (i.e., Alconox®) and potable water mixture, rinsed with distilled water, and air-dried before each use in accordance with the field operating procedure (FOP) included in the RI/AA Work Plan.

2.7 Community Air Monitoring Program

During the RI activities, real-time community air monitoring was performed during intrusive activities at the Site (June 21, 2023 (test pits) June 26th through June 29th, 2023 (monitoring well installation), August 17, 2023 (soil vapor point installation) and September 21st, 2023 (soil borings for geotechnical investigation) in accordance with the Community Air Monitoring Plan (CAMP) included in the project health and safety plan (HASP). Particulate and VOC monitoring were performed downwind of the investigation areas.

There were no exceedances of the particulate (150 micrograms per cubic meter (ug/m^3) or total volatile organic levels (5 parts per million (ppm)) established for 15-minute time weighted averages during the intrusive RI or geotechnical activities, which the exception of

- 6/28/2023 – 6/29/2023: The particulate meter was reading elevated levels of particulates above 0.150 mg/m^3 due to the wildfire smoke from Canada prior to the start of work. The NYSDEC was contacted to discuss air quality impacts which were acknowledged.

The RI CAMP data has been included in Appendix D.

3. Site Physical Characteristics

The physical characteristics of the Site observed during the RI are described in the following sections.

3.1 General Site Features and Site Topography

The Site is a ±1.56-acre in size and is a large portion of the 1.82-acre parcel addressed at 389 Manhattan Avenue, Buffalo, Erie County, New York (see Figures 1 and 2). The Site is currently covered with gravel and visible urban fill such as broken brick and concrete in the central portion of the Site and light vegetation in the north, western, and eastern portions of the Site. Piles of fill material, sand, crushed gravel, vegetative debris, etc. are present in the east portion of the Site from dumping activities. The majority of the Site is flat, with an elevation between 653 and 655 feet above mean sea level with an increase in elevation along the northeastern portion of the Site which reaches an elevation of 660 ft above mean sea level based on a 2020 topographic survey completed by Millard, MacKay & Delles

The Site is bordered by the parking lot and green space associated with the Bethune Lofts (residential apartment building located at 2917 Main Street) and residential apartment currently under construction (2929 Main Street) to the north, the remaining portion of the 389 Manhattan Avenue parcel outside the BCP Site to the east, vacant land associated with 375 Manhattan Avenue to the south and Manhattan Avenue and Bennett High School to the west.

According to the City of Buffalo Green Code Land Use Plan, the current zoning assigned to the Site is N-1C (mixed-use core) defined as mixed-use centers of high intensity.

3.2 Geology and Hydrogeology

3.2.1 Overburden

The United States Department of Agriculture (USDA) Natural Resources Conservation Service soil survey map of Erie County (Ref. 6) describes the general soil type at the Site as Urban Land Urban Land Wassaic Complex (Ux) and Benson very channery loam (BfB). Soils associated with Urban Land are characterized as miscellaneous areas in which 80% or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structures. Urban Land Wassaic Complex soils are composed of 60% urban land, 35% Wassaic or similar soils, and 5% minor components. Wassaic Complex soils are classified as well drained soils formed in loamy till with a slope of 0 to 3 percent. Benson very channery loam is comprised of 75% Benson and similar soils characterized as somewhat excessively drained loam with flat limestone fragments and 3 to 8 percent slopes and 25% minor components.

The previous investigation and RI identified the Site geology as gravel, urban fill material, and/or vegetation over 1.5 to 7 ft of urban fill to bedrock. The urban fill is described as dark granular fill material or sandy soil containing man-made constituents such as brick, cinders, ash, plastic, and debris. Native soil was not encountered at the Site.

3.2.2 Bedrock

Based on the bedrock geologic map of Erie County (Ref. 7), the Site is situated over the Onondaga Limestone Formation of the Middle Devonian Series. The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximate thickness of 110 to 160 feet. Limestone bedrock was encountered underlying the Site during the previous investigation and RI at depths ranging from 1.5 to 7 fbgs.

In order to install groundwater monitoring wells into the upper most water bearing zone, the upper bedrock was cored to depths ranging from approximately 15 to 20 fbgs. Information on the bedrock quality is included on the monitoring well logs in Appendix B.

3.2.3 Hydrogeology

Overburden groundwater is not present due to the shallow nature of the bedrock underlying the Site. The depths to groundwater were measured at the four (4) Site bedrock monitoring wells on July 13, 2023 and used to evaluate Site hydrogeology. Depth to groundwater ranged from approximately 10.6 fbgs (MW-3) to 14.9 fbgs (MW-1), as shown in Table 3. In general, groundwater flow direction is northwesterly, as shown on Figure 4.

The hydraulic gradient of the bedrock groundwater was determined from groundwater elevation data collected on July 13, 2023. The estimated average horizontal hydraulic gradient for bedrock groundwater was calculated to be approximately 0.013 ft/ft. The hydraulic gradient calculations are included in Appendix E.

Rising head tests were completed at MW-2, MW-3, and MW-4 to assess the hydraulic conductivity (K) of the bedrock aquifer. Results of the rising head test are provided in Appendix E and below:

Well Location	K (cm/s)	K (ft/day)
MW-2	0.0009	2.43
MW-3	0.0012	3.41
MW-4	0.0012	3.54

Based on the hydraulic conductivity measured at each well, the average hydraulic conductivity at the Site is approximately 1.1 x 10^{-3} cm/s (3.13 ft/day). Assuming an average porosity of 0.13, indicative of limestone bedrock, average linear velocity of bedrock groundwater is approximately 1.7 x 10^{-4} cm/s (0.33 ft/day). Velocity calculations are provided in Appendix E.

4. Investigation Results by Media

The nature and extent of contamination at the Site was further characterized using soil/fill, groundwater, and soil vapor samples collected and analyzed as part of the RI. As described in Section 1.2, samples collected during the Phase II were used to supplement this RI and are discussed below.

Appendix F contains laboratory analytical data packages for samples analyzed from the RI. Tabulated analytical results are shown only for those parameters for which a value greater than the method detection limit (MDL) was detected at a minimum of one (1) sample location. Table 2 summarizes the sampling and analytical program employed under the RI. The surface soil/fill results are summarized on Table 4, the subsurface soil/fill results are summarized on Table 5, the groundwater results are summarized on Table 6, and the soil vapor results are summarized on Table 7. Table 5A is a summary of the compounds detected in soil/fill results (both surface and subsurface), number of exceedances, and maximum concentrations for compounds detected. Table 6A is a summary of the compounds detected in groundwater, number of exceedances, and maximum concentrations for compounds detected.

4.1 Standards, Criteria, and Guidance

According to DER-10 Section 1.3(b)71, SCGs are defined as:

> *standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable or not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with, and with consideration being given to guidance determined, after the exercise of scientific and engineering judgment, to be applicable. This term incorporates both the CERCLA concept of 'applicable or relevant and appropriate requirements' (ARARs) and the USEPA's 'to be considered' (TBCs) category of non-enforceable criteria or guidance. For purposes of this Guidance, 'soil SCGs' means the soil cleanup objectives and supplemental soil cleanup objectives identified in 6NYCRR 375-6.8 and the Commissioner Policy on Soil Cleanup Guidance (CP-Soil).*

For discussion purposes, analytical results for the Phase II and RI were compared with the following SCG values.

Soil/Fill

Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006.

Guidance values for PFOA and PFOS in soil per Sampling, Analysis, and Assessment of Per-and Polyfluoroalkyl Substances (PFAS), Under NYSDEC's Part 375 Remedial Programs, revised April 2023.

Groundwater

Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000, June 2004, February 2023 (Ref. 8).

Soil Vapor

NYSDOH Decision Matrices – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and subsequent updates (Ref. 9).

4.2 RI Surface Soil/Fill Investigation Results

Three (3) surface soil/fill samples were collected as part of the RI. The surface soil/fill samples (SS-1 through SS-3) were collected from the upper 2-inches of soil/fill present below the vegetative cover, in present in the area the sample was collected at the Site. Table 4 summarizes the RI surface soil/fill sample results with comparison to applicable Part 375 SCOs and guidance values. Sample locations are shown on Figure 3 and Figure 5 present sample locations along with SCO exceedances. The laboratory analytical data package for the surface soil samples is included in Appendix F.

4.2.1 Volatile Organic Compounds

The surface soil/fill samples were not analyzed for VOCs, per the RI/AA Work Plan.

4.2.2 Semi-Volatile Organic Compounds

SVOCs were detected above MDLs in the three (3) surface soil/fill samples analyzed during the RI. PAHs were detected in one (1) surface soil/fill sample, SS-2, at concentrations exceeding their respective SCOs, as discussed below.

- Benzo(a)anthracene was detected above its USCO/RRSCO (1 mg/kg) at SS-2.
- Benzo(a)pyrene was detected above its ISCO (1.1 mg/kg) at SS-2.
- Benzo(b)fluoranthene was detected above its USCO/RRSCO (1 mg/kg) at SS-2.
- Benzo(k)fluoranthene was detected above its USCO (0.8 mg/kg) at SS-2.
- Chrysene was detected above its USCO (1 mg/kg) at SS-2.
- Dibenzo(a,h)anthracene was detected above its USCO/RRSCO (0.33 mg/kg) at SS-2.
- Indeno(1,2,3-cd)pyrene was detected above its USCO/RRSCO (0.5 mg/kg) at SS-2.

1,4-dioxane was not detected above MDLs at the three (3) surface soil/fill samples analyzed for 1,4-dioxane during the RI.

4.2.3 Inorganic Compounds

Metals were detected above MDLs in the three (3) surface soil/fill samples analyzed during the RI. Metal analytes were detected in one (1) surface soil/fill sample, SS-2, at concentrations exceeding their respective SCOs, as discussed below.

- Copper was detected above its CSCO (270 mg/kg) at SS-2.
- Lead was detected above its USCO (63 mg/kg) at SS-2.
- Zinc was detected above its USCO (109 mg/kg) at SS-2.

4.2.4 Polychlorinated Biphenyls

PCBs were detected above MDLs in one (1) of the three (3) surface soil/fill samples analyzed during the RI (SS-2). Total PCBs were not detected above its USCO (0.1 mg/kg).

4.2.5 Pesticides and Herbicides

Pesticides were detected above MDLs in the three (3) surface soil/fill samples analyzed during the RI. Pesticides were detected in two (2) of the (3) surface soil/fill samples above their respective SCOs, as discussed below.

- 4,4'-DDE was detected above its USCO (0.0033 mg/kg) at SS-1 and SS-3.
- 4,4'-DDT was detected above its USCO (0.0033 mg/kg) at SS-1 and SS-3.

No herbicides were detected above MDLs in the three (3) surface soil/fill samples.

4.2.6 Per- and Polyfluoroalkyl Substances

PFAS were detected above MDLs in the three (3) surface soil/fill samples analyzed during the RI. PFOA and PFOS were not detected above their respective SCOs in the three (3) surface soil samples.

4.2.7 Surface Soil/Fill Summary

Based on the RI data, SVOCs (specifically PAHs), metals, and pesticides were detected above their respective USCOs within the surface soil/fill material at the Site.

PCBs, herbicides, 1,4-dioxane, and PFAS were not detected above their respective USCOs in the surface soil/fill at sample locations.

4.3 RI Subsurface Soil/Fill Investigation Results

Subsurface soil/fill sampling was completed across the Site to further assess on-Site subsurface conditions via test pits. Seven (7) test pits, TP-15 through TP-21 were completed to the top of bedrock and subsurface soil/fill samples were collected for analysis. Due to the shallow nature of bedrock (1 to 3 fbgs) at the Site, a test pit was completed at each soil boring locations to install the four (4) monitoring wells (MW-1 through MW-4) to collect the subsurface soil/fill sample, in advance of completing the borings to install the bedrock monitoring wells that the four (4) locations. Soil/fill samples collected from the test pits and well locations were composite samples representative of soil/fill to the top of shallow bedrock. Table 5 summarizes the RI subsurface soil/fill sample results with comparison to applicable Part 375 SCOs. Sample locations are shown on Figure 3 and Figure 5 present sample locations along with SCO exceedances. The laboratory analytical data package for soil samples is included in Appendix F.

Three (3) soil/fill samples were collected during geotechnical borings completed in September 2023 and analyzed for VOCs only. The geotechnical borings were done on behalf of the civil engineer to assist with building foundation and site design. Roux field screened soil/fill samples retrieved from the borings and the three (3) locations with the highest PID field screening results were submitted for VOC analysis. The results of the geotechnical samples sent for analysis are summarized on Table 5 along with the Phase II

subsurface sample results. The Phase II and geotechnical sample locations shown on Figure 3 and Figure 5 present sample locations along with SCO exceedances.

4.3.1 Volatile Organic Compounds

Five (5) subsurface soil/fill samples were analyzed for VOCs as part of the RI. No olfactory evidence or PID measurements above background (i.e., 0 parts per million (ppm)) were noted during the RI. However, elevated PID readings were noted during a few of geotechnical borings and three (3) soil/fill samples were collected for VOC analysis. The results of the three (3) samples from geotechnical borings B-6, B-9, and B-10 are discussed below. No VOC samples were collected during the Phase II.

VOCs were detected above MDLs in the five (5) subsurface soil/fill samples analyzed for VOCs during the RI and the three (3) subsurface soil samples submitted from the geotechnical borings. Acetone was detected above its USCO (0.05 mg/kg) at TP-19 (0-2 ft) and total xylene was detected above its USCO (0.26 mg/kg) at B-10 (0-2 ft).

4.3.2 Semi-Volatile Organic Compounds

Eleven (11) samples were analyzed for TCL SVOCs as part of the RI and four (4) samples from the Phase II. SVOCs were detected above MDLs in all 15 subsurface soil/fill samples analyzed. PAHs were detected in eleven (11) of the 15 subsurface soil/fill samples at concentrations exceeding their respective USCOs, RRSCOs, CSCOs and/or ISCOs.

- Benzo(a)anthracene was detected above its USCO/RRSCO (1 mg/kg) at TP-6, TP-7, TP-17, TP-18, TP-21, MW-2, and MW-4; and its CSCO (5.6 mg/kg) at TP-11.
- Benzo(a)pyrene was detected above its ISCO (1.1 mg/kg) at TP-6, TP-7, TP-11, TP-17, TP-21, MW-2, and MW-4.
- Benzo(b)fluoranthene was detected above its USCO/RRSCO (1 mg/kg) at TP-6, TP-7, TP-13, TP-17, TP-18, TP-19, TP-21, MW-2, and MW-4; and its ISCO (11 mg/kg) at TP-11.
- Benzo(k)fluoranthene was detected above its USCO (0.8 mg/kg) at TP-6, TP-7, and TP-11.
- Chrysene was detected above its USCO (1 mg/kg) at TP-6, TP-7, TP-17, TP-18, TP-21, MW-2, and MW-4; and its RRSCO (3.9 mg/kg) at TP-11.
- Dibenzo(a,h)anthracene was detected above its USCO/RRSCO (0.33 mg/kg) at TP-7; above its CSCO (0.56 mg/kg) at TP-6; and its ISCO (1.1 mg/kg) at TP-11.
- Indeno(1,2,3-cd)pyrene was detected above its USCO/RRSCO (0.5 mg/kg) at TP-6, TP-7, TP-11, TP-15, TP-17, TP-18, TP-19, TP-21, MW-2, and MW-4.

No SVOCs were detected above their respective USCOs in the samples collected from TP-16, TP-20, MW-1, and MW-3.

1,4-dioxane was not detected above MDLs at the eleven (11) subsurface soil/fill samples analyzed during the RI.

4.3.3 Inorganic Compounds

Eleven (11) samples were analyzed for TAL metals as part of the RI and four (4) samples from the Phase II were analyzed for RCRA 8 metals. Metal analytes were detected at concentrations above MDLs in all eleven (15) samples analyzed during the RI. Metals including arsenic, chromium, copper, lead, mercury, and/or zinc were detected exceeding SCOs.

- Arsenic was detected above its USCO (13 mg/kg) at TP-6, TP-21 and MW-2; and its ISCO (16 mg/kg) at TP-7 and TP-11.
- Chromium was detected above its USCO (30 mg/kg) at MW-3.
- Copper was detected above its USCO (50 mg/kg) at TP-15, TP-19, TP-21, and MW-3; and its CSCO (270 mg/kg) at MW-2.
- Lead was detected above its USCO (63 mg/kg) at TP-7, TP-11, TP-17, TP-19, TP-21; and its RRSCO (400 mg/kg) at TP-6 and MW-2.
- Mercury was detected above its USCO (0.18 mg/kg) at TP-6, TP-7, and TP-11, TP-17, TP-19, and TP-21.
- Zinc was detected above its USCO (109 mg/kg) at TP-19, TP-21, MW-2, and MW-3.

4.3.4 Polychlorinated Biphenyls

Five (5) samples were analyzed for PCBs as part of the RI and four (4) as part of the Phase II. PCBs were detected above MDLs in 12 of the 15 subsurface soil/fill samples collected. Total PCBs were detected above its USCO (0.1 mg/kg) at TP-6, TP-11, TP-17.

4.3.5 Pesticides and Herbicides

Five (5) samples were analyzed for pesticides and herbicides as part of the RI. Pesticides were detected above their respective USCOs in all five (5) samples.

- 4,4'-DDD was detected above its USCO (0.0033 mg/kg) at TP-17.
- 4,4'-DDE was detected above its USCO (0.0033 mg/kg) at TP-16, TP-17, TP-18, and TP-20.
- 4,4'-DDT was detected above its USCO (0.0033 mg/kg) at TP-16, TP-17, TP-19, and TP-20.
- Dieldrin was detected above its USCO (0.005 mg/kg) at TP-16, TP-17, and TP-18.

Herbicides were not detected above MDLs in the five (5) samples submitted for herbicide analysis.

4.3.6 Per- and Polyfluoroalkyl Substances

Five (5) samples were analyzed for PFAS as part of the RI. PFAS were detected above MDLs in all five (5) subsurface soil/fill samples. PFOS was detected above its unrestricted guidance value (0.88 mg/kg) at TP-17. PFOA was not detected above its unrestricted use guidance values in the five (5) subsurface soil samples.

4.3.7 Subsurface Soil/Fill Summary

VOCs, SVOCs, metals, PCBs, pesticides, and PFAS were detected above their respective USCOs, RSCO, CSCOs, ISCOs, and/or guidance values within the fill material across the Site.

No herbicides or 1,4-dioxane were detected above their respective USCOs in the subsurface soil/fill at any location.

4.4 Groundwater Investigation

Four (4) groundwater monitoring wells (MW-1 through MW-4) were installed as part of the RI to further investigate on-Site groundwater quality and flow direction. The four (4) wells were sampled on July 13 and 14, 2023 in accordance with the RI/AA Work Plan.

Groundwater has a northwesterly flow direction on-Site, and depth to groundwater ranged from 10.65 fbgs (MW-3) to 14.9 fbgs (MW-1). MW-2 and 4 appear to be the upgradient wells on Site, while MW-1 and MW-3 are downgradient wells. Table 6 presents a comparison of the groundwater sample results to GWQS and Figure 6 is a summary of the GWQS exceedances at the respective well locations. The laboratory analytical data package for the groundwater samples is included in Appendix F.

4.4.1 Volatile Organic Compounds

VOCs including 1,2,4-Trimethylbenzene, cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and/or vinyl chloride (VC) were detected in groundwater exceeding their respective GWQS/GV at the four (4) bedrock monitoring well locations analyzed during the RI. VOC exceedances in groundwater are summarized below:

- 1,2,4-Trimethylbenzene was detected above its GWQS (5 ug/l) at MW-4 (9.9 ug/l);
- Cis-1,2-DCE was detected above its GWQS (5 ug/l) at MW-1 (12 ug/l), MW-2 (100 ug/l), MW-3 (11 ug/l), and MW-4 (22 ug/l);
- TCE was detected above its GWQS (5 ug/l) at MW-2 (13 ug/l) and MW-3 (26 ug/l);
- VC was detected above its GWQS (2 ug/l) at MW-2 (34 ug/l) and MW-4 (30 ug/l).

TICs were not detected at MW-1, MW-2, and MW-3. Total TICs were detected at a concentration of 2.98 ug/l at MW-4.

4.4.2 Semi-volatile Organic Compounds

SVOCs, specifically PAHs, were detected in groundwater above method detection limits (MDLs) at 1 of the 4 locations analyzed during the RI (MW-3). However, no SVOCs were detected exceeding GWQS/GV. TICs were detected at 1 of the 4 locations at a concentration of 6.4 ug/L (MW-4).

1,4-dioxane was not detected in groundwater above MDLs at the two (2) locations analyzed during the RI (MW-2 and MW-3).

4.4.3 Inorganic Compounds

Metal analytes were detected in groundwater exceeding GWQS/GV at the four locations analyzed during the RI. Metals detected above GWQS/GV primarily included common occurring metals in urban environments (iron, magnesium, and sodium) and cobalt and manganese, as summarized below:

- Cobalt was detected above its GWQS (5 ug/l) at MW-2 (5.2 ug/l) and MW-4 (16.7 ug/l);
- Iron was detected above its GWQS (300 ug/l) at MW-4 (140,000 ug/l);
- Magnesium was detected above its GWQS (35,000 ug/l) at MW-1 (38,900 ug/l), MW-2 (54,000 ug/l), and MW-4 (48,700 ug/l);
- Manganese was detected above its GWQS (300 ug/l) at MW-2 (1,205 ug/l) and MW-4 (1,280 ug/l); and
- Sodium was detected above its GWQS (20,000 ug/l) at MW-1 (354,000 ug/l), MW-2 (268,000 ug/l), MW-3 (594,000 ug/l), and MW-4 (586,000 ug/l).

4.4.4 Polychlorinated Biphenyls

PCBs were not detected in groundwater above MDLs at the four (4) locations analyzed during the RI.

4.4.5 Pesticides and Herbicides

Pesticides and herbicides were not detected in groundwater above MDLs at the four (4) locations analyzed during the RI.

4.4.5 Per- and Polyfluoroalkyl Substances

Two (2) samples were analyzed for PFAS as part of the RI. PFAS were detected above MDLs the two (2) groundwater samples. PFOA was detected above its GWQS/GV (6.7 ng/L) at MW-2. PFOS was not detected above its GWQS/GV in the two (2) groundwater samples.

4.4.6 Groundwater Summary

VOCs were detected exceeding GWQS/GV in groundwater samples collected from the four (4) monitoring wells installed during the RI. These exceedances primarily consisted of chlorinated VOCs (cVOCs), including TCE and its breakdown products (cis-1,2-DCE and VC), with one petroleum VOC (1,2,4-Trimethylbenzene) exceedance at MW-4. The highest concentrations of are at MW-2 and MW-4, which are upgradient locations. VOCs, primarily cVOCs, are considered a COC in groundwater at this Site, as it can create a SVI concern for future buildings constructed on the Site. The source of the cVOCs is likely south of the Site and off-site based on groundwater concentrations and flow direction.

Naturally occurring metals including iron, magnesium, and sodium, were detected exceeding GWQS/GV at the four (4) monitoring wells installed during the RI. Generally, the highest concentrations detected were at MW-2 and MW-4 which are upgradient well locations. Additionally, these metals are commonly observed in groundwater in urban areas and therefore are not considered COCs for the Site. Cobalt and manganese were also detected in groundwater exceeding their respective GWQS/GV at MW-2 and MW-4 (upgradient well locations), and it is unlikely the Site is the source of groundwater impacts. Additionally,

manganese concentrations do not exceed its USCO at any location. There are no established SCOs for cobalt. Therefore, metals are not considered a COC in groundwater at this Site.

PFAS were detected above MDLS at the two (2) wells analyzed during the RI, MW-2 and MW-3. PFOA was detected exceeding its GWQS/GV at MW-2, an upgradient well location. PFOS did not exceed its GWQS/GV at either location.

SVOCs were detected in groundwater samples collected from the four (4) monitoring wells installed during the RI below their respective GWQS/GV. 1,4-dioxane, PCBs, pesticides, and herbicides were not detected above MDLs at any location.

4.5 Soil Vapor Assessment

The soil vapor assessment consisted of the collection of three (3) soil vapor samples from within the footprint of the building to be constructed on the Site. A concurrent outdoor air (OA) sample was collected as well. The samples were collected for an approximate 4-hour duration and analyzed for VOCs via EPA Method TO-15.

The purpose of the soil vapor sampling was to evaluate potential impacts in the proposed building footprint. A summary of the SV and OA analytical results are found on Table 7.

NYSDEC nor NYSDOH have published soil vapor standards or guidance value, but NYSDOH has Decision Matrices for the following 21 VOCs: trichloroethene, cis-dichloroethene, 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene, 1,1,1-trichloroethane, methylene chloride, vinyl chloride, benzene, ethylbenzene, naphthalene, cyclohexane, isooctane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, o-xylene, m-xylene, p-xylene, heptane, hexane, and toluene. The decision matrices are used to determine if soil vapor intrusion (SVI) is a potential concern at a Site building and may require mitigation to prevent exposure.

The eight (8) compounds mentioned above were detected at the following SV locations:

- Trichloroethene: SV-1, SV-2, and SV-3.
- Cis-dichloroethene: SV-1.
- Tetrachloroethene: SV-1 and SV-3
- Methylene chloride was detected at SV-1 and SV-3 but the concentrations were similar to the outdoor air sample indicating a background condition.
- Benzene: SV-1, SV-2, and SV-3.
- Ethylbenzene: SV-1, SV-2, and SV-3.
- Cyclohexane: SV-1, SV-2, and SV-3.
- 1,2,4-trimethylbenzene: SV-1 and SV-3.
- 1,3,5-trimethylbenzene: SV-3.
- o-xylene: SV-1, SV-2, and SV-3.

- m,p-xylene: SV-1, SV-2, and SV-3.
- Heptane: SV-1, SV-2, and SV-3.
- Hexane: SV-1, SV-2, and SV-3.
- Toluene: SV-1, SV-2, and SV-3.

Based on the presence of these compounds in the soil vapor, SVI may be a concern. A formal SVI assessment would need to be completed after building construction to confirm.

The laboratory analytical data package for the soil vapor samples is included in Appendix F.

4.6 RI Data Usability Summary

In accordance with the RI/AA Work Plan, the laboratory analytical data from this investigation was assessed and as required, submitted for independent review. Data Validation Services located in North Creek, New York performed the data usability summary assessment, which involved a review of the summary form information and sample raw data, and a limited review of associated QC raw data. Specifically, the following items were reviewed:

- Data Completeness
- Case Narrative
- Custody Documentation/Sample Receipt
- Holding Times
- Surrogate/Isotopic Dilution/Internal Standard Recoveries
- Method
- Matrix Spike Recoveries/Duplicate Correlations
- Blind Field Duplicate Correlation
- Laboratory Control Samples
- Instrumental Tunes
- Initial and Continuing Calibration Standards
- Method Compliance
- Sample Result Verification

The Data Usability Summary Report (DUSR) was conducted using guidance from the USEPA Region 2 validation Standard Operating Procedures, the USEPA National Functional Guidelines for Data Review, as well as professional judgment.

In summary, the analytical results were usable either as reported or with minor qualification or edit with the exception of the following data.

- 1,4-dioxane results determined from the volatile fraction were rejected due to processing. 1,4-dioxane results provide in this report were generated from Method 8027 SIMs and deemed acceptable.

- Three (3) SVOCs (Hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4,6-dinitro-2-methylphenol in the soil sample from TP-20 and one (1) SVOC (3,3-Dichlorobenzidine) in soil sample from MW-2, were rejected due to apparent matrix effects. We note that the rejected results were non-detect.

Additional qualifications of the data have been incorporated to the summary data tables. A copy of the DUSR is included in Appendix G.

4.7 Constituents of Concern (COCs)

Based on the findings of the Phase II and RI and the planned unrestricted use redevelopment of the Site, the Constituents of Concern (COC) are:

Soil/Fill: PAHs, metals, PCBs, pesticides and PFOS, which were present in the soil/fill material across the Site overlying shallow bedrock.

Groundwater: VOCs (primarily TCE, cis-1,2-DCE, and VC), and PFOA at MW-2.

Soil Vapor: Potential for SVI concern for future buildings. A post-redevelopment SVI assessment including both sub-slab and indoor air samples will be required to determine if SVI is a concern.

4.8 Waste Characterization Sampling

Ten (10) waste characterization samples (WC-1 through WC-10) were collected during the RI from fill material across the Site, including the fill piles, to be addressed during remediation. The samples were analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, TCLP SVOCs, TCLP metals, PCBs, ignitability, corrosivity and reactivity. The results of the waste characterization samples indicated non-hazardous characteristics.

The laboratory reports for the waste characterization samples are included in Appendix I.

5. Fate and Transport of COCs

The results of the previous Phase II and RI soil/fill, groundwater, and soil vapor sampling were used to evaluate the fate and transport of COCs in Site media. The mechanisms by which the COCs can migrate to other areas or media are briefly outlined below.

5.1 Fugitive Dust Generation

Contaminants present in soil/fill can be released to ambient air because of fugitive dust generation. Fugitive dust generation during excavations related to construction and Site redevelopment is considered a relevant potential short-term migration pathway.

Particulate monitoring in accordance with an approved Community Air Monitoring Plan (CAMP) would be implemented during intrusive activities and, if required, dust mitigation measures will be employed during future remediation and redevelopment (if not addressed during remedial actions) to minimize the potential exposure.

5.2 Volatilization

VOCs were not identified in soil/fill at the Site exceeding the USCOs with the exception of acetone and total xylene, each at one (1) location. cVOCs including TCE and its breakdown products were detected exceeding GWQS/GV at the four (4) monitoring wells and 1,2,4-Trimethylbenzene was also detected at MW-4. The highest concentration of VOC were detected at MW-2 and MW-4, which represent upgradient groundwater locations. The source of the VOCs detected in the groundwater is likely upgradient and off-site.

The cVOCs detected in the soil vapor samples collected from within the proposed building footprint could represent a potential SVI concern and are likely associated with the concentrations detected in the groundwater. However, a formal soil vapor intrusion (SVI) assessment would need to be completed after building construction to assess if for SVI and determine if volatilization is a relevant migratory pathway.

Monitoring for total volatile organic would be a component of the approved CAMP, and implemented during intrusive activities and, if required, mitigation measures or PPE employed during future remediation and/or redevelopment to minimize the potential exposure.

5.3 Surface Water Runoff

Erosion and transport of surface soils and associated sorbed chemicals in surface water runoff is a potential migration pathway. The potential for soil particle transport with surface water runoff is low as the perimeter Site is predominantly covered with vegetation cover. As such, surface water runoff is not considered a relevant migration pathway.

Soil/fill and surface water generated during remedial excavation activities would be managed under a Remedial Action Work Plan (RAWP), which would minimize or eliminate the potential of contaminated sediment particles from migrating from the Site. As the remedial plan would be to remove soil/fill at the Site down to the top of bedrock within the limits of the BCP Site, surface elevations of the Site would be

below the surface elevation of the surrounding properties, so surface water runoff would be contained to the Site and could not migrate off-site. The site remedial contractor will maintain construction entrances along Manhattan Avenue and silt socks along the perimeter to prevent surface water and sediment runoff.

5.4 Leaching

Leaching refers to chemicals present in soil/fill migrating downward to groundwater because of infiltration of precipitation. The groundwater sample results from the RI indicate cVOCs (TCE, cis-1,2-DCE, and VC) were detected above their respective GWQS/GV in the groundwater at the four (4) monitoring wells and one (1) petroleum VOC (1,2,4-Trimethylbenzene) was detected above its GWQS/GV at MW-4. TCE was detected in the subsurface soil/fill above MDLs but below PGWSCOs at TP-19 and TP-20 from ground surface to 2 fbgs. Tetrachloroethene was in the subsurface soil/fill above MDLs but below PGWSCOs at B-10 from ground surface to 2 fbgs. Cis-1,2-DCE, VC, and 1,2,4-Trimethylbenzene were not detected above MDLs in any soil/fill sample. Based on the soil/fill data collected there is no evidence that the source of the source of VOCs on-Site is due to leaching. Based on the groundwater flow and upgradient wells (MW-2 and MW-4) having the highest concentrations of VOCs, the source of the groundwater contamination is likely to southeast. Therefore, leaching is a potential exposure pathway for VOCs.

Select metals (cobalt, iron, magnesium, manganese, and sodium) were detected in the groundwater above their respective GWQS/GV. Manganese was detected in surface and subsurface soil/fill samples at the Site below its Protection of Groundwater SCO (PGWSCO). Cobalt, iron, magnesium, and sodium were detected in surface and subsurface soil/fill samples at the Site, but do not have SCOs which would indicate unacceptable levels. The highest concentrations of metals analytes were generally detected at MW-2 and MW-4 which are upgradient wells.

PFOA was detected above its GWQS at MW-2, an upgradient well location, but below its GWQS at MW-3 which is a downgradient well location. PFOA was detected above its PGWSCOs (1 ng/g) at TP-17 (1.9 ng/g) but located on the northern and downgradient portion of the Site. Therefore, leaching is not a likely exposure pathway for PFOA.

SVOCs, PCBs, pesticides, herbicides, and 1,4-dioxane were not detected in the groundwater at any location. Therefore, leaching is not considered a potential exposure pathway for SVOCs, metals, PCBs, pesticides, herbicides, or 1,4-dioxane.

5.5 Groundwater Transport

Bedrock groundwater underlying the Site flows from the south towards the northwest. The results of the groundwater samples collected as part of the RI indicate VOCs (TCE, cis-DCE, VC, and 1,2,4-Trimethylbenzene) and metals were detected above their respective GWQS/GVs.

TCE was detected above its GWQS/GV at upgradient well MW-2 and downgradient well MW-3. TCE breakdown product, cis-1,2-DCE was detected above its GWQS/GV at all four (4) wells with the highest concentrations at MW-2 and MW-4, the upgradient well locations. TCE breakdown product VC was detected above its GWQS/GV at MW-2 and MW-4, the upgradient well locations. The detections of cVOCs at the upgradient monitoring wells suggests an off-Site source may be present. 1,2,4-Trimethylbenzene was detected above its GWQS/GV at one (1) upgradient location, MW-4.

To the northwest of the Site is another BCP Site (Main and Hertel Site, BCP Site No. C915318). Review of the RI/IRM/AA Report available on NYSDEC's DECInfo Locator website identified two (2) monitoring wells (MW-04 and MW-05) located near the shared boundary between the Site and the Main and Hertel Site. Groundwater data from 2018 did not indicate that cVOCs were detected above their respective GWQS in either well location, but a few petroleum compounds (xylenes and 1,2,4-Trimethylbenzene) were detected above their respective GWQS. No SVOCs, metals, PCBs or pesticides were detected above their respective GWQS at either well location on the Main and Hertel Site.

Naturally occurring metals detected in the groundwater at the Site include iron, magnesium, and sodium. Generally, the highest concentrations detected were at MW-2 and MW-4 which are upgradient well locations. Cobalt and manganese were also detected in groundwater exceeding their respective GWQS/GV at MW-2 and MW-4 which are upgradient well locations. It is unlikely the Site is the source of groundwater impacts. The elevated concentrations of metals in the groundwater is not uncommon in urban environments and the use of groundwater is prohibited in the City of Buffalo.

The impacted groundwater is present within bedrock at the Site makes direct contact difficult and unlikely to non-specialized construction workers. Therefore, groundwater transport is not considered a potential exposure pathway for metals.

Therefore, groundwater transport is considered a potential exposure pathway for VOCs, although it may be from an upgradient and off-site source. As discussed above, 2018 groundwater data from the downgradient and adjacent Main and Hertel BCP Site did not indicated that cVOCs were detected above their respective GWQS in either well location, but a few petroleum compounds (xylenes and 1,2,4-Trimethylbenzene) were detected above their respective GWQS.

5.6 Exposure Pathways

Based on the analysis of chemical fate and transport provided above, the pathways through which Site COCs could reach receptors at significant exposure point concentrations are: incidental contact with impacted Site soil/fill; fugitive dust generated from impacted fill; volatilization; and groundwater transport.

Remedial activities completed in accordance with a soil/fill management plan, Health and Safety Plan (HASP) and CAMP will significantly minimize or eliminate the potential exposure associated with:

- direct contact with impacted soil/fill,
- impacted soil/fill particles migration from the Site in the form of fugitive dust.

During remedial action or redevelopment, the use of proper personal protective equipment (PPE) will significantly minimize or eliminate the potential exposure associated with direct contact with impacted soil/fill, in accordance with the HASP.

A CAMP, along with erosion and sediment control strategies will be implemented to mitigate the potential for off-site exposure.

Removal of all soil/fill from the Site to the top of bedrock would eliminate the potential leaching pathway as the potential on-Site source would be removed. However, as discussed below, groundwater transport of contaminants onto the Site from an upgradient, off-site source may still exist associated with the VOCs.

VOCs have been detected in on-Site groundwater in the southern portion of the Site. The source of the VOCs is unknown, as VOCs were not detected in on-Site soil/fill above their respective USCOs or PGWSCOs. Groundwater has a southeast to northerly flow direction across the Site and the southeastern well (MW-4) has the highest concentration of VOCs. Therefore, it is possible the contaminants are being transported via groundwater onto the Site from an off-site source. TCE, PCE and cis-DCE were detected in the soil vapor which could create a potential SVI concern in future buildings constructed at the Site. A formal SVI assessment will need to be completed after building construction to determine if volatilization pathway exists.

6. Qualitative Exposure Assessment

The Site surface and subsurface soil/fill are impacted by SVOCs, metals, PCBs, pesticides, and PFAS. The Site groundwater is impacted with VOCs (specifically TCE, Cis-DCE, and VC), select metals, and PFOA at one location.

Due to the shallow nature of bedrock at the Site, the soil/fill impacts present in the upper 2 to 3 feet and will be addressed via excavation and off-site disposal. However, the presence of VOCs in the groundwater is unknown and may be from an upgradient and off-site source. Groundwater treatment could potential address the groundwater contamination on-site, but may not be feasible if the source is not determined and future migration on to the Site controlled/stopped.

A formal SVI assessment will need to be completed after building construction to determine if volatilization pathway exists.

6.1 On-Site Potential Human Health Exposure

A qualitative exposure assessment consists of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying exposure pathways, and evaluating contaminant fate and transport.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five (5) elements:

- Receptor population
- Contaminant source
- Contaminant release and transport mechanism
- Point of exposure
- Route of exposure

An exposure pathway is complete when all five (5) elements of an exposure pathway are documented; a potential exposure pathway exists when any one (1) or more of the five (5) elements comprising an exposure pathway is not documented but could reasonably occur. An exposure pathway may be eliminated from further evaluation when any one (1) of the five (5) elements comprising an exposure pathway does not exist in the present and will not exist in the future.

6.1.1 Receptor Population

The receptor population includes the people who are or who may be exposed to contaminants at a point of exposure. The identification of potential human receptors is based on the characteristics of the Site, the surrounding land uses, and the probable future land uses. The Site is currently vacant and primarily covered with gravel, fill, and vegetation.

Under current Site use conditions (e.g., vacant, unused property) receptors would include construction workers involved in the remediation and/or redevelopment of the Site and trespassers who may traverse

the property during intrusive activities. Construction workers are/will be comprised of adults, and trespassers would likely be limited to adolescents and adults.

The reasonably anticipated future use of the Site is residential affordable housing, but the goal of the remediation is to achieve a Track 1 Unrestricted Use cleanup. It is possible that an engineering control in the form of a sub-slab depressurization system may be necessary to address SVI associated with groundwater contamination if it is deemed a concern after an SVI assessment can formally be completed after the building is constructed. Therefore, discussion below will consider this potential. Exposed receptors under the future use scenario would be comprised of residents, indoor workers, visitors, and construction workers who may be employed at or perform work on the property.

6.1.2 Contaminant Sources

The source of contamination is defined as either the source of contaminant release to the environment (such as a waste disposal area or point of discharge) or the impacted environmental medium (soil, air, biota, water) at the point of exposure. Section 4.0 discusses the COCs present in the unremediated Site media at elevated concentrations. The soil/fill at the Site is contaminated with PAHs, metals, PCBs, pesticides, and PFOS. VOCs, select metals, and PFOA have been detected in the groundwater. The source of the cVOCs in groundwater at the Site may be on-Site or from an upgradient, off-site source.

6.1.3 Contaminant Release and Transport Mechanisms

Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed and are specific to the type of contaminant and site use. For the non-volatile COCs present in the soil/fill, contaminant release and transport mechanisms will generally be limited to fugitive dust migration and direct contact during future planned intrusive work/remedial and redevelopment activities. For the cVOCs, metals, and PFOA present in the bedrock groundwater, the contaminant release and transport mechanisms will occur via direct contact. For VOCs detected in the soil vapor, the contaminant release and transport mechanisms will occur via volatilization into occupied structures once constructed or open trenches/excavations on the Site.

6.1.4 Point of Exposure

The point of exposure is a location where actual or potential human contact with a contaminated medium may occur. Based on the exceedances in the soil/fill and groundwater, and detection of VOCs in soil vapor, the point of exposure is defined as those areas that will remain after planned remedial activities.

The proposed remedial action will involve removal of soil/fill across the Site to the top of bedrock. The VOCs in the groundwater will be addressed either by amendment injection on-site as a preventative measure, or by the responsible party off-site to prevent further migration onto the Site if it is determined that the source of the VOCs in groundwater is upgradient of the Site. Due to the potential for an SVI condition associated with the proposed residential building to be constructed until the groundwater contamination can be addressed, sub-slab depressurization system piping will be installed during construction, as an SVI assessment will be completed after the building is constructed to determine if an SVI condition exists. Under these remedial scenarios and preemptive engineering controls, the future points of exposure will be limited to contact with groundwater.

6.1.5 Route of Exposure

The route of exposure is the manner in which a contaminant actually enters or contacts the body (i.e., ingestion, inhalation, dermal absorption). Based on the types of receptors and points of exposure identified above, potential routes of exposure are listed below:

Current Use Scenario (Vacant and Unused Land)

- Construction Worker/Outdoor Worker/Environmental Personnel/Trespasser (short-term) – skin contact, inhalation, and incidental ingestion.

Future Use Scenario (Residential Housing)

- Residents, Indoor workers, and visitors – inhalation (to be determined by SVI assessment and addressed by sub-slab depressurization system, if deemed necessary);
- Construction Worker (short-term) – inhalation, and incidental contact/ingestion of bedrock groundwater.

6.1.6 Exposure Assessment Summary

Based on the above assessment, the potential exposure pathways for the current and future use conditions are listed below.

Current Use Scenario

- Construction Worker/Outdoor Worker/Environmental Personnel/Trespasser (short-term) – skin contact, inhalation, and incidental ingestion

Future Use Scenario

- Residents, Indoor workers, and visitors – inhalation (to be determined by SVI assessment and addressed by sub-slab depressurization system, if deemed necessary)
- Construction Worker (short-term) – inhalation, and incidental contact/ingestion of bedrock groundwater.

In most instances, these exposures can be readily mitigated using personal protective equipment (PPE); proper soil/fill management during intrusive activities; adherence to the approved health and safety plan (HASP) and CAMP; and engineering controls (i.e., vapor mitigation systems). Sub-slab depressurization system (SSD) piping will be installed during the construction of the building as a precautionary measure, because until the building is constructed and mechanical equipment are put into service, a proper SVI assessment cannot be completed to determine if an SVI condition exists and whether a passive or active SSD system is necessary to mitigate the indoor inhalation scenario as part of the remedy.

6.2 Fish and Wildlife Impact Assessment (FWIA)

The Site has historically been vacant land with very little vegetation, other than perimeter grass, and the surrounding areas have been used for residential and commercial uses for the past 100 years. In the Site's current condition, it provides little wildlife habitat or food value.

The anticipated future use is residential (affordable housing development), with a cleanup goal of Track 1 Unrestricted Use. There are no natural waterways onsite, and the closest waterbody is Scajaquada Creek, which is not present aboveground until 2 miles southwest of the Site. No federal or state wetlands or listed or proposed threatened or endangered species are known to exist in the project area. No resources were identified associated with the Site indicating no further work on the Fish and Wildlife Resource Impact Analysis (FWRI) is required (Appendix H). As such, no unacceptable ecological risks are anticipated under the current or reasonably anticipated future use scenario.

6.3 Qualitative Off-Site Exposure Assessment

Surface and subsurface soil/fill samples were collected from across the Site and four (4) bedrock monitoring wells were installed. The RI sample data was used to complete this qualitative off-site exposure assessment and evaluate potential remedial measures to address Site contamination. The RI data suggest a potential for off-site impacts, as follows.

PAHs, metals, and PCBs were detected in the Site soil/fill at concentrations above their Restricted Residential SCOs, which would be the applicable SCOs for the adjacent properties considering their residential and active recreational uses. There is a potential that the soil/fill present over shallow bedrock at the Site extends beyond the boundary of the Site.

Groundwater contamination (TCE/cis-DCE, select metals, pesticide, and PFOA) was identified at the Site above GWQS and groundwater contamination could be migrating off-site. The source of the groundwater contamination, however, may be from an upgradient, off-site location, as MW-2 and MW-4 (two upgradient wells) have the highest concentrations of cVOCs detected.

The Main and Hertel Site (BCP Site No. C915318) is located northwest and downgradient from the Site. Review of the RI/IRM/AA Report available on NYSDEC's DECInfo Locator website identified two (2) monitoring wells (MW-04 and MW-05) located near the shared boundary between the Site and the Main and Hertel Site. Groundwater data from 2018 did not indicate that cVOCs were detected above their respective GWQS in either well location, but a few petroleum compounds (xylenes and 1,2,4-Trimethylbenzene) were detected above their respective GWQS. No SVOCs, metals, PCBs or pesticides were detected above their respective GWQS at either well location on the Main and Hertel Site. Groundwater contamination does not appear to be a concern migrating from the Site.

The proposed remedial strategy for the Site is to excavate all soil/fill on-site to the top of bedrock. The removal of the impacted soil/fill may improve groundwater quality. The source of the cVOCs detected in the on-site groundwater is unknown. With the exception of acetone and total xylene, each detected in one (1) sample location, VOCs detected in the soil/fill samples were below their respective USCOs and/or PGWSCOs. Based on groundwater flow direction (westerly) and the lack of significant VOC detections at the Site, the source may be upgradient (east) of the Site.

If the source of the groundwater contamination is off-site, investigation and appropriate remedial actions would be necessary to prevent further migration on to the Site and address the potential for off-site exposure.

7. Remedial Alternatives Analysis Evaluation

This section provides an analysis of the potential remedial approach(s) by using the Remedy Selection Evaluation Criteria identified in Section 4.2 of Guidance Document DER-10: Technical Guidance for Site Investigation and Remediation. In accordance with DER-10 Section 4.4(d)(2), in addition to a "no action" baseline alternative, the following alternatives are developed and assessed for each BCP Site based on NYSDEC-defined cleanup tracks as follows:

Track 1, 6 New York Codes, Rules, and Regulations (6NYCRR) Part 375-3.8(e)(1) requires site media to meet Part 375 SCOs that will allow the site to be used for any purpose without restrictions on the use of the site (i.e., unrestricted use). The soil cleanup must achieve the unrestricted use criteria at any depth above bedrock. Details and evaluation of the Track 1 alternative are described below.

Track 2, 6NYCRR Part 375-3.8(e)(2) requires site media to meet Part 375 restricted use SCOs that are consistent with the end use. For the Site, the Track 2 cleanup must achieve the Residential Use SCOs to a depth of 15 fbgs or top of bedrock, whichever is shallower. For Track 2 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls, and future use and development will be completed in accordance with the environmental easement and site management plan. Details and evaluation of the of the Track 2 cleanup are described below.

Track 4, 6NYCRR Part 375-3.8(e)(4) soil cleanups use site-specific information to identify site-specific SCOs (or SSALs) that are protective of public health and the environment under a restricted use scenario. For Track 4 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls if they can be realistically implemented and maintained in a reliable and enforceable manner. As set forth in 6 NYCRR Part 375-3.8(e)(4)(iii)(a)(1), the top 2 feet of all exposed surface soils, not otherwise covered by the components of the development of the site (e.g., buildings, pavement), shall not exceed the restricted use (Restricted Residential Use) SCOs. Areas that exceed these SCOs must be covered by material meeting the requirements of the generic soil cleanup table contained in Part 375-6.7(d) for the applicable future site uses (i.e., Restricted Residential).

However, due to the shallow bedrock present below the Site and the potential depths of soil/fill excavations to address contamination and geotechnical requirements, a cleanup under a Track 4 scenario would be similar to a Track 2 cleanup. Therefore, a Track 4 scenario was not evaluated.

7.1 Remedial Action Objectives

The final remedial measures for the Site must satisfy Remedial Action Objectives (RAOs). RAOs are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. Appropriate RAOs for the Site, per DER-10s generic RAOs include:

Soil/Fill RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil/fill.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.

Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.
- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of groundwater contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

7.2 General Response Actions

General Response Actions (GRAs) are broad classes of actions that are developed to achieve the RAOs and form the foundation for the identification and screening of remedial technologies and alternatives.

Soil/Fill

The GRAs available to address the RAOs for soil/fill include:

- Source Area Removal/Treatment – excavation and offsite disposal
- Engineering Controls (e.g., SSD system, if deemed necessary)
- Institutional Controls (e.g., Environmental Easement, Site Management Plan, if deemed necessary)

Groundwater

The GRAs available to address the RAOs for groundwater include:

- Source Area Removal/Treatment
- Groundwater Monitoring
- Institutional Controls (e.g., groundwater use restrictions)

Soil Vapor

The GRAs available to address the RAOs for soil vapor include:

- Completion of SVI testing in any new buildings and installation of SSD system(s), as needed.

7.3 Applicable Standards, Criteria, and Guidance

According to DER-10 Section 1.3(b)(1), standards, criteria, and guidance (SCGs) means *"standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable or not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with, and with consideration being given to guidance determined, after the exercise of scientific and engineering judgment, to be applicable. This term incorporates both the CERCLA concept of 'applicable or relevant and appropriate requirements' (ARARs) and the USEPA's 'to be considered' (TBCs) category of non-enforceable criteria or guidance. For purposes of this Guidance, 'soil SCGs' means the soil cleanup objectives and supplemental soil cleanup objectives identified in 6NYCRR 375-6.8 and the Commissioner Policy CP-51 on Soil Cleanup Guidance."*

Soil/Fill

Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006.

Groundwater

Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000.

Soil Vapor Intrusion

NYSDOH Decision Matrices – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and subsequent updates.

Additional discussions concerning the specific chemical-specific SCGs that may be applicable, relevant, or appropriate to remedy selection for the Site are presented below. In each case, the identified SCGs are generally limited to regulations or technical guidance in lieu of the environmental laws from which they are authorized, as the laws are typically less prescriptive in nature and inherently considered in the regulatory and guidance evaluations. Table 8 summarizes the SCGs by media that may be applicable or relevant and appropriate to the Site.

7.3.1 Chemical-Specific SCGs

Chemical-specific SCGs are usually health- or risk-based concentrations in environmental media (e.g., air, soil, water), or methodologies that when applied to site-specific conditions, result in the establishment of concentrations of a chemical that may be found in, or discharged to, the ambient environment. The determination of potential chemical specific SCGs for a site is based on the nature and extent of contamination; potential migration pathways and release mechanisms for site contaminants; reasonably anticipated future site use; and likelihood that exposure to site contaminants will occur.

Previous sampling from the Phase II and RI activities included the collection and analysis of surface soil/fill, subsurface soil/fill, groundwater, and soil vapor samples (see Tables 4 through 7).

7.3.2 Location-Specific SCGs

Location-specific SCGs are restrictions placed on the concentration of hazardous substances or the conduct of activities solely because they are in a specific location. Some examples of these unique locations include floodplains, wetlands, historic places, and sensitive ecosystems or habitats. The location of the site is a fundamental determinant of its impact on public health and the environment.

7.3.3 Action-Specific SCGs

Action-specific SCGs are restrictions placed on particular treatment or disposal technologies. Examples of action-specific SCGs are effluent discharge limits and hazardous waste manifest requirements.

7.4 Evaluation of Alternatives

In addition to achieving RAOs, NYSDEC's Brownfield Cleanup Program calls for remedy evaluation in accordance with DER-10 Technical Guidance for Site Investigation and Remediation. The remedial alternatives are evaluated against the following criteria consistent with 6NYCRR Part 375-1.8(f):

- **Overall Protection of Public Health and the Environment**. This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- **Compliance with Standards, Criteria, and Guidance (SCGs)**. Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- **Long-Term Effectiveness and Permanence**. This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: (i) the magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals), (ii) the adequacy of the engineering and institutional controls intended to limit the risk, (iii) the reliability of these controls, and (iv) the ability of the remedy to continue to meet RAOs in the future.
- **Reduction of Toxicity, Mobility or Volume with Treatment**. This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of Site contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the Site.
- **Short-Term Effectiveness**. Short-term effectiveness is an evaluation of the potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during construction and/or implementation. This includes a discussion of how the identified adverse impacts and health risks to the community or workers at the Site will be controlled, and the effectiveness of the controls. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.
- **Implementation**. The implementation criterion evaluates the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

- **Cost**. Capital, operation, maintenance, and monitoring costs are estimated for the remedy and presented on a present worth basis.
- **Community Acceptance**. This criterion evaluates the public's comments, concerns, and overall perception of the remedy.

7.5 Future Land Use Evaluation

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land use be factored into the evaluation. The regulations identify 16 criteria that must be considered. These criteria and the resultant outcome for the Site are presented below.

1. *Current use and historical and/or recent development patterns:* The Site was previously owned by Buffalo Meter Company, Inc., a water meter manufacturer, and the University at Buffalo to house their Department of Art and Architecture Department. The Site is located in a highly developed residential, commercial, and industrial area of the City of Buffalo. The Site is zoned N-1C, according to the Land Use Plan of the Buffalo Green Code (Ref. 10), which is defined as mixed-use centers of high intensity and supports residential, commercial, and industrial uses.
2. The planned redevelopment includes the construction of a multi-family four-story affordable housing development, with an associated parking lot and greenspace. **Accordingly, the planned redevelopment is consistent with the City of Buffalo Land Use for the area.**
3. *Applicable zoning laws and maps:* The Site is located in an area of the City of Buffalo identified as N-1C mixed use-core, which is defined as mixed-use centers of high intensity and supports residential, commercial, and industrial uses. **Residential use is consistent with current zoning (Buffalo Green Code).**
4. *Brownfield opportunity areas as designated set forth in GML 970-r:* The Brownfield Opportunity Area (BOA) Program provides municipalities and community-based organizations with assistance to complete revitalization plans and implementation strategies for areas or communities affected by the presence of brownfield sites, and site assessments for strategic sites. **The Site does not lie within a BOA.**
5. *Applicable comprehensive community master plans, local waterfront revitalization plans as provided for in EL article 42, or any other applicable land use plan formally adopted by a municipality*: The Site is within an area zoned N-1C, which is defined as mixed-use centers of high intensity and supports residential, commercial, and industrial uses. **Redevelopment is consistent with the Buffalo Green Code and will not require rezoning or change in use.**
6. *Proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural, and recreational areas*: The area surrounding the Site consists of residential and commercial properties. Main Street, a main thorough fair into and out of the city with numerous amenities, is located 0.2 miles to the northwest of the Site. Bennett High School is located adjacent to the Site to the west. McCarthy Park is less than 0.1 miles to the east. There are no nearby agricultural areas. **Nearby and adjacent properties are mixed use. The proposed redevelopment does not change the previous land use for the Site and is consistent with local zoning and development plans.**
7. *Any written and oral comments submitted by members of the public on the proposed use as part of the activities performed pursuant to the citizen participation plan*: **No comments have been received from the public to date pursuant to the citizen participation plan.**
8. *Environmental justice concerns, which include the extent to which the proposed use may reasonably be expected to cause or increase a disproportionate burden on the community in*

which the site is located, including low-income minority communities, or to result in a disproportionate concentration of commercial or industrial uses in what has historically been a mixed use or residential community: **Redeveloping the Site for use as affordable housing does not pose environmental justice concerns.**

9. *Federal or State land use designations:* There are no known federal or state land use designations. The Site soil/fill will be remediated under the BCP to unrestricted use soil cleanup objectives. The property is designated by the City of Buffalo Green Code for mixed-use, including residential use. **Redevelopment is consistent with the current land use designation.**

10. *Population growth patterns and projections:* The City of Buffalo, encompassing approximately 40.38 square miles, has a population of 278,349 (2020 Census - US Census Bureau), an increase of 6.5 percent from the 2010 census. **Redevelopment is consistent with zoning use and would further support residential capacity.**

11. *Accessibility to existing infrastructure:* Utilities (water, electric, and gas) are present around the Site along Manhattan Avenue. The storm and sanitary sewer are present along Manhattan Avenue, however, City of Buffalo has requested the services be tied in at East Amherst Street, to the east. **Existing infrastructure supports planned reuse**.

12. *Proximity of the site to important cultural resources, including federal or State historic or heritage sites or Native American religious sites*. Per the New York State Historical Preservation Office, there are ten (10) historical buildings and six (6) historical districts located within 1 mile of the subject Site. The buildings include Blessed Trinity Roman Catholic Church Buildings, Buffalo Meter Company Building, Buffalo Public School #63, Buffalo Public School #78, Buffalo Zoo Entrance Court, Edmund B. Hayes Hall, Darwin D. Martin House, Darwin D. Martin House and Complex, St. Andrew's Episcopal Church, and University Presbyterian Church. The districts include Buffalo Veterans Hospital Historic District, Parkside Candy Shoppe and Factory, Parkside East Historic District, St. Rose of Lima Roman Catholic Church Complex, University Heights-Summit Park-Berkshire Terrace Historic District, and University Park Historic District. **The presence of these historical districts and buildings does not affect the future land use of the Site.**

13. *Natural resources, including proximity of the site to important federal, State or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species:* No State or Federal wetlands exist on the Site, nor is the Site located within a rare plant and/or animal habitat. The Site and adjacent properties are in a highly developed urbanized area that does not provide a setting suitable for rare plant and/or animal habitats. **The absence of a suitable setting for ecological resources on or adjacent to the Site indicates that cleanup to unrestricted use soil cleanup objectives will not pose an ecological threat.**

14. *Potential vulnerability of groundwater to contamination that might emanate from the site, including proximity to wellhead protection and groundwater recharge areas and other areas identified by the Department and the State's comprehensive groundwater remediation and protection program established set forth in ECL article 15 title 31:* Groundwater at the Site is assigned Class "GA" by 6NYCRR Part 701.15. Four (4) groundwater monitoring wells were installed during the RI. The results of the groundwater samples collected as part of the RI indicate low-level VOCs, metals, and PFOA were detected above their respective GWQS. No PCBs, pesticide, herbicide, or 1,4-dioxane were detected above their respective GWQS. Regionally, groundwater has not been developed for industrial, commercial, agricultural, or public supply purposes. Potable water service is provided by the local municipal water authority and the City of Buffalo has a ban on the use of groundwater for drinking water purposes. **Due to the absence of potable wells and wellhead protection, the Site will not pose a threat to drinking water.**

15. *Proximity to flood plains:* The Scajaquada Creek, located approximately 2-miles southwest of the Site, is the closest designated flood zone. No flood zones are present on the property, and therefore there is a low risk of erosion due to flooding. **The proposed cleanup to achieve USCOs, and redevelopment of the Site does not pose a threat to surface water.**
16. *Geography and geology:* The Site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief, except in the immediate vicinity of major drainage ways. Based on the Phase II investigation and the RI, the Site consisted of soil/fill material overlying shallow bedrock. Building foundations will be pinned to the top of bedrock. **The redevelopment plan is consistent with the geography and geology of the Site.**
17. *Current institutional controls applicable to the site:* **There are no current institutional controls applicable to the site.**

Based on the above analysis, planned reuse of the Site is consistent with past and current zoning/land use on and around the Site; and it does not pose additional environmental or human health risk.

7.6 Volume, Nature, and Extent of Contamination

Estimation of the volume, nature, and extent of media that may require remediation to satisfy the RAOs or that needs to be quantified to facilitate evaluation of remedial alternatives is presented in this section. For the unrestricted use scenario, the cleanup goal would involve achieving USCOs. For the reasonably anticipated future use scenario, the cleanup goal would involve achieving RRSCOs, but due to the shallow nature of bedrock, would involve removal of the same amount of soil/fill. The volume and extent of media requiring cleanup under these scenarios is presented in Sections 7.6.1 and 7.6.2. In all instances, these volume estimates (and associated cost estimates presented later in this AAR) are projected based on data collected and observations made during the previous investigation and RI activities.

7.6.1 Comparison to Unrestricted SCOs (Track 1 Cleanup)

Exceedances of USCOs were noted in 18 of the 21of soil/fill samples analyzed as part of the Phase II, geotechnical borings, and RI, for VOCs, SVOCs, metals, PCBs, pesticides, and PFAS (see Tables 4 and 5 and Figure 5). Due to the ubiquitous nature of the constituents observed in Site soil/fill, the entire Site area (1.56-acres) defines the Track 1 Cleanup area. The depth of soil/fill ranged from approximately 1 to 7 fbgs overlying the shallow bedrock with an average of about 2.5 ft. The volume of impacted soil/fill requiring remediation under the unrestricted use scenario is approximately 6,300 cubic yards.

In addition to the soil/fill removal, the bedrock groundwater and soil vapor are impacted and will need to be addressed to meet Track 1 Use requirements, as discussed in Section 7.6.3.

7.6.2 Comparison to Restricted-Residential SCOs (Track 2 Cleanup)

Exceedances of RRSCOs were noted in 12 of the 21 soil/fill samples analyzed as part of the Phase II, geotechnical borings, and RI, for SVOCs and metals (see Tables 4 and 5 and Figure 5). Due to the ubiquitous nature of the constituents observed above RRSCOs in the Site soil/fill, the entire Site area (1.56-acres) defines the Track 2 Cleanup area. The depth of soil/fill ranged from approximately 1 to 7 fbgs overlying the shallow bedrock with an average of about 2.5 ft. The volume of impacted soil/fill requiring remediation under the residential use scenario is approximately 6,300 cubic yards.

In addition to the soil/fill removal, the bedrock groundwater and soil vapor are impacted. The source of the groundwater contamination is unknown and likely upgradient and off-site.

Under a Track 2 Restricted-Residential Use scenario, restrictions can be placed on the use of the property in the form of institutional and engineering controls, and future use and development will be completed in accordance with the environmental easement and site management plan. Institutional and engineering controls could be used to achieve RAOs for groundwater and soil vapor, as discussed in Section 7.6.3.

7.6.3 Groundwater Impacts

Bedrock groundwater is primarily impacted with cVOCs (TCE, cis-DCE, and VC), metals, and PFOA above their respective GWQS (see Figure 6). The concentrations of the cVOCs and most metal analytes (sodium being the exception) are highest in upgradient wells MW-2 and MW-4. The metal analytes with GWQS exceedances are not uncommon in urban settings and likely attributed to the urban setting of the area. PFOA was detected above its GWQS at upgradient well MW-2 and was below its GWQS at MW-3 a downgradient well.

The source of the cVOCs appear to be upgradient (east) of the Site, as VOC detections in soil/fill samples analyzed from the Site where relatively low with acetone and total xylene being the only VOCs detected above their respective USCO and elevated PID readings noted during the RI or geotechnical borings were sampled for VOCs.

To achieve a Track 1 Unrestricted Use Cleanup, groundwater treatment would be needed due to GWQS exceedances and eliminate the potential for a vapor intrusion concern within the new building to be constructed. If vapor intrusion were identified as a concern, an engineering control (active sub-slab depressurization (ASD) system) would be required to mitigate the concern, which is not allowed under a Track 1 cleanup. The potential upgradient off-site source of the cVOCs would also likely need to be addressed to prevent contamination from migrating on to the Site.

To achieve a Track 2 Restricted Residential Use Cleanup, institutional and engineering controls are permitted and could be used to achieve the RAOs. The cVOCs present in groundwater are the likely source of the potential vapor intrusion concern. The use of an ASD system would mitigate the concern if soil vapor intrusion were identified as a concern.

The Main and Hertel Site (BCP Site No. C915318) is located northwest and downgradient from the Site. Review of the RI/IRM/AA Report available on NYSDEC's DECInfo Locator website identified two (2) monitoring wells (MW-04 and MW-05) located near the shared boundary between the Site and the Main and Hertel Site. Groundwater data from 2018 did not indicate that cVOCs were detected above their respective GWQS in either well location, but a few petroleum compounds (xylenes and 1,2,4-Trimethylbenzene) were detected above their respective GWQS. No SVOCs, metals, PCBs or pesticides were detected above their respective GWQS at either well location on the Main and Hertel Site. Groundwater contamination does not appear to be a concern migrating from the Site.

7.7 Comparison of Remedial Alternatives

In addition to the evaluation of the alternatives to remediate the Site to the likely end use, NYSDEC regulations and policy calls for evaluation of more restrictive end-use scenarios. These include an

Unrestricted Use scenario (considered under 6NYCRR Part 375 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives. The alternatives evaluated below in greater detail include:

- Alternative 1: No Further Action
- Alternative 2: Unrestricted Use (Track 1) Cleanup
- Alternative 3: Residential Use (Track 2) Cleanup

7.7.1 Alternative 1 - No Further Action

Under this alternative, the Site would remain in its current state, with no remediation or controls in place.

Overall Protection of Public Health and the Environment – The Site is not protective of human health and the environment, due to the presence of SVOCs, metals, PCBs, pesticides, and PFAS contamination remaining on-site above SCGs; the absence of engineering controls (e.g., cover system) to present exposure; and the absence of institutional controls to prevent more restrictive forms of future site use (e.g., restricted residential or commercial) or the export of Site soil/fill to uncontrolled off-site locations. The groundwater contamination also has the potential to create a vapor intrusion concern for occupied structures that may be constructed on the Site.

Accordingly, no further action is not protective of public health and does not satisfy the RAOs.

Compliance with SCGs – Under the current use (vacant commercial) and reasonably anticipated future use scenario (residential affordable housing), the contamination detected in on-site soil/fill does not comply with applicable SCGs and the groundwater contamination present also has the potential to create a vapor intrusion concern for occupied structures that may be constructed on the Site.

Long-Term Effectiveness and Permanence – The no further action alternative involves no remediation, engineering, or institutional controls, and provides no long-term effectiveness toward achieving the RAOs.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – The no action alternative does not reduce the toxicity, mobility, or volume of contamination beyond natural degradation/attenuation, and therefore this alternative is not protective of public health and does not satisfy any of the RAOs.

Short-Term Impacts and Effectiveness – The contamination on-site does pose short-term risks to community members that may use the Site for recreational purposes, on-site workers, and the environment. Adverse impacts and risks to the community, potential workers, or the environment would be attributable to implementation of the no action alternative. Therefore, implementation of the no further action alternative does not satisfy RAOs.

Implementation – No technical or administrative implementation issues are associated with the no further action alternative.

Cost – The capital cost of the no action alternative is $0. There would be no capital or long-term operation, maintenance, or monitoring costs associated with the no action alternative.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to a Fact Sheet and other planned Citizen Participation activities, including a public comment period for the RI/AA Report.

7.7.2 Alternative 2 - Conditional Unrestricted Use (Track 1) Cleanup

An Unrestricted Use alternative necessitates remediation of all soil/fill where concentrations exceed USCOs per 6NYCRR Part 375. For the Unrestricted Use scenario, excavation and off-site disposal of impacted soil/fill is generally regarded as the most applicable remedial measure, because institutional controls and engineering controls cannot be used to supplement the remedy. As such, the Unrestricted Use alternative assumes that those areas on-Site which exceed USCOs would be excavated and disposed at an off-Site commercial solid waste facility.

Based on the previous investigation and RI, exceedances of USCOs were detected in the soil/fill across the Site to the top of bedrock which ranges from approximately 1 to 7 fbgs, with an average of about 2.5 fbgs. It has been estimated that approximately 6,300 cubic yards of soil/fill will need to be removed to the top of bedrock from the Site.

Because the excavation would extend to the property boundaries and top of bedrock, no on-Site confirmatory sampling would be required, however post-excavation sidewall samples would be collected at the property boundaries. No groundwater management would be anticipated during excavation activities due to the lack of overburden groundwater. However, groundwater impacts, detected above their respective GWQS would need to be addressed to meet RAOs and a soil vapor intrusion investigation would need to be completed after the building has been constructed and mechanical are in operation to determine if soil vapor intrusion is a concern.

Overall Protection of Public Health and the Environment – Excavation and off-site disposal to achieve USCOs would be protective of public health under any reuse scenario. Treatment of groundwater contamination and elimination of soil vapor intrusion concern would also be protective of public health and environment.

Compliance with SCGs – The Unrestricted Use alternative would be performed in accordance with all applicable, relevant, and appropriate standards, guidance, and criteria. Imported backfill material would need to meet backfill quality criteria per DER-10. Excavation of soil/fill to achieve USCOs would satisfy these criteria. Treatment of groundwater contamination and elimination of soil vapor intrusion concern would also satisfy these criteria.

Long-Term Effectiveness and Permanence – The Unrestricted Use alternative would remove all impacted soil/fill and address groundwater contamination to meet RAOs and potential for soil vapor intrusion. Therefore, the Unrestricted Use alternative would provide long-term effectiveness and permanence. However, the source of the groundwater contamination would need to be identified and addressed.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – Through removal of all impacted soil/fill and addressing the groundwater contamination and source of soil vapor intrusion, the Unrestricted Use alternative would permanently and significantly reduce the toxicity, mobility, and

volume of on-Site contamination. However, the source of the groundwater contamination would need to be identified and addressed.

Short-Term Effectiveness – The principal advantage of an excavation to achieve USCOs is reliability of effectiveness in the long-term. There are some short-term impacts associated with this alternative:

- There is potential for impacts to human health (workers and construction personnel) due to direct contact with impacted soil/fill and/or particulate releases. This alternative would require implementation of a health and safety plan (HASP) and community air monitoring, as outlined in the NYSDOH Generic Community Air Monitoring Plan (CAMP), to mitigate potential adverse conditions/short-term impacts. Physical hazards may be encountered due to excavation and drilling work, and general construction activities proximate to roads and utilities.
- Human health and the environment concerns associated with chemical exposures would be protected under this alternative if the HASP and CAMP are properly implemented. This alternative is expected to meet RAOs because the impacted soil/fill will be removed from the Site to the top of bedrock.

This alternative does have adverse short-term impacts, however, the soil/fill RAOs would be achieved once the soil/fill is removed from the Site and groundwater remediation is complete.

Implementation – No significant technical or administrative implementation issues would be expected in the completion of the soil/fill excavation and groundwater treatment on-site to achieve an Unrestricted Use.

Cost – The capital cost of implementing an Unrestricted Use cleanup alternative is estimated at $1.829 million (see Table 9). There would be no additional capitals or long-term operation, maintenance, or monitoring costs associated with the Unrestricted Use alternative. There would be short-term groundwater maintenance and monitoring costs, as the Unrestricted Use cleanup criteria needs to be achieved within a 5-year period of receiving a Certificate of Completion. These short-term costs are estimated at an annual cost of $6,000 per year and the groundwater monitoring for 5-years $30,000.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

7.7.3 Alternative 3 – Residential Use (Track 2) Cleanup – Soil/Fill Excavation, EC/ICs & Groundwater Treatment

Under Alternative 3, the Site would be cleaned up to a Track 2 Restricted-Residential Use. Due to the Site conditions (shallow bedrock) and contaminant distribution in the soil/fill overlying the bedrock, a Track 2 Residential Use scenario would not differ substantially from that proposed under the Conditional Track 1 Unrestricted Use scenario as it relates to soil/fill contamination. Construction of a new building, associated utilities, stormwater detention, and associated parking lot at the Site will require the removal of unsuitable fill under the structures.

Track 2 Cleanups allow the use of institutional and engineering controls that may be required due the groundwater contamination (groundwater use restriction) and potential for soil vapor intrusion (as confirmed by a SVI assessment) which would be addressed through the use of an engineering control (ASD System beneath the new building).

The remedial elements of the Track 2 Residential Use scenario are therefore identical to those for the Track 1 scenario, discussed above, but would also include:

- Limited Groundwater remediation.
- Groundwater monitoring program as outlined in the Site Management Plan (SMP).
- Implementation of a SMP. The SMP will include:
- **Institutional Controls and Engineering Controls (IC/EC)** Engineering controls include any physical barrier or method employed to actively or passively contain, stabilize, or monitor contaminants; restrict the movement of contaminants; or eliminate potential exposure pathways to contaminants. Institutional controls at the site will include groundwater use restrictions and use restrictions of the Site to commercial or industrial use.
- **An Operation and Maintenance Plan** that describes the measures necessary to operate, monitor, and maintain any mechanical components of the remedial work;
- **An Excavation Work Plan** to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner;
- **A Site Monitoring Plan** that includes: provisions for a Site-wide inspection program and post-remedial groundwater monitoring to assure that the IC/ECs have not been altered and remain effective; and,
- **An Environmental Easement** filed with Erie County.

Overall Protection of Public Health and the Environment – This alternative meets the NYSDEC requirements for a Track 2 cleanup under the BCP regulations and is protective of public health and the environment. The RAOs for the Site would be satisfied through the planned remedial activities, including: removal and off-site disposal of impacted soil/fill across the Site; and the use of EC/ICs to prevent potential future exposure and limit the future Site use to residential use.

Compliance with SCGs – The planned remedial activities would meet the SCGs for the soil/fill within the Site boundaries (e.g., soil/fill excavation to the top of bedrock). Post-injection samples would need to be collected to verify conformance with RAOs and imported material would need to meet backfill criteria per DER-10. The SMP will include: an Operation and Maintenance (O&M) plan to confirm that engineering controls, such as the ASD system is operating and being maintained in accordance with the SMP; a Site Monitoring Plan will provide the schedule for groundwater monitoring, inspection of the ASD system, and Site-wide Inspection program to be implemented to assure that the engineering and institutional controls placed on the Site have not been altered and remain effective.

The planned remedial activities for this alternative are fully protective of public health and the environment, and will achieve RAOs for the Site.

Long-Term Effectiveness and Permanence – The groundwater monitoring post groundwater amendment injections and the operation and maintenance of the ASD system will provide long-term effectiveness and permanence.

The SMP will include appropriate plans, controls, and measures and an environmental easement to ensure the restricted use remedy is protective of human health and the environment. The SMP will be followed by

the current Site owner as well as future Site owners. As such, this alternative will provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – Through the planned remedial measures described above, this criterion will be achieved.

Short-Term Impacts and Effectiveness – The removal of all impacted soil/fill from the Site is considered a short-term effectiveness. The short-term adverse impacts and risks to the community, workers, and environment during implementation of this Track 2 Residential alternative are not considered significant and are controllable with the implementation of a Health and Safety Plan (HASP) and CAMP.

This alternative achieves the soil/fill RAOs for the Site in the short-term.

Implementation – No significant technical or administrative implementation issues would be expected in the completion of the soil/fill excavation and groundwater treatment on-site to achieve a Track 2 Residential Use.

Cost – The capital cost for the implementation of Alternative 3 is estimated at approximately $1.37 million. An annual cost of $10,000 is estimated for groundwater monitoring, and institutional and engineering control inspections (Periodic Review Reports). The estimated remedial costs are 1.52 million. Table 10 provides a breakdown of the remedial costs.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

7.8 Recommended Remedial Measure

Based on the Alternatives Analysis evaluation, the Track 2 Residential Use alternative satisfies the RAOs.

8. RI/AA Summary and Conclusions

Based on the data and analyses presented in the preceding sections, we offer the following summary and conclusions:

Soil/Fill

- Based on the Phase II and RI activities, SVOCs, metals, PCBs, pesticides, and/or PFAS concentrations were observed exceeding USCOs in the surface and subsurface soil/fill material across the Site at depths ranging from 1 to approximately 7 fbgs.
- No VOCs were detected in soil/fill samples above their respective USCOs collected as part of the RI. The potential source of the cVOCs detected in the groundwater discussed below is unknown.
- Waste characterization samples collected during the RI indicate non-hazardous waste disposal.

Groundwater

- No SVOCs, PCBs, pesticides, herbicides, or 1,4-dioxane were detected above their respective GWQS at the groundwater monitoring locations at the Site.
- cVOCs (TCE, cis-DEC and VC) were detected in the groundwater above their respective GWQS. 1,2,4-trimethylbenzene was also detected above its GWQS at MW-4 only.
- Cobalt, iron, magnesium, manganese, and sodium were detected in the groundwater at the Site above their respective GWQS.
- The concentrations of the cVOCs and most metal analytes (sodium being the exception) are highest in upgradient wells MW-2 and MW-4. The metal analytes with GWQS exceedances are not uncommon in urban settings and likely attributed to the urban setting of the area. PFOA was detected above its GWQS at upgradient well MW-2 and was below its GWQS at MW-3 a downgradient well.
- The source of the groundwater contamination detected in the Site groundwater may be attributed to an upgradient off-site source, based on groundwater flow direction.

Soil Vapor

- Based on the concentrations detected in the soil vapor, soil vapor may be a concern. However, a formal soil vapor intrusion assessment would need to be completed after building construction to confirm.

Selected Remedy

- Based on the Alternatives Analysis evaluation, Alternative 3 – Track 2 Residential Use Cleanup is the recommended remedial approach for the Site. This remedy is fully protective of human health and the environment, and fully satisfies the RAOs for the Site.

References

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10. City of Buffalo. Buffalo Green Code, Unified Development Ordinance. January 2017.

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1. Summary of Phase II Subsurface Field Observations
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ROUX

TABLE 1
SUMMARY OF PHASE II SUBSURFACE FIELD OBSERVATIONS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Location	Date	Fill Present	Odors	Depth of Fill (ft)	Depth to Bedrock (ft)	Ground Surface Elevation[2]	Bedrock Elevation	Sample Depth (ft)	Depth (fbgs) and Soil Description
Soil Boring Locations									
TP-2	03/04/20	Yes	No	2	2	655	653	N/A	**0.0-2.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **Bedrock refusal at 2 fbgs.**
TP-3	03/04/20	Yes	No	2	2	653.5	651.5	N/A	**0.0-2.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1], trace black cinders. **Bedrock refusal at 2 fbgs.**
TP-4	03/04/20	Yes	No	5	5	659	654	N/A	**0.0-3.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **3.0-4.0 Concrete Fill** **4.0-5.0 Black Granular Fill:** Black, mostly medium grained granular material, some cinders. **Bedrock refusal at 5 fbgs.**
TP-5	03/04/20	Yes	No	1.5	1.5	654.5	653	N/A	**0.0-1.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1], some concrete with rebar. **Bedrock refusal at 1.5 fbgs.**
TP-6	03/04/20	Yes	No	7	7	663	656	5-6'	**0.0-5.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1], layer of black sand from 0.5-1.5 fbgs. **5.0-7.0 Black Granular and Sandy Fill:** Black, mostly medium grained granular material and sand with cinders, some white ash. Large concrete and red brick fragments from 6-7 fbgs. **Bedrock refusal at 7 fbgs.**
TP-7	03/04/20	Yes	No	2.7	2.7	656	653.3	0.5-1.5'	**0.0-0.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **0.5-1.0 Black Granular Fill:** Black, mostly medium grained granular material and cinders. **1.0-1.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **1.5-2.7 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. Large concrete and stone fragments surrounded by orange sandy material. **Bedrock refusal at 2.7 fbgs.**
TP-11	07/01/20	Yes	No	3	3	655.2	652.2	0.5-1.5'	**0.0-0.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **0.5-1.5 Black Granular Fill:** Black, mostly medium grained granular material and cinders. **1.5-3.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. Trace stone fragments surrounded by orange sandy material. **Bedrock refusal at 3.0 fbgs.**
TP-12	07/01/20	Yes	No	2	2	653.5	651.5	N/A	**0.0-2.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1], trace black cinders. **Bedrock refusal at 2 fbgs.**
TP-13	07/01/20	Yes	No	2	2	653.5	651.5	0.5-1.5'	**0.0-2.0 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1], trace black cinders and coal. **Bedrock refusal at 2 fbgs.**
TP-14	07/01/20	Yes	No	2.5	2.5	655	652.5	N/A	**0.0-0.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. **0.5-1.5 Black Granular Fill:** Black, mostly medium grained granular material and cinders. **1.5-2.5 Sandy Urban Fill:** Brown, mostly fine sand mixed with urban fill material[1]. Trace stone fragments surrounded by orange sandy material. **Bedrock refusal at 2.5 fbgs.**

Notes:
1. Urban Fill: varying combinations of block, concrete, wood, plastic, and cinders.
2. Ground surface elevation data based on survey information by Millard, MacKay & Delles Land Surveyors, LLP dated 2/20/20 utilizing GPS datum: NAD83 (2011) Epoch 2010.0 datum.

Definitions:
fbgs = feet below ground surface
N/A = Non applicable

TABLE 2
REMEDIAL INVESTIGATION SAMPLING & ANALYSIS PLAN
REMEDIAL INVESTIGATION / ALTERNATIVE ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Matrix	Investigation Location	Sample Type	TCL VOCs + TICs	TO-15 VOCS	TCL SVOCs + TICs	TAL Metals	PCBs	Pesticide	Herbicide	1,4-Dioxane [1]	PFAS	Notes
Soil/Fill	SS-1	Surface (0 to 2-in)			X	X	X	X	X	X	X	
	SS-2				X	X	X	X	X	X	X	
	SS-3				X	X	X	X	X	X	X	
	TP-15	Subsurface Soil			X	X	X			X		--
	TP-16		X		X	X	X	X	X	X	X	
	TP-17		X		X	X	X	X	X	X	X	
	TP-18		X		X	X	X	X	X	X	X	--
	TP-19		X		X	X	X	X	X	X	X	
	TP-20		X		X	X	X	X	X	X	X	MS/MSD
	TP-21				X	X	X			X		
	MW-1				X	X	X			X		
	MW-2				X	X	X			X		
	MW-3				X	X	X			X		
	MW-4				X	X	X			X		
	B-6		X									Geotechnical Boring
	B-9		X									Geotechnical Boring
	B-10		X									Geotechnical Boring
Groundwater	MW-1	Bedrock Groundwater	X		X	X	X	X	X			
	MW-2		X		X	X	X	X	X	X	X	MS/MSD
	MW-3		X		X	X	X	X	X	X	X	Blind Dup
	MW-4		X		X	X	X	X	X			
Air	SV-1	Soil Vapor		X								
	SV-2	Soil Vapor		X								
	SV-3	Soil Vapor		X								
	OA-1	Outdoor Air		X								

Notes:

1. 1,4-dioxane analysis in soil/fill samples was completed in conjunction with EPA Method 8270 analysis for TCL SVOCs. Groundwater analysis for 1,4-dioxane was completed via a separate analysis via EPA 8270 Selective Ion Method (SIM)
2. Blind duplicate and MS/MSD samples were collected at a frequency of 1 per 20 samples/media collected.
3. GW field parameters including: pH, specific conductance, temperature, DO, ORP, and turbidity were collected and recorded.
4. Trip blanks were submitted to the laboratory each day aqueous volatile organic samples were collected.

Acronyms:

TCL = Target Compound List
VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
TAL = Target Analyte List
PCBs = Polychlorinated Biphenyls
PFAS = Per- and polyfluoroalkyl Substances
QA/QC = quality control/quality assurance sample
MS = matrix spike
MSD = matrix spike duplicate

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TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS & WELL CONSTRUCTION DETAILS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Well Identification		Depth to Bedrock (feet)	Depth to Bottom of Borehole (feet)	Total Length of Bedrock Cored (feet)	Potable Water Lost During Coring (gal)	Water Removed During Development (gal)	Stick up (feet)	Well Elevations					Well Diameter (inches)	Well Screen Data			
Well Number	Date Completed							Grade [1] (feet)	TOR Elevation [1] (feet)	DTW (fbTOR) [2]	DTW (fb Grade) [2]	Groundwater Elevation (feet)		Length of Well Screen (feet)	Screen Interval (fb Grade)		
MW-1	06/27/2023	2	20	18	885	8.25	0.45	500.98	501.43	15.35	14.90	486.08	2	15	5	to	20
MW-2	06/28/2023	3.4	17.6	14.2	380	55	0.52	503.03	503.55	13.05	12.53	490.50	2	10	7.5	to	17.5
MW-3	06/27/2023	2.25	15.3	13.05	655	55	0.82	498.76	499.58	11.38	10.56	488.20	2	10	5.3	to	15.3
MW-4	06/30/2023	2.4	17.7	15.3	25	55	1.60	502.07	503.67	13.15	11.55	490.52	2	10	7.7	to	17.7

Notes:

1. All elevations are feet relative to an assumed datum at elevation 500.00. Survey data collected by Roux on July 7, 2023 using the northeast corner of a storm grate along Manhattan Avenue.
2. DTW and well depth based on static water levels and measurements collected by Roux on July 13, 2023.

TOR = Top of riser
DTW = Depth to water
fb = feet below

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TABLE 4
SUMMARY OF REMEDIAL INVESTIGATIONSURFACE SOIL/FILL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Parameter[1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs [3]	Commercial Use SCOs[3]	Industrial Use SCOs[3]	RI Locations		
					SS-1	SS-2	SS-3
					6/21/2023	6/21/2023	6/21/2023
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [4]							
2-Methylnaphthalene	--	--	--	--	0.055 J	0.15 J	0.025 J
Acenaphthene	20	100	500	1000	0.031 J	0.26	0.02 J
Acenaphthylene	100	100	500	1000	0.093 J	0.22	0.045 J
Anthracene	100	100	500	1000	0.15	0.9	0.1 J
Benzo(a)anthracene	1	1	5.6	11	0.68	3.2	0.42
Benzo(a)pyrene	1	1	1	1.1	0.66	2.9	0.39
Benzo(b)fluoranthene	1	1	5.6	11	0.93	4.3	0.51
Benzo(ghi)perylene	100	100	500	1000	0.46	1.5	0.26
Benzo(k)fluoranthene	0.8	3.9	56	110	0.25	0.94	0.14
Biphenyl	--	--	--	--	ND	0.027 J	ND
Bis(2-ethylhexyl) phthalate	--	--	--	--	ND	ND	0.38
Carbazole	--	--	--	--	0.1 J	0.52	0.038 J
Chrysene	1	3.9	56	110	0.75	3.2	0.43
Dibenzofuran	7	59	350	1000	0.026 J	0.18	ND
Dibenzo (a,h)anthracene	0.33	0.33	0.56	1.1	0.095 J	0.39	0.06 J
Fluoranthene	100	100	500	1000	1.3	6.1	0.77
Fluorene	30	100	500	1000	0.05 J	0.28	0.025 J
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	0.48	1.8	0.27
Naphthalene	12	100	500	1000	0.047 J	0.16 J	0.023 J
Phenanthrene	100	100	500	1000	0.66	3.7	0.31
Pyrene	100	100	500	1000	1.1	4.9	0.7
3-Methylphenol/4-Methylphenol	0.33	100	500	1000	ND	0.11 J	ND
1,4 Dioxane	0.1	13	130	250	ND	ND	ND
Total PCBs - mg/Kg [4]							
Aroclor 1254	--	--	--	--	ND	0.0339 J	ND
Aroclor 1260	--	--	--	--	ND	0.018 J	ND
Total PCBs	0.1	1	1	25	ND	0.0519 J	ND
Pesticides - mg/Kg [4]							
4,4'-DDD	0.0033	13	92	180	0.00083 J	ND	ND
4,4'-DDE	0.0033	8.9	62	120	0.00466	ND	0.00646
4,4'-DDT	0.0033	7.9	47	94	0.00765	ND	0.00531
cis-Chlordane	0.094	4.2	24	47	0.00128 J	0.00299	ND
Dieldrin	0.005	0.2	1.4	2.8	ND	ND	0.00372
trans-Chlordane	--	--	--	--	ND	0.00201 NJ	0.00284 J
Herbicides - mg/Kg [4]							
Herbicides	--	--	--	--	ND	ND	ND
Total Metals - mg/Kg							
Aluminum	--	--	--	--	4640	5160	6420
Antimony	--	--	--	--	0.387 J	1.1 J	0.517 J
Arsenic	13	16	16	16	4.29	6.45	5.23
Barium	350	400	400	10000	33.2	49.9	59.2
Beryllium	7.2	72	590	2700	0.219 J	0.33 J	0.316 J
Cadmium	2.5	4.3	9.3	60	0.309 J	0.964	0.439 J
Calcium	--	--	--	--	43200	59700	69400
Chromium	30	180	1500	6800	9	11.1	12.3
Cobalt	--	--	--	--	3.97	4.41	5.88
Copper	50	270	270	10000	16	721	22.3
Iron	--	--	--	--	10200	10000	12200
Lead	63	400	1000	3900	33.4	148	36.6
Magnesium	--	--	--	--	10400	8770	15000
Manganese	1600	2000	10000	10000	250	313	470
Mercury	0.18	0.81	2.8	5.7	0.13 J	0.141 J	0.13 J
Nickel	30	310	310	10000	8.16	15.3	12.1
Potassium	--	--	--	--	628	652	850
Silver	2	180	1500	6800	ND	0.26 J	ND
Sodium	--	--	--	--	85.5 J	96.1 J	113 J
Vanadium	--	--	--	--	11.9	13.9	16.6
Zinc	109	10000	10000	10000	55.3	491	78.5
Perfluorinated Alkyl Acids - ng/g							
Perfluorobutanoic Acid (PFBA)	--	--	--	--	0.116 J	0.088 J	0.17 J
Perfluoropentanoic Acid (PFPeA)	--	--	--	--	ND	0.059 J	0.077 J
Perfluorohexanoic Acid (PFHxA)	--	--	--	--	ND	0.052 J	0.046 J
Perfluoroheptanoic Acid (PFHpA)	--	--	--	--	0.047 J	0.059 J	0.054 J
Perfluorooctanoic Acid (PFOA)	0.66	33	500	600	0.085 J	0.066 J	0.147 J
Perfluorononanoic Acid (PFNA)	--	--	--	--	ND	ND	0.077 J
Perfluorooctanesulfonic Acid (PFOS)	0.88	44	440	440	0.186 J	0.257	0.286
Perfluorodecanoic Acid (PFDA)	--	--	--	--	ND	ND	0.1 J
Perfluoroundecanoic Acid (PFUnA)	--	--	--	--	ND	0.052 J	ND
Perfluorododecanoic Acid (PFDoA)	--	--	--	--	ND	0.059 J	ND

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, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives (SCOs) and current NYSDEC Guidance Values for PFAS (April 2023).
3. Values per 6NYCRR Part 375, Table 375-6.8 (b) Restricted Use Soil Cleanup Objectives (SCOs) and current NYSDEC Guidance Values for PFAS (April 2023).
4. 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 the parameter was not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
I = The lower value for the two columns has been reported due to obvious interference.
P = The RPD between the results for the two columns exceeds the method-specified criteria.

BOLD	= Result exceeds Unrestricted Use SCO's.
BOLD	= Result exceeds Restricted Residential Use SCO's.
BOLD	= Result exceeds Commercial Use SCOs
BOLD	= Result exceeds Industrial Use SCOs

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TABLE 5
SUMMARY OF PHASE II AND REMEDIAL INVESTIGATION SUBSURFACE SOIL/FILL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Parameter[1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[3]	Commercial Use SCOs[3]	Industrial Use SCOs[3]	Phase II Locations				RI Locations											Geotechnical Borings		
					TP-6 (5-6 FT)	TP-7 (0.5-1.5 FT)	TP-11 (0.5-1.5 FT)	TP-13 (0.5-1.5 FT)	TP-15 (0-0.75 FT)	TP-16 (0-1 FT)	TP-17 (0-2 FT)	TP-18 (0-2.5 FT)	TP-19 (0-2 FT)	TP-20 (0-2 FT)	TP-21 (0-1.5 FT)	MW-1 TP (0-2 FT)	MW-2 TP (0-3 FT)	MW-3 TP (0-2 FT)	MW-4 TP (0-2 FT)	B-6 (0-2 FT)	B-9 (0-2 FT)	B-10 (0-2 FT)
					3/4/2020	3/4/2020	7/1/2020	7/1/2020	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	6/21/2023	9/21/2023	9/21/2023	9/21/2023
Volatile Organic Compounds (SVOCs) - mg/Kg [4]																						
1,3,5-Trimethylbenzene	**8.4**	**52**	**190**	**380**	--	--	--	--	--	ND	ND	0.00026 J	ND	ND	--	--	--	--	--	ND	ND	ND
1,2-Dichlorobenzene	**1.8**	**100**	**500**	**1000**	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	0.00018 J	ND	0.025 J
Benzene	**0.06**	**5**	**44**	**89**	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	0.013 J	ND
2-Butanone	**0.12**	**100**	**500**	**1000**	--	--	--	--	--	ND	ND	ND	0.014	ND	--	--	--	--	--	ND	ND	ND
Acetone	**0.05**	**100**	**500**	**1000**	--	--	--	--	--	0.0076 J	0.0094 J	0.017 J+	**0.14 J+**	0.0091 J	--	--	--	--	--	ND	ND	ND
Cyclohexane	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	0.046 J	0.04 J
Ethylbenzene	**1**	**41**	**390**	**780**	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	0.00023 J	0.026 J	0.045 J
Methyl Acetate	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	0.16 J	0.2 J
Methyl cyclohexane	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	0.15 J	0.067 J
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	0.00017 J	0.00023 J	0.00049 J	ND	ND	--	--	--	--	--	ND	ND	ND
Isopropylbenzene	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	0.00053 J	0.024 J	0.12
Styrene	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	0.021 J	ND
Toluene	**0.7**	**100**	**500**	**1000**	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	ND	ND	0.037 J
Total xylene	**0.26**	**100**	**500**	**1000**	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	0.0033	0.142 J	**0.63**
Tetrachloroethene	**1.3**	**19**	**150**	**300**	--	--	--	--	--	0.00036 J	ND	ND	0.00044 J	ND	--	--	--	--	--	ND	ND	0.014 J
Trichloroethene	**0.47**	**21**	**200**	**400**	--	--	--	--	--	ND	ND	ND	0.00087	0.00032 J	--	--	--	--	--	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [4]																						
2,4-Dimethylphenol	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.093 J	ND	ND	--	--	--
2-Methylnaphthalene	--	--	--	--	0.53 J	8.7	11	0.082 J	0.046 J	0.043 J	0.072 J	0.22	1	0.029 J	0.13 J	0.1 J	0.65	0.048 J	0.05 J	--	--	--
Acenaphthene	**20**	**100**	**500**	**1000**	0.46 J	ND	1	0.05 J	0.035 J	0.027 J	0.24	0.14	0.086 J	ND	0.16	0.04 J	0.75	0.051 J	0.065 J	--	--	--
Acenaphthylene	**100**	**100**	**500**	**1000**	ND	0.32 J	0.63 J	0.091 J	0.099 J	0.048 J	0.062 J	0.14	0.086 J	0.055 J	0.12 J	0.032 J	0.087 J	0.074 J	0.084 J	--	--	--
Acetophenone	--	--	--	--	ND	0.84 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
Anthracene	**100**	**100**	**500**	**1000**	1.1 J	0.79 J	2.4	0.23	0.2	0.12	0.55	0.34	0.29	0.081 J	0.46	0.12	1.4	0.19	0.22	--	--	--
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	**3.6**	**2.8**	**9.8**	0.78	0.81	0.36	**1.8**	**1.1**	0.92	0.27 J	**1.8**	0.4	**1.9**	0.68	**1.1**	--	--	--
Benzo(a)pyrene	**1**	**1**	**1**	**1.1**	**4**	**2.9**	**7.8**	0.81	0.79	0.4	**1.6**	0.92	0.96	0.29 J	**1.6**	0.46	**1.3**	0.58	**1.3**	--	--	--
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	**5.2**	**3.7**	**12**	**1**	1	0.5	**2**	**1.3**	**1.2**	0.36 J	**2.2**	0.58	**1.5**	0.72	**1.8**	--	--	--
Benzo(ghi)perylene	**100**	**100**	**500**	**1000**	2	1.4 J	3.3	0.65	0.51	0.25	0.92	0.5	0.48	0.19 J	0.86	0.31	0.5	0.3	0.84	--	--	--
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	**110**	**1.6**	**1.3**	**3.3**	0.42	0.34	0.18	0.75	0.38	0.42	0.13 J	0.54	0.23	0.63	0.25	0.64	--	--	--
Biphenyl	--	--	--	--	ND	0.58 J	0.81 J	ND	ND	ND	ND	0.04 J	0.075 J	ND	ND	ND	0.1 J	ND	ND	--	--	--
Bis(2-ethylhexyl) phthalate	--	--	--	--	ND	ND	ND	ND	ND	ND	0.31	ND	ND	ND	ND	0.062 J	ND	ND	0.22	--	--	--
Butyl benzyl phthalate	--	--	--	--	0.8 J	ND	ND	ND	ND	ND	0.05 J	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
Carbazole	--	--	--	--	0.72 J	0.61 J	1.6	0.11 J	0.068 J	0.047 J	0.38	0.16 J	0.13 J	0.037 J	0.21	0.069 J	0.64	0.09 J	0.21	--	--	--
Chrysene	**1**	**3.9**	**56**	**110**	**3.3**	**2.8**	**10**	0.83	0.83	0.37	**1.8**	**1.1**	0.96	0.3 J	**1.8**	0.44	**1.5**	0.62	**1.5**	--	--	--
Dibenzofuran	**7**	**59**	**350**	**1000**	0.35 J	1.8 J	2.9	0.047 J	0.03 J	0.025 J	0.12 J	0.16 J	0.24	0.017 J	0.097 J	0.044 J	0.6	0.037 J	0.042 J	--	--	--
Dibenzo (a,h)anthracene	**0.33**	**0.33**	**0.56**	**1.1**	**0.58 J**	**0.41 J**	**1.2**	0.13	0.11	0.062 J	0.23	0.13	0.14	0.042 J	0.21	0.07 J	0.16	0.074 J	0.16	--	--	--
Fluoranthene	**100**	**100**	**500**	**1000**	9.9	5.9	20	1.6	1.5	0.66	3.6	2.1	1.7	0.46 J	3.1	0.86	3.2	1.2	2.6	--	--	--
Fluorene	**30**	**100**	**500**	**1000**	0.51 J	0.52 J	1.2	0.059 J	0.04 J	0.033 J	0.21	0.16 J	0.13 J	0.027 J	0.15 J	0.048 J	0.81	0.067 J	0.086 J	--	--	--
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	**2.3**	**1.5**	**4.2**	**0.61**	**0.55**	0.26	**1.1**	**0.58**	**0.56**	0.2 J	**1**	0.33	**0.64**	0.35	**0.95**	--	--	--
Naphthalene	**12**	**100**	**500**	**1000**	0.64 J	7.1	8.2	0.07 J	0.048 J	0.037 J	0.083 J	0.37	0.73	0.03 J	0.11 J	0.068 J	1.1	0.045 J	0.053 J	--	--	--
Phenanthrene	**100**	**100**	**500**	**1000**	4.9	5.4	15	0.77	0.6	0.37	2.5	1.2	1.3	0.23 J	1.8	0.54	3.8	0.71	1.3	--	--	--
Phenol	**0.33**	**100**	**500**	**1000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.072 J	ND	ND	--	--	--
Pyrene	**100**	**100**	**500**	**1000**	8.1	4.3	17	1.3	1.2	0.56	2.8	1.8	1.4	0.42 J	2.6	0.69	2.5	1	2	--	--	--
2-Methylphenol	**0.33**	**100**	**500**	**1000**	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.081 J	ND	ND	--	--	--
3-Methylphenol/4-Methylphenol	**0.33**	**100**	**500**	**1000**	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	--	--	--
Total PCBs - mg/Kg [4]																						
Aroclor 1254	--	--	--	--	0.11 P	0.0382	0.106	0.00783 J	0.00826 JP	ND	0.0724	0.0111 J	ND	ND	0.0122 JP	ND	ND	0.00851 J	0.0379 JP	--	--	--
Aroclor 1260	--	--	--	--	0.186	0.0483	0.0923	ND	ND	ND	0.0459 J	ND	0.0416 J	ND	0.00965 J	0.0226 J	ND	ND	ND	--	--	--
Total PCBs	**0.1**	**1**	**1**	**25**	**0.296**	0.0865	**0.198**	0.00783 J	0.00826 J	ND	**0.118 J**	0.0111 J	0.0416 J	ND	0.0219 J	0.0226 J	ND	0.00851 J	0.0379 J	--	--	--
Pesticides - mg/Kg [4]																						
4,4'-DDD	**0.0033**	**13**	**92**	**180**	--	--	--	--	--	0.00192	**0.00909**	0.00115 J	0.000993 J	0.00106 JP	--	--	--	--	--	--	--	--
4,4'-DDE	**0.0033**	**8.9**	**62**	**120**	--	--	--	--	--	**0.00898**	**0.0243**	**0.00615**	0.00276	**0.00478**	--	--	--	--	--	--	--	--
4,4'-DDT	**0.0033**	**7.9**	**47**	**94**	--	--	--	--	--	**0.00678**	**0.011 J**	ND	**0.0047**	**0.00484 J**	--	--	--	--	--	--	--	--
Aldrin	**0.005**	**0.097**	**0.68**	**1.4**	--	--	--	--	--	ND	0.0027 J	ND	ND	ND	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--	--	ND	0.0361 J	0.0243	ND	ND	--	--	--	--	--	--	--	--
cis-Chlordane	**0.094**	**4.2**	**24**	**47**	--	--	--	--	--	0.00198 J	0.0117 J	0.00398	ND	0.000785 J	--	--	--	--	--	--	--	--
Dieldrin	**0.005**	**0.2**	**1.4**	**2.8**	--	--	--	--	--	**0.00665**	**0.03**	**0.00585**	ND	0.00251	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--	--	ND	0.00306 J	ND	ND	ND	--	--	--	--	--	--	--	--
trans-Chlordane	--	--	--	--	--	--	--	--	--	ND	0.00968 J	0.00266 NJ	ND	ND	--	--	--	--	--	--	--	--
Herbicides - mg/Kg [4]																						
Herbicides	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
Total Metals - mg/Kg																						
Aluminum	--	--	--	--	--	--	--	--	6550	5660	3930	5780	10600	5560	7280	7310	3430	6520	3020	--	--	--
Antimony	--	--	--	--	--	--	--	--	0.644 J	0.42 J	0.397 J	0.586 J	0.988 J	0.525 J	0.643 J	0.738 J	4.01 J	0.724 J	ND	--	--	--
Arsenic	**13**	**16**	**16**	**16**	**13.5**	**29**	**108**	3.48	6.32	5.45	7.06	7.66	8.48	5.59	**14.2**	5.29	**13.1**	6.31	5.43	--	--	--
Barium	**350**	**400**	**400**	**10000**	259	53.2	76	54.4	62.1	43.9	36	61	52.2	39.7	65.8	36	75	62.6	39.7	--	--	--
Beryllium	**7.2**	**72**	**590**	**2700**	--	--	--	--	0.325 J	0.268 J	0.229 J	0.361 J	0.484	0.319 J	0.446	0.384 J	0.194 J	0.304 J	0.254 J	--	--	--
Cadmium	**2.5**	**4.3**	**9.3**	**60**	**3.55**	0.169 J	ND	0.13 J	0.475 J	0.355 J	0.447 J	0.511 J	0.626 J	0.322 J	0.884	0.405 J	1.66	0.62 J	0.336 J	--	--	--
Calcium	--	--	--	--	--	--	--	--	86000	54800	96200	111000	6680	40400 J	71200	51800	64900	73400	160000	--	--	--
Chromium	**30**	**180**	**1500**	**6800**	21.5	4.94	11.1	13.7	22.3	11.6	20.1	14.2	13.8	9.44 J	13.5	12.6	7.27	**33.3**	6.85	--	--	--
Cobalt	--	--	--	--	--	--	--	--	5.32	4.72	3.05	5.15	9.79	4.18	7.59	6.63	3.91	5.67	2.24	--	--	--
Copper	**50**	**270**	**270**	**10000**	--	--	--	--	**50.7**	17.2	30.8	25.8	**66**	15.9 J	**53.2**	32.5	**736**	**127**	14.2	--	--	--
Iron	--	--	--	--	--	--	--	--	14000	10900	9130	17000	17700	10600	14900	13400	16100	15400	5660	--	--	--
Lead	**63**	**400**	**1000**	**3900**	**689**	**108**	**257**	18.9	49.6	33.7	**68.8**	47.1	**82.7**	29.5 J	**84.1**	34.2	**453**	62.4	56.3	--	--	--
Magnesium	--	--	--	--	--	--	--	--	18300	12400	12200	14100	2350	9800 J	10900	8230	33300	15200	13600	--	--	--
Manganese	**1600**	**2000**	**10000**	**10000**	--	--	--	--	603	340	336	585	252	285 J	497	375	226	991	249	--	--	--
Mercury	**0.18**	**0.81**	**2.8**	**5.7**	**0.378**	**0.284**	**0.354**	0.05 J	0.114 J	0.138 J	**0.221 J**	0.127 J	**0.188 J**	0.121 J	**0.181 J**	0.102 J	0.124 J	0.144 J	0.106 J	--	--	--
Nickel	**30**	**310**	**310**	**10000**	--	--	--	--	12.9	10.2	8.17	9.04	19.4	11.6	19.6	13.6	20.6	13.7	7.66	--	--	--
Potassium	--	--	--	--	--	--	--	--	746	658	410	680	437	560	673	660	432	832	483	--	--	--
Selenium	**3.9**	**180**	**1500**	**6800**	1.48	1.94	4.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
Silver	**2**	**180**	**1500**	**6800**	0.562	0.159 J	0.251 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.612	ND	ND	--	--	--
Sodium	--	--	--	--	--	--	--	--	132 J	96.8 J	106 J	387	358	408 J	122 J	88.5 J	419	139 J	183	--	--	--
Thallium	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	0.285 J	ND	ND	0.523 J	ND	ND	--	--	--
Vanadium	--	--	--	--	--	--	--	--	19	15.2	9.38	17.9	21.7	13.9	17.5	17.4	8.98	24.2	7.56	--	--	--
Zinc	**109**	**10000**	**10000**	**10000**	--	--	--	--	107	63.8	88.7	67.6	**125**	51.4 J	**188**	83.5	**1000**	**182**	80.1	--	--	--
Perfluorinated Alkyl Acids - ng/g																						
Perfluoropentanoic Acid (PFPeA)	--	--	--	--	--	--	--	--	--	ND	ND	ND	0.085 J	ND	--	--	--	--	--	--	--	--
Perfluorohexanoic Acid (PFHxA)	--	--	--	--	--	--	--	--	--	ND	0.045 EMPC	ND	0.131 J	ND	--	--	--	--	--	--	--	--
Perfluoroheptanoic Acid (PFHpA)	--	--	--	--	--	--	--	--	--	0.032 J	0.038 J	ND	0.092 J	ND	--	--	--	--	--	--	--	--
Perfluorohexanesulfonic Acid (PFHxS)	--	--	--	--	--	--	--	--	--	ND	0.061 J	ND	ND	ND	--	--	--	--	--	--	--	--
Perfluorooctanoic Acid (PFOA)	**0.66**	**33**	**500**	**600**	--	--	--	--	--	0.095 J	0.333	ND	0.385	0.285	--	--	--	--	--	--	--	--
Perfluorooctanesulfonic Acid (PFOS)	**0.88**	**44**	**440**	**440**	--	--	--	--	--	0.262	**1.9**	0.158 J	0.377	0.206	--	--	--	--	--	--	--	--
Perfluorodecanoic Acid (PFDA)	--	--	--	--	--	--	--	--	--	ND	0.128 J	ND	ND	ND	--	--	--	--	--	--	--	--
Perfluoroundecanoic Acid (PFUnA)	--	--	--	--	--	--	--	--	--	ND	0.053 J	ND	ND	ND	--	--	--	--	--	--	--	--
Perfluorodecanesulfonic Acid (PFDS)	--	--	--	--	--	--	--	--	--	ND	0.068 J	ND	ND	ND	--	--	--	--	--	--	--	--
Perfluorododecanoic Acid (PFDoA)	--	--	--	--	--	--	--	--	--	ND	0.061 J	ND	ND	ND	--	--	--	--	--	--	--	--

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, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives (SCOs) and current NYSDEC Guidance Values for PFAS (April 2023).
3. Values per 6NYCRR Part 375, Table 375-6.8 (b) Restricted Use Soil Cleanup Objectives (SCOs) and current NYSDEC Guidance Values for PFAS (April 2023).
4. 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 the parameter was not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
F = The ratio of quantifier ion response to qualifier ion response falls outside of laboratory criteria. Results are considered to be an estimated maximum concentration.
I = The lower value for the two columns has been reported due to obvious interference.
P = The RPD between the results for the two columns exceeds the method-specified criteria.

BOLD	= Result exceeds Unrestricted Use SCO's.
BOLD	= Result exceeds Restricted Residential Use SCO's.
BOLD	= Result exceeds Commercial Use SCOs
BOLD	= Result exceeds Industrial Use SCOs

ROUX

TABLE 5A
SUMMARY OF REMEDIAL INVESTIGATION SOIL/FILL DETECTED COMPOUNDS, NUMBER OF EXCEEDANCES & MAXIMUM CONCENTRATIONS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Parameter[1]	Unrestricted Use SCOs[2]	Number of Samples Tested	Number of Exceedances	Maximum Detected Concentration	Location of Maximum Dectected Concentration
Volatile Organic Compounds (SVOCs) - mg/Kg [3]					
1,3,5-Trimethylbenzene	**8.4**	8	0	--	--
1,2-Dichlorobenzene	**1.8**	8	0	--	--
Benzene	**0.06**	8	0	--	--
2-Butanone	**0.12**	8	0	--	--
Acetone	**0.05**	8	1	0.14	TP-19
Cyclohexane	**--**	8	0	--	--
Ethylbenzene	**1**	8	0	--	--
Methyl Acetate	**--**	8	0	--	--
Methyl cyclohexane	**--**	8	0	--	--
p-Isopropyltoluene	**--**	8	0	--	--
Isopropylbenzene	**--**	8	0	--	--
Styrene	**--**	8	0	--	--
Toluene	**0.7**	8	0	--	--
Total xylene	**0.26**	8	0	0.63	B-10
Tetrachloroethene	**1.3**	8	1	--	--
Trichloroethene	**0.47**	8	0	--	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]					
2,4-Dimethylphenol	**--**	19	NA	0.093	MW-2 TP
2-Methylnaphthalene	**--**	19	NA	11	TP-11
Acenaphthene	**20**	19	0	1	TP-11
Acenaphthylene	**100**	19	0	0.63	TP-11
Acetophenone	**--**	19	NA	0.84	TP-7
Anthracene	**100**	19	0	2.4	TP-11
Benzo(a)anthracene	**1**	19	9	9.8	TP-11
Benzo(a)pyrene	**1**	19	8	7.8	TP-11
Benzo(b)fluoranthene	**1**	19	11	12	TP-11
Benzo(ghi)perylene	**100**	19	0	3.3	TP-11
Benzo(k)fluoranthene	**0.8**	19	4	3.3	TP-11
Biphenyl	**--**	19	NA	0.81	TP-11
Bis(2-ethylhexyl) phthalate	**--**	19	NA	0.38	SS-3
Butyl benzyl phthalate	**--**	19	NA	0.8	TP-6
Carbazole	**--**	19	NA	1.6	TP-11
Chrysene	**1**	19	9	10	TP-11
Dibenzofuran	**7**	19	0	2.9	TP-11
Dibenzo (a,h)anthracene	**0.33**	19	4	1.2	TP-11
Fluoranthene	**100**	19	0	20	TP-11
Fluorene	**30**	19	0	1.2	TP-11
Indeno(1,2,3-cd)pyrene	**0.5**	19	12	4.2	TP-11
Naphthalene	**12**	19	0	8.2	TP-11
Phenanthrene	**100**	19	0	15	TP-11
Phenol	**0.33**	19	0	0.072	MW-2 TP
Pyrene	**100**	19	0	17	TP-11
2-Methylphenol	**0.33**	19	0	0.16	TP-11
3-Methylphenol/4-Methylphenol	**0.33**	19	0	0.18	TP-11
1,4-Dioxane		19			
Total PCBs - mg/Kg [3]					
Total PCBs	**0.1**	19	4	0.681	TP-1
Pesticides - mg/Kg [3]					
4,4'-DDD	**0.0033**	8	1	0.009	TP-17
4,4'-DDE	**0.0033**	8	6	0.0243	TP-17
4,4'-DDT	**0.0033**	8	6	0.011	TP-17
Aldrin	**0.005**	8	0	0.0027	TP-17
Chlordane	**--**	8	NA	0.0361	TP-17
cis-Chlordane	**0.094**	8	0	0.0117	TP-17
Dieldrin	**0.005**	8	3	0.03	TP-17
Heptachlor epoxide	**--**	8	NA	0.00306	TP-17
trans-Chlordane	**--**	8	NA	0.00968	TP-17
Herbicides - mg/Kg [4]					
Herbicides	**--**	8	0	ND	--
Total Metals - mg/Kg					
Aluminum	**--**	14	NA	10600	TP-19
Antimony	**--**	14	NA	4.01	MW-2 TP
Arsenic	**13**	19	5	108	TP-11
Barium	**350**	19	0	259	TP-6
Beryllium	**7.2**	14	0	0.484	TP-19
Cadmium	**2.5**	19	1	3.55	TP-6
Calcium	**--**	14	NA	160000	MW-4 TP
Chromium	**30**	19	1	33.3	MW-3 TP
Cobalt	**--**	14	NA	9.79	TP-19
Copper	**50**	14	6	736	MW-2 TP
Iron	**--**	14	NA	17700	TP-19
Lead	**63**	19	9	689	TP-6
Magnesium	**--**	14	NA	33300	MW-2 TP
Manganese	**1600**	14	0	991	MW-3 TP
Mercury	**0.18**	19	6	0.378	TP-6
Nickel	**30**	14	0	20.6	MW-2 TP
Potassium	**--**	14	NA	850	SS-3
Selenium	**3.9**	19	1	4.17	TP-11
Silver	**2**	19	0	0.612	MW-2 TP
Sodium	**--**	14	NA	406	TP-20
Thallium	**--**	14	NA	0.523	MW-3 TP
Vanadium	**--**	14	NA	24.2	MW-3 TP
Zinc	**109**	14	5	1000	MW-2 TP
Perfluorinated Alkyl Acids - ng/g					
Perfluorobutanoic Acid (PFBA)		8	NA	0.17	SS-3
Perfluoropentanoic Acid (PFPeA)	**--**	8	NA	0.085	TP-19
Perfluorohexanoic Acid (PFHxA)	**--**	8	NA	0.131	TP-19
Perfluoroheptanoic Acid (PFHpA)	**--**	8	NA	0.092	TP-19
Perfluorohexanesulfonic Acid (PFHxS)	**--**	8	NA	0.061	TP-17
Perfluorooctanoic Acid (PFOA)	**0.66**	8	0	0.385	TP-19
Perfluorooctanesulfonic Acid (PFOS)	**0.88**	8	1	1.9	TP-17
Perfluorodecanoic Acid (PFDA)	**--**	8	NA	0.128	TP-17
Perfluoroundecanoic Acid (PFUnA)	**--**	8	NA	0.053	TP-17
Perfluorodecanesulfonic Acid (PFDS)	**--**	8	NA	0.068	TP-17
Perfluorododecanoic Acid (PFDoA)	**--**	8	NA	0.061	TP-17

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, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives (SCOs) and current NYSDEC Guidance Values for PFAS (April 2023).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:
NA = Not Applicable.
"--" = No value available for the parameter.

TABLE 6
SUMMARY OF REMEDIAL INVESTIGATION GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION / ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

PARAMETER [1]	GWQS [2]	Remedial Investigation Locations			
		MW-1	MW-2	MW-3	MW-4
		07/14/23	07/13/23	07/13/23	07/13/23
Volatile Organic Compounds (VOCs) - ug/L					
1,1-Dichloroethene	**5**	ND	0.78	ND	0.17 J
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	**9.9**
cis-1,2-Dichloroethene	**5**	**12**	**100 J**	**11**	**22**
Ethylbenzene	**5**	ND	ND	ND	1.7 J
Isopropylbenzene	**5**	ND	ND	ND	2 J
n-propylbenzene	**5**	ND	ND	ND	3.8
p/m-Xylene	**5**	ND	ND	ND	1.5 J
trans-1,2-Dichloroethene	**5**	ND	1 J	ND	ND
Trichloroethene	**5**	2.1	**13**	**26**	0.84
Vinyl chloride	**2**	0.39 J	**34**	0.54 J	**30**
Total VOC TICs	--	ND	ND	ND	2.98 J
Semi-Volatile Organic Compounds (SVOCs) - ug/L					
Acenaphthene	**20**	ND	ND	0.04 J	ND
Acenaphthylene	**--**	ND	ND	ND	ND
Anthracene	**50**	ND	ND	ND	ND
Fluoranthene	**50**	ND	ND	ND	ND
Fluorene	**50**	ND	ND	ND	ND
Hexachlorobenzene	**0.04**	ND	ND	ND	ND
Napthalene	**10**	ND	ND	0.1 J	ND
Phenanthrene	**50**	ND	ND	ND	ND
Pyrene	**50**	ND	ND	ND	ND
Total SVOC TICs	**--**	ND	ND	ND	6.4 J
Semi-Volatile Organic Compounds 8270 (SIM) - ug/L					
1,4 - Dioxane	**0.35**	--	ND	ND	--
Total Metals - ug/L [3]					
Aluminum	**--**	4.92 J	3.8 J	5.66 J	16.9
Antimony	**3**	ND	ND	0.45 J	ND
Arsenic	**25**	0.71	0.56	0.36 J	1.99
Barium	**1000**	543.3	56.07	105.3	34.69
Beryllium	**3**	ND	ND	ND	ND
Cadmium	**5**	ND	0.34	ND	ND
Calcium	**--**	212000	500000 J	188000	477000
Chromium	**50**	ND	0.34 J	ND	ND
Cobalt	**5**	0.38 J	**5.2**	0.56	**16.7**
Copper	**200**	ND	4.48	1.13	ND
Iron	**300**	ND	ND	ND	**14000**
Lead	**25**	ND	ND	ND	ND
Magnesium	**35000**	**38900**	**54000**	33100	**47800**
Manganese	**300**	32.83	**1205**	9.52	**1280**
Mercury	**0.7**	ND	ND	ND	ND
Nickel	**100**	1.01 J	27.9	5.4	11.79
Potassium	**--**	3360	10100	5260	10100
Selenium	**10**	ND	ND	ND	ND
Silver	**50**	ND	ND	ND	ND
Sodium	**20000**	**354000**	**268000**	**594000**	**586000**
Thallium	**--**	ND	0.33 J	0.18 J	ND
Vanadium	**14**	ND	ND	ND	ND
Zinc	**2000**	ND	261	ND	3.56 J
PCB (ug/L)					
Total PCBs	**0.09**	ND	ND	ND	ND
Pesticides - ug/L					
Pesticides	**--**	ND	ND	ND	ND
Herbicides - ug/L					
Herbicides	**--**	ND	ND	ND	ND
Perfluorinated Alkyl Acids - ng/L					
Perfluorobutanoic Acid (PFBA)		--	16.4	13.7	--
Perfluoropentanoic Acid (PFPeA)	**--**	--	23.4	19.8	--
Perfluorohexanoic Acid (PFHxA)	**--**	--	16.6	10.6	--
Perfluoroheptanoic Acid (PFHpA)	**--**	--	6.53	3.8	--
Perfluorooctanoic Acid (PFOA)	**6.7**	--	**14.4**	4.8	--
Perfluorononanoic Acid (PFNA)	**--**	--	0.581 J	ND	--
Perfluorobutanesulfonic Acid (PFBS)	**--**	--	17.4	2.58	--
Perfluoropentanesulfonic Acid (PFPeS)	**--**	--	0.508 J	ND	--
Perfluorohexanesulfonic Acid (PFHxS)	**--**	--	1.02 J	1 J	--
Perfluorooctanesulfonic Acid (PFOS)	**2.7**	--	2.4	2.01	--

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds or analytes were reported as non-detect.
2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - Class GA (TOGS 1.1.1).
3. Reported by the laboratory in mg/L, converted to ug/L for comparison to GWQS/GV.

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the reporting limit but greater than zero.

BOLD = Result exceeds GWQS.

TABLE 6A
SUMMARY OF REMEDIAL INVESTIGATION GROUNDWATER DETECTED COMPOUNDS, NUMBER OF EXCEEDANCES & MAX CONCENTRATIONS
REMEDIAL INVESTIGATION / ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

PARAMETER [1]	GWQS [2]	Number of Samples Tested	Number of Exceedances	Maximum Detected Concentrations	Location of Maximum Detected Concentrations
Volatile Organic Compounds (VOCs) - ug/L					
1,1-Dichloroethene	**5**	4	0	0.17	MW-4
1,2,4-Trimethylbenzene	**5**	4	1	9.9	MW-4
cis-1,2-Dichloroethene	**5**	4	4	100	MW-2
Ethylbenzene	**5**	4	0	1.7	MW-4
Isopropylbenzene	**5**	4	0	2	MW-4
n-propylbenzene	**5**	4	0	3.8	MW-4
p/m-Xylene	**5**	4	0	1.5	MW-4
trans-1,2-Dichloroethene	**5**	4	0	1	MW-2
Trichloroethene	**5**	4	2	26	MW-3
Vinyl chloride	**2**	4	2	34	MW-2
Total VOC TICs	**--**	4	NA	2.98	MW-4
Semi-Volatile Organic Compounds (SVOCs) - ug/L					
Acenaphthene	**20**	4	0	0.04	MW-3
Napthalene	**10**	4	0	0.1	MW-3
Total SVOC TICs	**--**	4	NA	6.4	MW-4
Semi-Volatile Organic Compounds 8270 (SIM) - ug/L					
1,4 - Dioxane	**0.35**	2	0	ND	NA
Total Metals - ug/L [3]					
Aluminum	**--**	4	NA	16.9	MW-4
Antimony	**3**	4	0	0.45	MW-3
Arsenic	**25**	4	0	1.99	MW-4
Barium	**1000**	4	0	543.3	MW-1
Cadmium	**5**	4	0	0.34	MW-2
Calcium	**--**	4	NA	500000	MW-2
Chromium	**50**	4	0	0.34	MW-2
Cobalt	**5**	4	2	16.7	MW-4
Copper	**200**	4	0	4.48	MW-2
Iron	**300**	4	1	14000	MW-4
Lead	**25**	4	0	ND	NA
Magnesium	**35000**	4	3	54000	MW-2
Manganese	**300**	4	2	1280	MW-4
Nickel	**100**	4	0	27.9	MW-2
Potassium	**--**	4	NA	10100	MW-2 & MW-4
Sodium	**20000**	4	4	594000	MW-3
Thallium	**--**	4	0	0.33	MW-2
Zinc	**2000**	4	0	261	MW-2
PCB (ug/L)					
Total PCBs	**0.09**	4	0	ND	NA
Pesticides - ug/L					
Pesticides	**--**	4	0	ND	NA
Herbicides - ug/L					
Herbicides	**--**	4	0	ND	NA
Perfluorinated Alkyl Acids - ng/L					
Perfluorobutanoic Acid (PFBA)		2	NA	16.4	MW-2
Perfluoropentanoic Acid (PFPeA)	**--**	2	NA	23.4	MW-2
Perfluorohexanoic Acid (PFHxA)	**--**	2	NA	16.6	MW-2
Perfluoroheptanoic Acid (PFHpA)	**--**	2	NA	6.53	MW-2
Perfluorooctanoic Acid (PFOA)	**6.7**	2	1.0	14.4	MW-2
Perfluorononanoic Acid (PFNA)	**--**	2	NA	0.581	MW-2
Perfluorobutanesulfonic Acid (PFBS)	**--**	2	NA	17.4	MW-2
Perfluoropentanesulfonic Acid (PFPeS)	**--**	2	NA	0.508	MW-2
Perfluorohexanesulfonic Acid (PFHxS)	**--**	2	NA	1.02	MW-2
Perfluorooctanesulfonic Acid (PFOS)	**2.7**	2	0.0	2.4	MW-2

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds or analytes were reported as non-detect.
2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - Class GA (TOGS 1.1.1).
3. Reported by the laboratory in mg/L, converted to ug/L for comparison to GWQS/GV.

Definitions:
NA = Not Applicable.
"--" = No value available for the parameter.

TABLE 7
SUMMARY OF SOIL VAPOR AND OUTDOOR AIR ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
389 MANHATTAN AVENUE
BUFFALO, NEW YORK

Parameter [1]	Sample Location			
	SV-1	SV-2	SV-3	OA-1
	8/17/2023			
Volatile Organic Compounds (VOCs, ug/m^3)				
1,1,2,2-Tetrachloroethane	ND, <1.37	18.7	ND, <1.37	ND, <1.37
1,2,4-Trimethylbenzene	1.07 NJ	ND, <4.47	3.85 NJ	ND, <0.983
1,3,5-Trimethylbenzene	ND, <0.983	ND, <4.47	2.71	ND, <0.983
2-Butanone	89.1	195	148	ND, <1.47
1,3-Butadiene	1.86	76.8	ND, <0.442	ND, <0.442
4-Methyl-2-pentanone (MIBK)	3.29	12.3	7.62	ND, <2.05
Acetone	869	1670	941	7.06
Benzene	70.3	664	62.6	0.719
Carbon Disulfide	97.2	738	1020 D	1.3
Carbon Tetrachloride	ND, <1.26	ND, <5.72	ND, <1.26	0.453
Chloroform	3.31	51.8	9.47	ND, <0.977
Chloromethane	0.58	ND, <1.88	0.781	0.847
cis-1,2-Dichlorethene	1.17	ND, <3.6	ND, <0.793	ND, <0.793
Cyclohexane	365 D	3090 D	339 D	ND, <0.688
Dichlorodifluoromethane (Freon 12)	2.23	ND, <4.49	2.03	2.28
Ethanol	62	135	48.2	11.1
Ethylbenzene	16.3	42.8	23.9	ND, <0.869
Heptane	570 D	1920 D	404	ND, <0.82
Isopropanol	8.46	23.5	7.25	ND, <1.23
m,p-Xylene	46	110	79.5	ND, <1.74
Methylene chloride	2.28	ND, <7.89	1.87	1.83
n-Hexane	235	2150 D	236	2.18
o-Xylene	14.2	40.2	27	ND, <0.869
Styrene	0.869	ND, <3.87	ND, <0.852	ND, <0.852
Tert-Butyl Alcohol	129	230	119	ND, <1.52
Tetrachloroethene	1.41	ND, <6.16	2.62	ND, <0.136
Tetrahydrofuran	2.45	11	6.49	ND, <1.47
Toluene	146	392	152	1.33
Trichloroethene	1.63	15.3	2.47	ND, <0.107
Trichlorofluoromethane	1.34	ND, <5.11	1.62	ND, <1.12
Xylenes, Total	60.2	150.2	106.5	ND

Notes:

1. Only those compounds detected at a minimum of one location are presented.

Qualifiers:

ND, < = non-detect result and associated reporting limit.

D = Sample results are obtained from a dilution.

ug/m3 = micrograms per cubic meter

TABLE 8
STANDARDS, CRITERIA, AND GUIDANCE (SCGs)
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Citation	Title	Regulatory Agency
General		
29CFR 1910.120	Hazardous Waste Operations and Emergency Response	US Dept. of Labor, OSHA
29CFR 1910.1000	OSHA General Industry Air Contaminants Standard	US Dept. of Labor, OSHA
29CFR 1926	Safety and Health Regulations for Construction	US Dept. of Labor, OSHA
Not Applicable	Analytical Services Protocol	NYSDEC
6NYCRR Part 608	Use and Protection of Waters	NYSDEC
6NYCRR Part 621	Uniform Procedures Regulations	NYSDEC
6NYCRR Parts 750-757	State Pollutant Discharge Elimination System	NYSDEC
Not Applicable	New York State Stormwater Management Design Manual	NYSDEC
Section 404	Clean Water Act	USACE
Soil/Fill		
6NYCRR Part 375	Environmental Remediation Programs	NYSDEC
DEC Policy CP-51	Soil Cleanup Guidance	NYSDEC
Groundwater		
6NYCRR Part 700-705	Surface Water and Ground Water Classification Standards	NYSDEC
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values	NYSDEC
TOGS 2.1.3	Primary and Principal Aquifer	NYSDEC
Air		
DER-10 Appendix 1B	Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites	NYSDEC
NYSDOH, October 2006	Final - Guidance for Evaluating Soil Vapor Intrusion in the State of NY	NYSDOH
Solid Waste		
6NYCRR 360	Solid Waste Management Facilities	NYSDEC
6NYCRR 364	Waste Transporters	NYSDEC

TABLE 9
ALTERNATIVE 2 - CONDITIONAL TRACK 1 UNRESTRICTED USE CLEANUP COST ESTIMATE
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost
Remedial Action Work Plan	1	EST	$ 20,000	**$ 20,000**
Remedial Costs				
Project Management	1	EST	$ 30,000	$ 30,000
Contractor Mobilization/Demobilization, HASP & Erosion Control	1	EST	$ 45,000	$ 45,000
Survey/Stakeout	1	EST	$ 5,000	$ 5,000
Sweeping & Dust Control/Water Truck	1	EST	$ 20,000	$ 20,000
Excavation of Impacted Soil/Fill to Top of Bedrock [1]	6,300	CYDs	$ 13	$ 81,900
Non-Hazardous Transportation & Disposal of Soil/Fill [2]	9,500	TON	$ 47	$ 446,500
Excavation Backfill (Placement & Compaction) [3]	9,450	TON	$ 38	$ 359,100
Backfill Compaction Testing	1	EST	$ 15,000	$ 15,000
Miscellaneous Earthwork Costs	1	EST	$ 16,000	$ 16,000
Post-Excavation Sidewall Sampling [4]	41	EA	$ 1,050	$ 43,050
Groundwater Remediation [5]	1	EST	$ 637,000	$ 637,000
Vapor Intrusion Sampling	1	EST	$ 7,500	$ 7,500
			Subtotal	**$ 1,706,050**
Remedial Oversight & Backfill Monitoring	24	DAY	$ 1,800	**$ 43,200**
Environmental Atorney				**$ 20,000**
Site Management Plan				**$ 15,000**
Final Engineering Report				**$ 25,000**
Total Capital Cost				**$ 1,829,250**
Groundwater Monitoring (assumes semi-annual for 5-years)	10	events	$ 3,000	**$ 30,000**
Estimated Remedial Cost				**$ 1,859,000**

Notes:

1. Assumes average of 2.5 feet of fill material over the top of bedrock to be removed over 1.56-acre Site.
2. Assumes weight of fill material is 1.5 tons per cubic yard.
3. Assumes stone backfill to be imported is 75% of volume removed and weight of stone backfill is 2 tons per cubic yard.
4. Post-excavation samples to be collected every 30 linear feet. Perimeter of Site is 1,040 ft. Samples to be analyzed for SVOCs, metals, PCBs, pesticides and PFAS.
5. Groundwater remediation costs includes EPA UIC Permit, installation of 29 bedrock injection wells, groundwater amendment, amendment injections and oversight.

TABLE 10
ALTERNATIVE 3 - TRACK 2 RESIDENTIAL USE CLEANUP COST ESTIMATE
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
389 MANHATTAN AVENUE SITE
BCP SITE NO. C915369
BUFFALO, NEW YORK

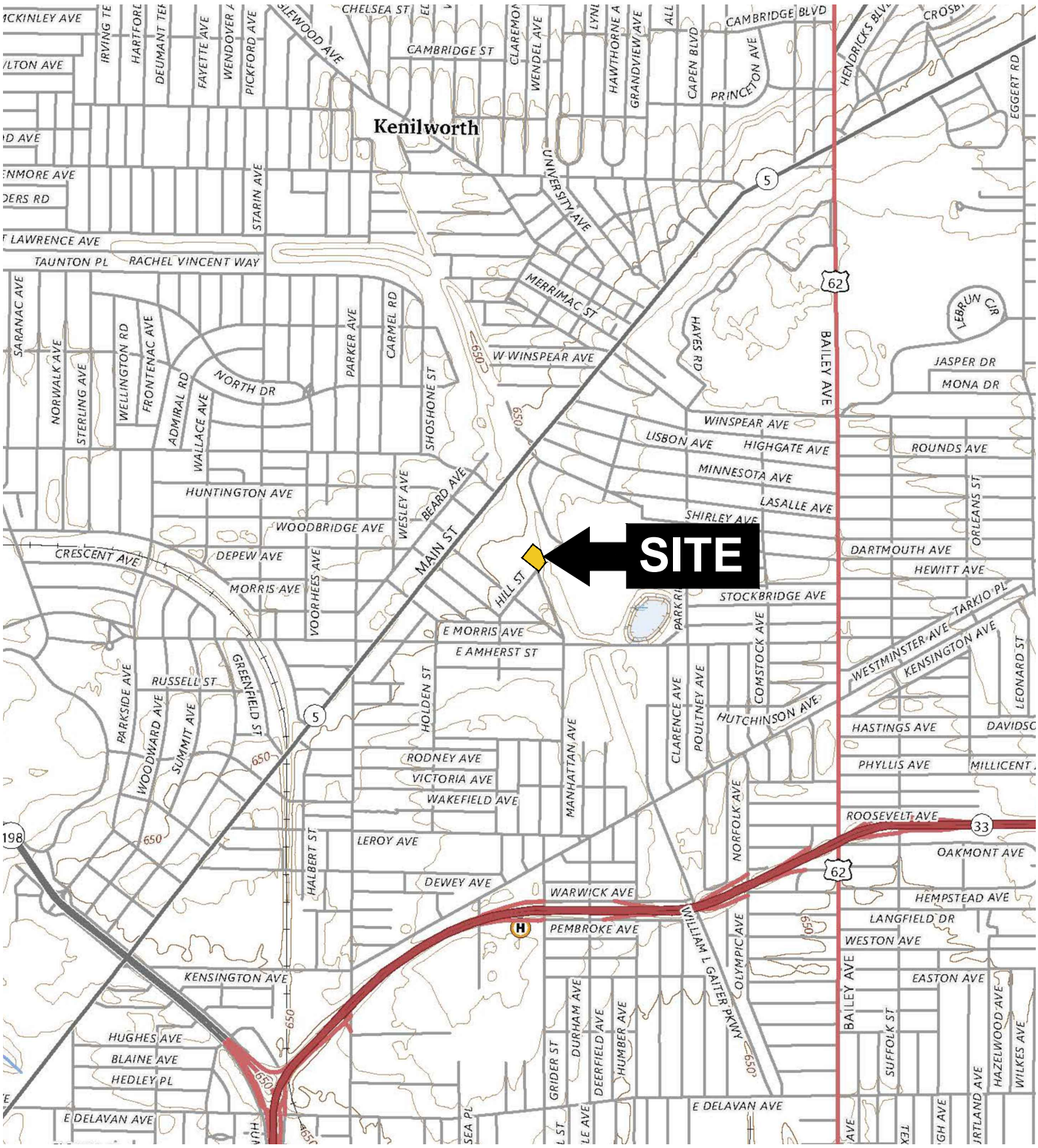
Item	Quantity	Units	Unit Cost	Total Cost
Remedial Action Work Plan	1	EST	$ 20,000	**$ 20,000**
Remedial Costs				
Project Management	1	EST	$ 30,000	$ 30,000
Contractor Mobilization/Demobilization, HASP, & Erosion Control	1	EST	$ 45,000	$ 45,000
Survey/Stakeout	1	EST	$ 5,000	$ 5,000
Swweping & Dust Control/Water Truck	1	EST	$ 20,000	$ 20,000
Excavation of Impacted Soil/Fill to Top of Bedrock [1]	6,300	CYDs	$ 13	$ 81,900
Non-Hazardous Transportation & Disposal of Soil/Fill [2]	9,500	TON	$ 47	$ 446,500
Excavation Backfill (Placement & Compaction) [3]	9,450	TON	$ 38	$ 359,100
Compaction Testing	1	EST	$ 15,000	$ 15,000
Miscellaneous Earthwork Costs	1	EST	$ 16,000	$ 16,000
Post-Excavation Sidewall Sampling [4]	41	EA	$ 1,050	$ 43,050
Groundwater Remediation [5]	1	EST	$ 120,000	$ 120,000
Vapor Intrusion Sampling & ASD Assessment	1	EST	$ 15,000	$ 15,000
Sub-slab Vapor Mitigation System	1	EST	$ 50,000	$ 50,000
			Subtotal	**$ 1,246,550**
Remedial Oversight & Backfill Monitoring	24	DAY	$ 1,800	**$ 43,200**
Environmental Atorney				**$ 20,000**
Site Management Plan				**$ 15,000**
Final Engineering Report				**$ 25,000**
Total Capital Cost				**$ 1,370,000**
Groundwater Monitoring (assumes semi-annual for 5-years)	10	events	$ 3,000	**$ 30,000**
Annual Peridoic Review Report (assumes 30-years)	30	years	$ 4,000	**$ 120,000**
Estimated Remedial Cost				**$ 1,520,000**

Notes:

1. Assumes average of 2.5 feet of fill material over the top of bedrock to be removed over 1.56-acre Site.
2. Assumes weight of fill material is 1.5 tons per cubic yard.
3. Assumes weight of fill material is 1.5 tons per cubic yard.
4. Post-excavation samples to be collected every 30 linear feet. Perimeter of Site is 1,040 ft. Samples to be analyzed for SVOCs, metals, PCBs, pesticides and PFAS.
5. Groundwater remediation costs includes EPA UIC Permit, installation of 6 bedrock injection wells, groundwater amendment, amendment injections and oversight.

APPENDICES

A. Project Photo Log
B. Test Pit Logs and Monitoring Well Completion Details
C. Field Notes & Forms
D. Community Air Monitoring Data
E. Hydraulic Gradient Calculations
F. Laboratory Analytical Data Packages
G. Data Usability Summary Reports
H. Fish and Wildlife Resource Impact Analysis
I. Waste Characterization Analytical Data Package



QUADRANGLE LOCATION



SOURCE:
USGS, 2023, Buffalo, NY
7.5 Minute Topographic Quadrangle

N

0 2,000'

Title:

SITE LOCATION AND VICINITY MAP
RI/AA REPORT
389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:

389 MANHATTAN , LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	1
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 1; SITE LOCATION AND VICINITY MAP.DWG		

F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 1; SITE LOCATION AND VICINITY MAP.DWG

F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 2; SITE PLAN (AERIAL).DWG



LEGEND

- BCP BOUNDARY
- PARCEL BOUNDARY
- 389 MANHATTAN AVENUE PARCEL BOUNDARY

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.

N

80' 0 80'

Title:

SITE PLAN (AERIAL)
RI/AA REPORT
389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369

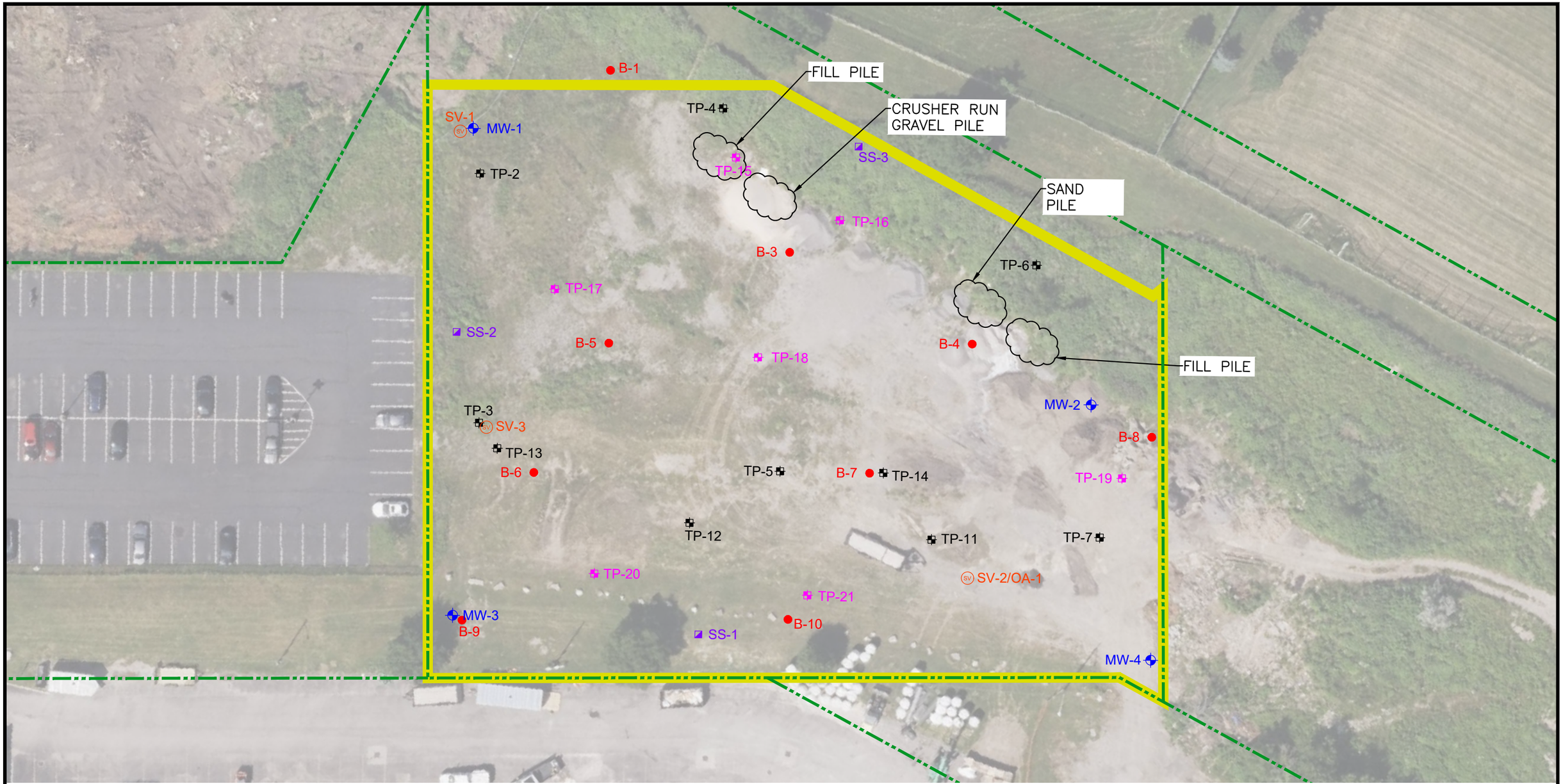
Prepared for:

389 MANHATTAN AVENUE, LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024
Prepared by: CNK	Scale: AS SHOWN
Project Mgr: CZB	Project: 4298.0001B000
File: FIGURE 2; SITE PLAN (AERIAL).DWG	

FIGURE 2



F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 3; PREVIOUS AND REMEDIAL INVESTIGATION LOCATIONS.DWG

LEGEND

- BCP BOUNDARY
- PARCEL BOUNDARY
- TP-1 PHASE II TEST PIT LOCATION
- TP-11 RI TEST PIT LOCATION
- MW-1 RI MONITORING WELL LOCATION
- SS-1 RI SURFACE SOIL LOCATION
- SV-1 RI SOIL VAPOR LOCATION
- B-1 GEOTECH SOIL BORING LOCATION

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.

40’ 0 40’

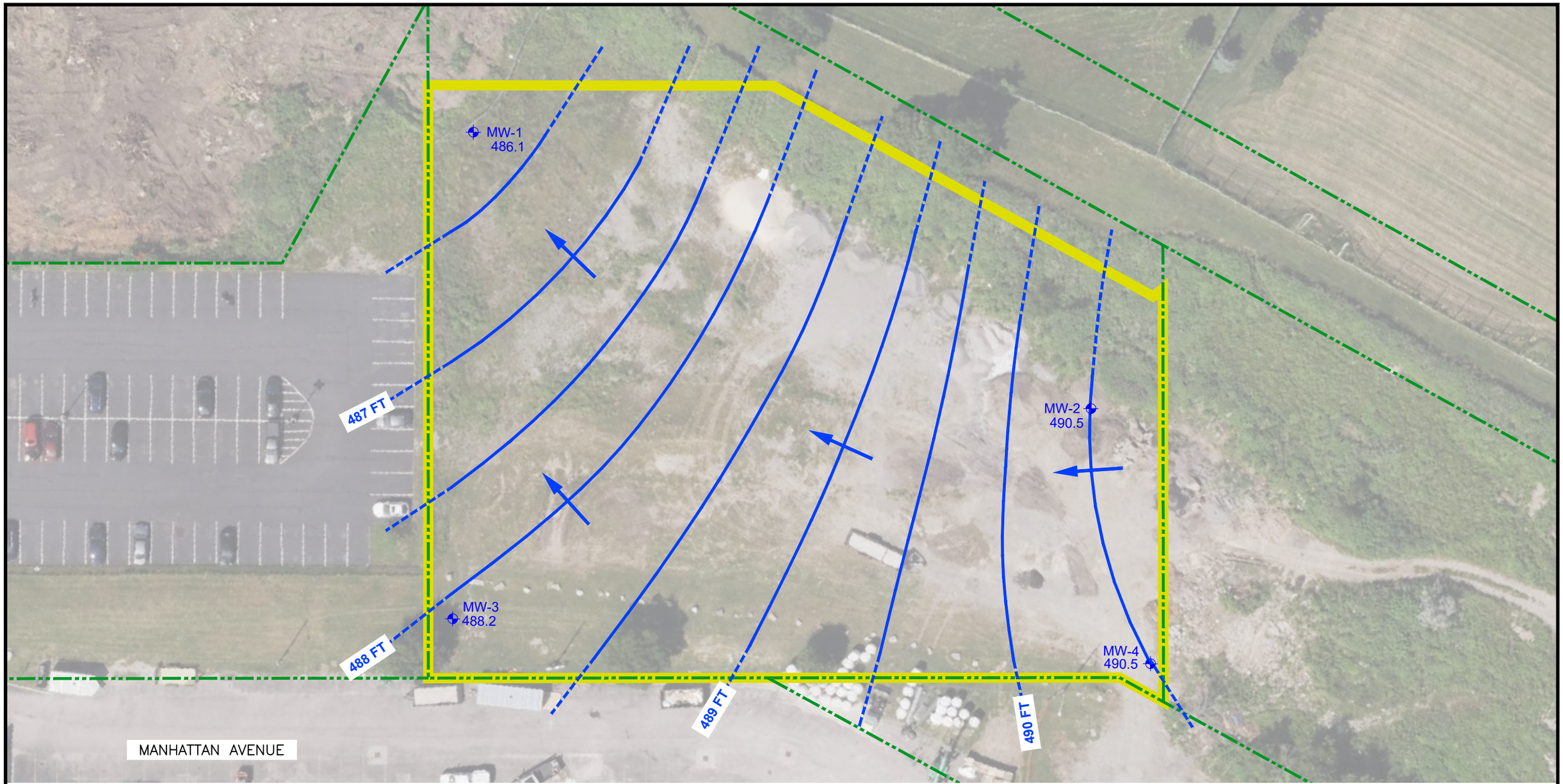
Title:
PREVIOUS AND REMEDIAL INVESTIGATION LOCATIONS
RI/AA REPORT
389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:
389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	3
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 3; PREVIOUS AND REMEDIAL INVESTIGATION LOCATIONS.DWG		



F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 4; GROUNDWATER ISOPOTENTIAL MAP.DWG

LEGEND

- BCP BOUNDARY
- PARCEL BOUNDARY
- MW-1 RI MONITORING WELL LOCATION
- GROUNDWATER ISOPOTENTIAL LINE
- 100 GROUNDWATER ISOPOTENTIAL LABEL
- GROUNDWATER FLOW DIRECTION

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.
2. GROUNDWATER ELEVATIONS ARE IN FEET RELETIVE TO AN ASSUMED DATUM ELEVATION OF 500 FT. SURVEY DATA WAS COLLECTED JULY 7, 2023.
3. GROUNDWATER ELEVATIONS BASED ON STATIC WATER LEVEL MEASUREMENTS COLLECTED JULY 13, 2023.

N

40’ 0 40’

Title:
GROUNDWATER ISOPOTENTIAL MAP
RI/AA REPORT
389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:
389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	4
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 4; GROUNDWATER ISOPOTENTIAL MAP.DWG		

SS-2	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	3.2
BENZO(A)PYRENE	2.9
BENZO(B)FLUORANTHENE	4.3
BENZO(K)FLUORANTHENE	0.94
CHRYSENE	3.2
DIBENZO(A,H)ANTHRACENE	0.39
INDENO(1,2,3-CD)PYRENE	1.8
COPPER	721
LEAD	148
ZINC	491

TP-17 (0-2 FT)	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.8
BENZO(A)PYRENE	1.6
BENZO(B)FLUORANTHENE	2
CHRYSENE	1.8
INDENO(1,2,3-CD)PYRENE	1.1
TOTAL PCBs	0.118
4,4'-DDD	0.00909
4,4'-DDE	0.0243
4,4'-DDT	0.011
DIELDRIN	0.03
LEAD	68.8
MERCURY	0.221
PARAMETER	NG/G
PFOS	1.9

TP-18 (0-2.5 FT)	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.1
BENZO(B)FLUORANTHENE	1.3
CHRYSENE	1.1
INDENO(1,2,3-CD)PYRENE	0.58
4,4'-DDE	0.00615
DIELDRIN	0.00585

TP-15 (0-0.75 FT)	6/21/2023
PARAMETER	MG/KG
INDENO(1,2,3-CD)PYRENE	0.55
COPPER	50.7

SS-3	6/21/2023
PARAMETER	MG/KG
4,4'-DDE	0.00646
4,4'-DDT	0.00531

TP-16 (0-1 FT)	6/21/2023
PARAMETER	MG/KG
4,4'-DDE	0.00698
4,4'-DDT	0.00678
DIELDRIN	0.00665

TP-6 (5-6 FT)	3/4/2020
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	3.6
BENZO(A)PYRENE	4
BENZO(B)FLUORANTHENE	5.2
BENZO(K)FLUORANTHENE	1.6
CHRYSENE	3.3
DIBENZO(A,H)ANTHRACENE	0.58
INDENO(1,2,3-CD)PYRENE	2.3
TOTAL PCBs	0.296
ARSENIC	13.5
LEAD	689
MERCURY	0.378

MW-2 (0-3 FT)	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.9
BENZO(A)PYRENE	1.3
BENZO(B)FLUORANTHENE	1.5
CHRYSENE	1.5
INDENO(1,2,3-CD)PYRENE	0.64
ARSENIC	13.1
COPPER	736
LEAD	453
ZINC	1000

TP-13 (0.5-1.5 FT)	7/1/2020
PARAMETER	MG/KG
BENZO(B)FLUORANTHENE	1
INDENO(1,2,3-CD)PYRENE	0.61

TP-19 (0-2 FT)	6/21/2023
PARAMETER	MG/KG
ACETONE	0.14
BENZO(B)FLUORANTHENE	1.2
INDENO(1,2,3-CD)PYRENE	0.56
4,4'-DDT	0.0047
COPPER	66
LEAD	82.7
MERCURY	0.188
ZINC	125

TP-7 (0.5-1.5 FT)	3/4/2020
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	2.8
BENZO(A)PYRENE	2.9
BENZO(B)FLUORANTHENE	3.7
BENZO(K)FLUORANTHENE	1.3
CHRYSENE	2.8
DIBENZO(A,H)ANTHRACENE	0.41
INDENO(1,2,3-CD)PYRENE	1.5
ARSENIC	29
LEAD	108
MERCURY	0.284

MW-3 (0-2 FT)	6/21/2023
CHROMIUM	33.3
COPPER	127
ZINC	182

TP-20 (0-2 FT)	6/21/2023
PARAMETER	MG/KG
4,4'-DDE	0.00478
4,4'-DDT	0.00484

TP-21 (0-1.5 FT)	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.8
BENZO(A)PYRENE	1.6
BENZO(B)FLUORANTHENE	2.2
CHRYSENE	1.8
INDENO(1,2,3-CD)PYRENE	1
ARSENIC	14.2
COPPER	53.2
LEAD	84.1
MERCURY	0.181
ZINC	188

SS-1	6/21/2023
PARAMETER	MG/KG
4,4'-DDE	0.00466
4,4'-DDT	0.00765

B-10	9/21/2023
PARAMETER	MG/KG
TOTAL XYLENE	0.63

MW-4 (0-2 FT)	6/21/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.1
BENZO(A)PYRENE	1.3
BENZO(B)FLUORANTHENE	1.8
CHRYSENE	1.5
INDENO(1,2,3-CD)PYRENE	0.95

TP-11 (0.5-1.5 FT)	7/1/2020
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	9.8
BENZO(A)PYRENE	7.8
BENZO(B)FLUORANTHENE	12
BENZO(K)FLUORANTHENE	3.3
CHRYSENE	10
DIBENZO(A,H)ANTHRACENE	1.2
INDENO(1,2,3-CD)PYRENE	4.2
TOTAL PCBs	0.198
ARSENIC	108
LEAD	257
MERCURY	0.354

B-1 MW-1 TP-2 TP-4 TP-15 SS-3 TP-16 B-3 TP-17 TP-6 SS-2 B-5 TP-18 B-4 MW-2 TP-3 TP-13 B-6 TP-5 B-7 TP-14 B-8 TP-19 TP-12 TP-11 TP-7 TP-20 TP-21 MW-3 B-9 SS-1 B-10 MW-4

F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 5; PREVIOUS AND REMEDIAL INVESTIGATION LOCATIONS AND SOIL-FILL EXCEEDANCES.DWG

LEGEND

- BCP BOUNDARY
- PARCEL BOUNDARY
- TP-1 PHASE II TEST PIT LOCATION
- TP-11 RI TEST PIT LOCATION
- MW-1 RI MONITORING WELL LOCATION
- SS-1 RI SURFACE SOIL LOCATION
- B-1 GEOTECH SOIL BORING LOCATION
- EXCEEDS UNRESTRICTED SCOs
- EXCEEDS RESTRICTED–RESIDENTIAL SCOs
- EXCEEDS COMMERCIAL SCOs
- EXCEEDS INDUSTRIAL SCOs

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.
2. RESULTS COMPARED TO 6 NYCRR PART 375 SOIL CLEANUP OBJECTIVES (SCOs).

N

60' 0 60'

Title:
PREVIOUS AND REMEDIAL INVESTIGATION SOIL/FILL EXCEEDANCES

RI/AA REPORT

389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:
389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	5
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 5; PREVIOUS AND REMEDIAL INVESTIGATION LOCATIONS AND SOIL-FILL EXCEEDANCES.DWG		

MW-1	7/14/2023
PARAMETER	UG/L
CIS-1,2-DICHLOROETHENE	12

MW-2	7/13/2023
PARAMETER	UG/L
CIS-1,2-DICHLOROETHENE	100
TRICHLOROETHENE	13
VINYL CHLORIDE	34

MW-3	7/13/2023
PARAMETER	UG/L
CIS-1,2-DICHLOROETHENE	11
TRICHLOROETHENE	26

MW-4	7/13/2023
PARAMETER	UG/L
1,2,4-TRIMETHYLBENZENE	9.9
CIS-1,2-DICHLOROETHENE	22
VINYL CHLORIDE	30

MW-1
486.1

MW-2
490.5

MW-3
488.2

MW-4
490.5

487 FT

488 FT

489 FT

490 FT

LEGEND

- BCP BOUNDARY
- PARCEL BOUNDARY
- MW-1 RI MONITORING WELL LOCATION
- GROUNDWATER ISOPOTENTIAL LINE
- 100 GROUNDWATER ISOPOTENTIAL LABEL
- GROUNDWATER FLOW DIRECTION
- EXCEEDS GWQS/GV

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.
2. GROUNDWATER ANALYTICAL RESULTS COMPARED TO TOGS 1.1.1 GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES (GWQS/GV).

40' 0 40'

Title:
VOC EXCEEDANCES IN GROUNDWATER
RI/AA REPORT
389 MANHATTAN AVENUE SITE

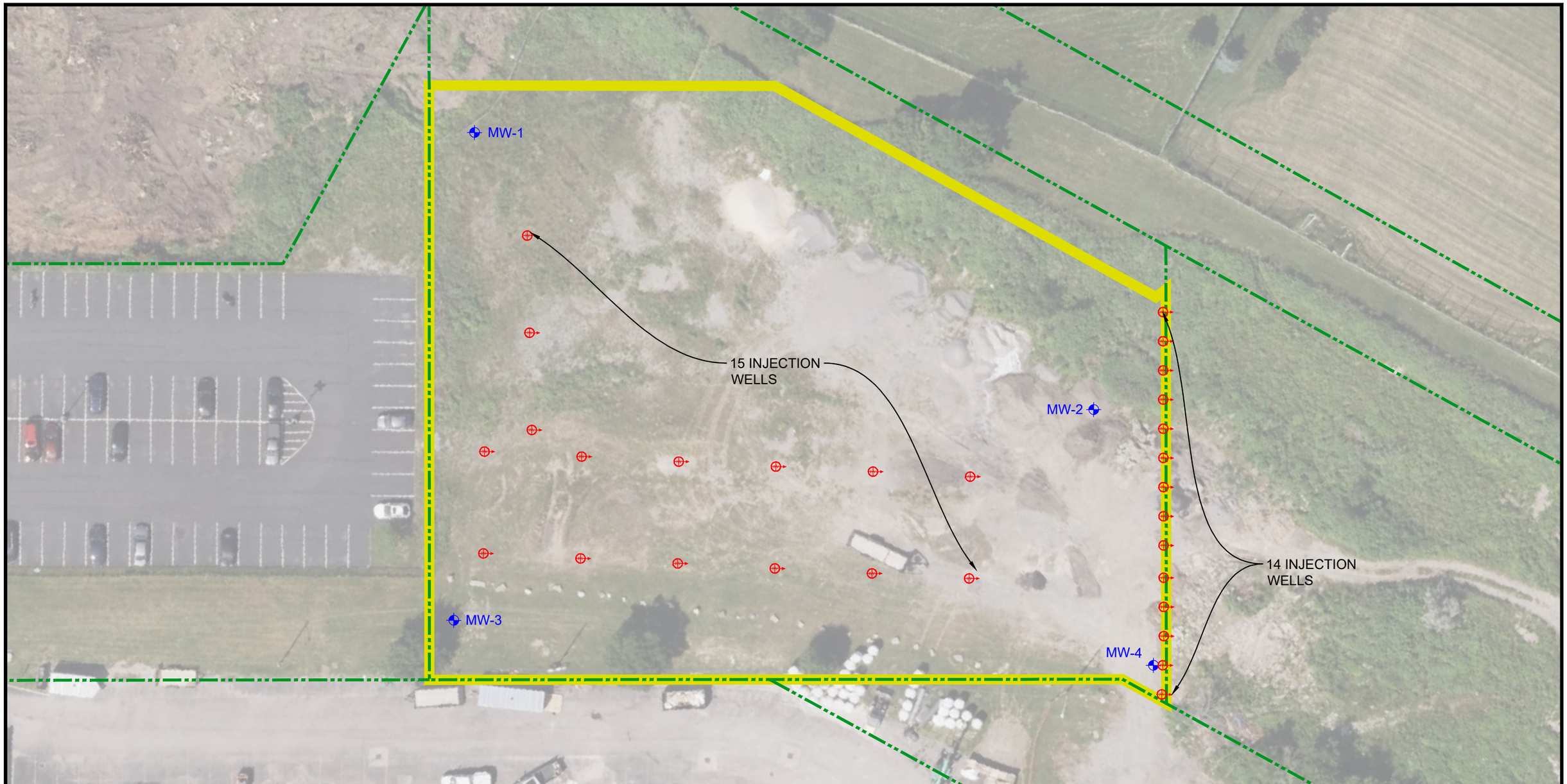
BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:
389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: JANUARY 2024	FIGURE 6
Prepared by: CNK	Scale: AS SHOWN	
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 6; VOC EXCEEDANCES IN GROUNDWATER.DWG		

F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 6; VOC EXCEEDANCES IN GROUNDWATER.DWG



F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 7; TRACK 1 UNRESTRICTED USEL CLEANUP GROUNDWATER INJECTION LOCATIONS.DWG

LEGEND

- BCP BOUNDARY AND LIMITS OF EXCAVATION
- PARCEL BOUNDARY
- MW-1 RI MONITORING WELL LOCATION
- BEDROCK INJECTION WELL LOCATION

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.

40' 0 40'

TRACK 1 UNRESTRICTED USE CLEANUP GROUNDWATER INJECTION LOCATIONS
389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:
389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: FEBRUARY 2024	FIGURE 7
Prepared by: CNK	Scale: AS SHOWN	
Project Mgr: CZB	Project: 4298.0001B000	
File: FIGURE 7; TRACK 1 UNRESTRICTED USEL CLEANUP GROUNDWATER INJECTION LOCATIONS.DWG		



F:\CAD\BENCHMARK\SAVARINO\389 MANHATTAN AVE\RI-AA\FIGURE 8; TRACK 2 RESIDENTIAL CLEANUP GROUNDWATER INJECTION LOCATIONS.DWG

LEGEND

- BCP BOUNDARY AND LIMITS OF EXCAVATION
- PARCEL BOUNDARY
- MW-1 RI MONITORING WELL LOCATION
- IW-1 BEDROCK INJECTION WELL LOCATION

NOTES

1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE FEBRUARY 2024.

N

40’ 0 40’

Title:

TRACK 2 RESIDENTIAL CLEANUP GROUNDWATER INJECTION LOCATIONS 389 MANHATTAN AVENUE SITE

BCP SITE NO. C915369
BUFFALO, NEW YORK

Prepared for:

389 MANHATTAN, LLC

ROUX

Compiled by: CNK	Date: FEBRUARY 2024
Prepared by: CNK	Scale: AS SHOWN
Project Mgr: CZB	Project: 4298.0001B000
File: FIGURE 8; TRACK 2 RESIDENTIAL CLEANUP GROUNDWATER INJECTION LOCATIONS.DWG	

FIGURE 8

APPENDIX A

Project Photo Log

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: TP-15 looking north.

Photo 2: TP-15 looking north.

Photo 3: TP-18 looking east.

Photo 4: TP-18.

SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: TP-21 looking south.

Photo 6: TP-21.

Photo 7: TP-20.

Photo 8: TP-20 looking west.

SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 12:



Photo 9: Asphalt and concrete debris piles, looking north.

Photo 10: Asphalt, soil, and sand debris piles, looking northeast.

Photo 11: Concrete and soil debris piles, looking west.

Photo 12: Asphalt debris pile, looking north.

SITE PHOTOGRAPHS

Photo 13:



Photo 14:



Photo 15:



Photo 16:



Photo 13: Drill rig set up at MW-3, looking north.

Photo 14: Overburden auguring to set PVC Casing.

Photo 15: Overburden casing for water recirculation, looking north.

Photo 16: Rock core generated from MW-3.

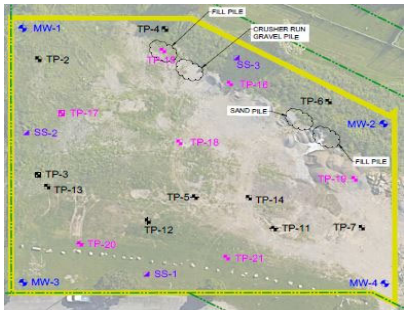
APPENDIX B

Test Pit and Monitoring Well Completion Details

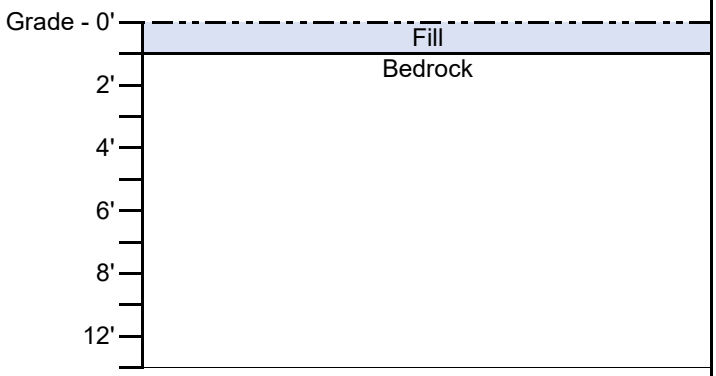
TEST PIT EXCAVATION LOG

Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-15**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



Test Pit Cross Section:



TIME			
Start:	Length:	10.5 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	0.75 ft	(approx.)

Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 0.75	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, trace plastic and concrete/brick fragments. No odors.	0.0	Y	Y
0.75	**Bedrock:** Equipment refusal at 0.75 fbgs			

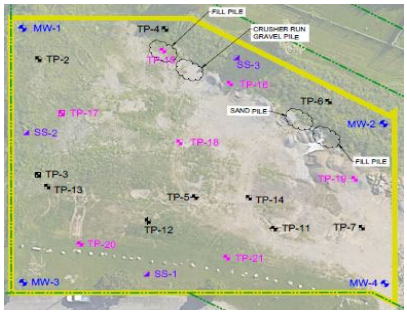
COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 0.75 ft			Sample I.D.: TP-15
			Sample I.D.:
			Sample I.D.:

TEST PIT EXCAVATION LOG

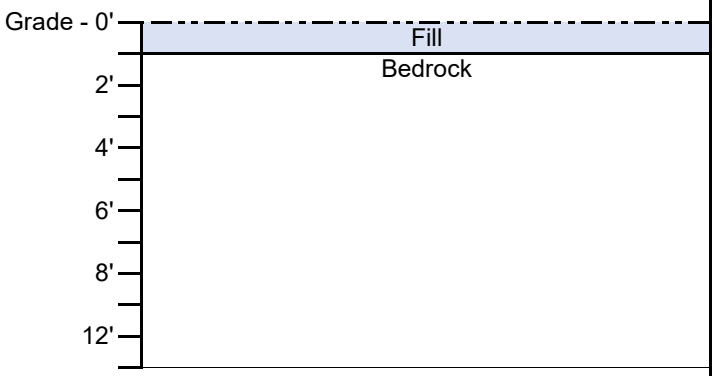
Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-16**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



TIME			
Start:	Length:	15 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	1 ft	(approx.)

Test Pit Cross Section:



Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 1.0	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, trace plastic and concrete/brick fragments. No odors.	0.0	Y	Y
1	**Bedrock:** Equipment refusal at 1.0 fbgs			

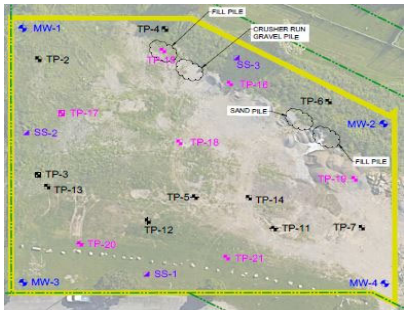
COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 1 ft			Sample I.D.: TP-16
			Sample I.D.:
			Sample I.D.:

TEST PIT EXCAVATION LOG

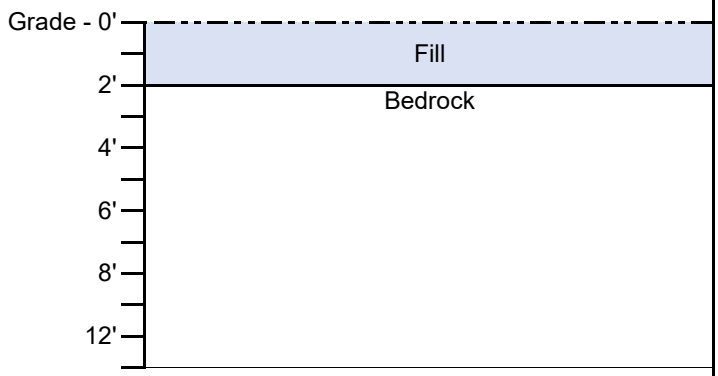
Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-17**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



TIME			
Start:	Length:	10 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	2 ft	(approx.)

Test Pit Cross Section:



Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 2.0	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, some asphalt fragments, trace concrete/brick fragments. No odors.	0.0	Y	Y
2	**Bedrock:** Equipment refusal at 2.0 fbgs			

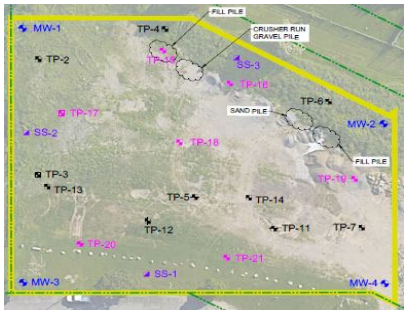
COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 2 ft			Sample I.D.: TP-17
			Sample I.D.:
			Sample I.D.:

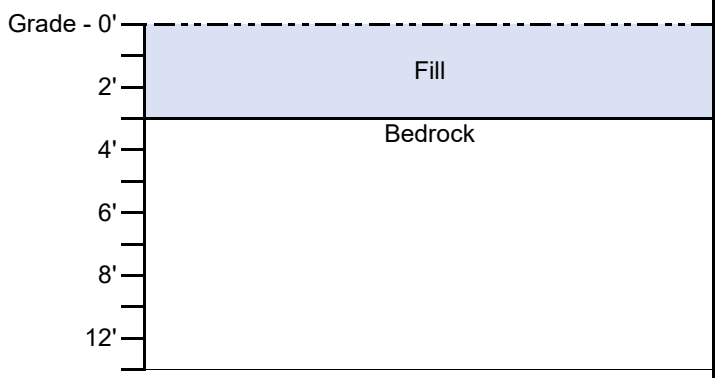
TEST PIT EXCAVATION LOG

Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-18**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



Test Pit Cross Section:



TIME			
Start:	Length:	10 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	2.5 ft	(approx.)

Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 2.5	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, large stones and cobbles throughout, trace concrete and brick fragments. No odors.	0.0	Y	Y
2.5	**Bedrock:** Equipment refusal at 2.5 fbgs			

COMMENTS:

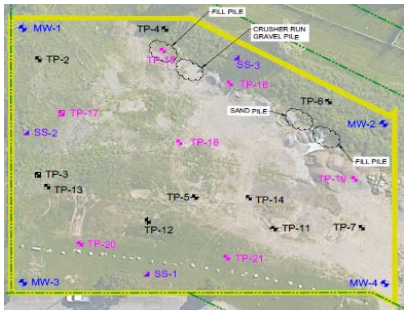
GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 2.5 ft			Sample I.D.: TP-18
			Sample I.D.:
			Sample I.D.:

ROUX

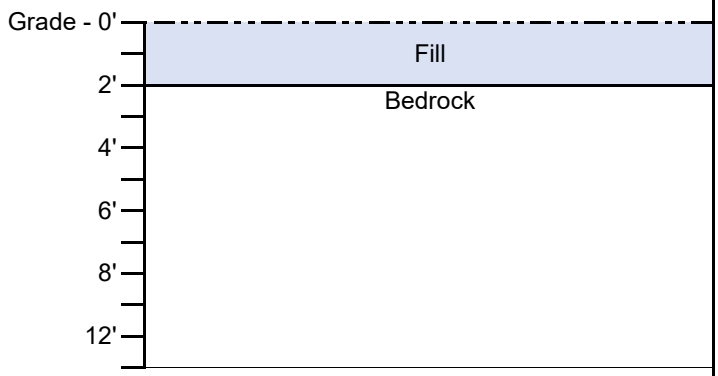
TEST PIT EXCAVATION LOG

Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-19**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



Test Pit Cross Section:



TIME			
Start:	Length:	10 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	2 ft	(approx.)

Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 1.0	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, some round cobbles, trace concrete/brick fragments. No odors.	0.0	Y	Y (Composite)
1.0 - 1.5	**Fill:** Black, mostly granular material and fines, some yellowish fine sand. No odors.	0.0	Y	
1.5 - 2.0	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, some round cobbles, some yellowish fine sand. No odors.	0.0	Y	
2.0	**Bedrock:** Equipment refusal at 2 fbgs			

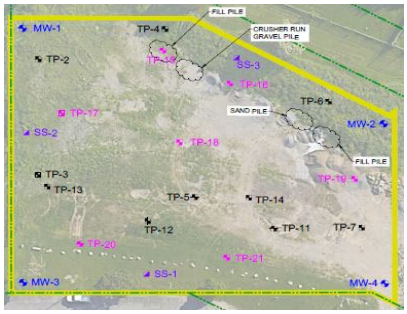
COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:	
VISUAL IMPACTS:	☑ YES	☐ NO	Describe:	Black granular and yellow sand
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:	
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO		
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:	
SAMPLES COLLECTED: 0 - 2 ft			Sample I.D.:	TP-19
			Sample I.D.:	
			Sample I.D.:	

TEST PIT EXCAVATION LOG

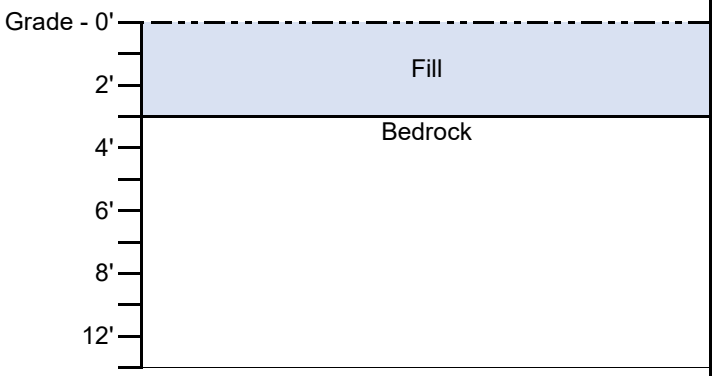
Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-20**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



TIME			
Start:	Length:	10 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	2.75 ft	(approx.)

Test Pit Cross Section:



Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 2.75	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, some asphalt fragments, some large stones and cobbles, trace concrete/brick fragments. No odors.	0.0	Y	Y
2.75	**Bedrock:** Equipment refusal at 2.75 fbgs			

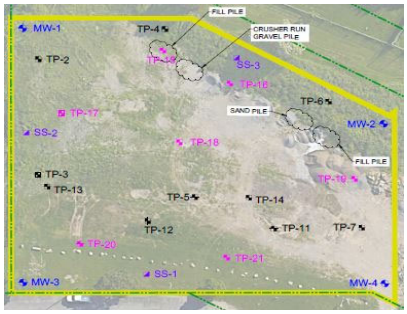
COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 2 ft			Sample I.D.: TP-20
			Sample I.D.:
			Sample I.D.:

TEST PIT EXCAVATION LOG

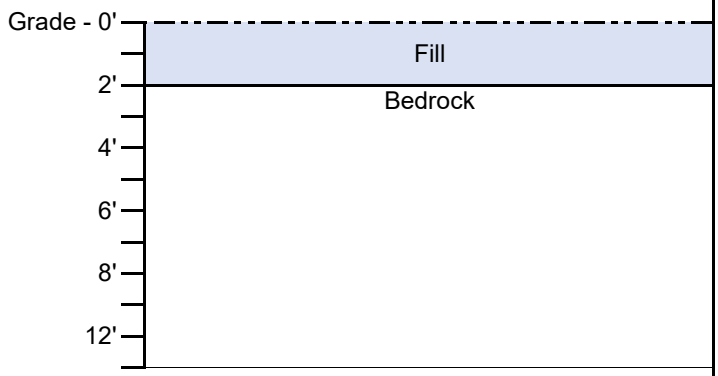
Project:	389 Manhattan Avenue Site	TEST PIT I.D.:	**TP-21**
Project No.:	0595-021-001	Excavation Date:	06/21/23
Client:	389 Manhattan, LLC	Excavation Method:	Excavator
Location:	389 Manhattan Avenue	Logged / Checked By:	cms/czb

Test Pit Location: *NOT TO SCALE*



TIME			
Start:	Length:	10.5 ft	(approx.)
End:	Width:	5 ft	(approx.)
	Depth:	1.5 ft	(approx.)

Test Pit Cross Section:



Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0 - 1.5	**Fill:** Brown, mostly fine sand and gravel (mostly subrounded and angular with some rounds), some silt, some large angular and rounded cobbles, trace concrete/brick fragments. No odors.	0.0	Y	Y
1.5	**Bedrock:** Equipment refusal at 1.5 fbgs			

COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES	☑ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES	☑ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES	☑ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☑ YES	☐ NO	
OTHER OBSERVATIONS:	☐ YES	☑ NO	Describe:
SAMPLES COLLECTED: 0 - 1.5 ft			Sample I.D.: TP-21
			Sample I.D.:
			Sample I.D.:

Project No: 0595-021-001

Borehole Number: MW-1

Project: 389 Manhattan Avenue Site

A.K.A.:

Client: 389 Manhattan, LLC

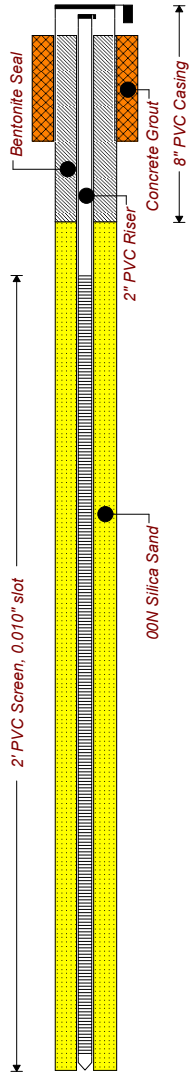
Logged By: CMS

Site Location: Buffalo, New York

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-1.0	0.0	Ground Surface							
	0.0	***Fill*** Brown, mostly fine sand and gravel (mostly sub-rounded and angular with some rounds), some silt, no odors.					0.0	Sample Location	
	-2.0 / 2.0	***Limestone*** Equipment refusal at 2 fbgs. Set 8" PVC casing at 2 fbgs. HQ bit to 19.5 fbgs.					0.0		
4.0		***Run #1*** 2.0 - 6.0 fbgs Recovery = 4' RQD = 8.5% Very Poor Heavily fractured. Total water loss 190-gallons					0.0 0.0 0.0		
	-6.0 / 6.0	***Run #2*** 6.0 - 11.0 fbgs Recovery = 5' RQD = 66% Fair Moderately fractured. Apparent mechanical fracture at 7.5 fbgs. Clay bedding at 8.7 fbgs. Total water loss 275-gallons					0.1 0.2 0.1		
9.0							0.1 0.1 0.0		
	-11.0 / 11.0	***Run #3*** 11.0 - 15.0 fbgs Recovery = 3.94' RQD = 70% Fair Moderately fractured. Total water loss 220-gallons					0.0 0.0 0.0		
14.0							0.0 0.0 0.0		
	-15.0 / 15.0	***Run #4*** 15.0 - 19.5 fbgs Recovery = 4.4' RQD = 94% Excellent Total water loss 200-gallons					0.0 0.0 0.0		
19.0							0.0		
	-19.5 / 19.5	End of Borehole							



Drilled By: NW Contracting
Drill Rig Type: ATV mounted drill rig
Drill Method: Excavator and HQ Core Barrel
Comments: Excavator completed overburden investigation
Drill Date(s): 6/21 and 6/26/23

Hole Size: 14"
Stick-up: 5"
Datum:

Sheet: 1 of 1

Project No: 0595-021-001

Borehole Number: MW-2

Project: 389 Manhattan Avenue Site

A.K.A.:

Client: 389 Manhattan, LLC

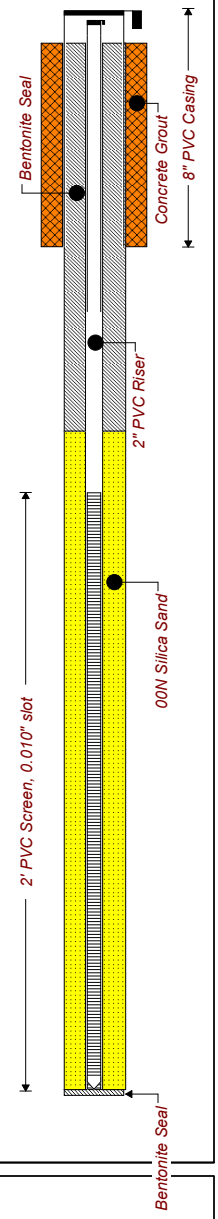
Logged By: CMS

Site Location: Buffalo, New York

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-1.0	0.0 / 0.0	Ground Surface					0.0		
	-1.0 / 1.0	***Fill*** Brown, mostly fine sand and gravel (mostly sub-rounded and angular with some rounds), some silt, no odors.					0.0	Sample Location	
		Fill Black, mostly fine sand and fines, some granular material, no odors.					0.0		
	-3.4 / 3.4	***Limestone*** Equipment refusal at 3.4 fbgs. Set 8" PVC casing at 3.4 fbgs. HQ bit to 17.6.					0.0		
4.0		***Run #1*** 3.4 - 8.4 fbgs Recovery = 5' RQD = 29% Poor Heavily fractured. Gradual water loss at end of run. Vertical crack noted from 3.85-4.44 fbgs.					0.0		
	-8.4 / 8.4						0.0		
9.0		***Run #2*** 8.4 - 13.5 fbgs Recovery = 5' RQD = 81% Good Water loss begins at 10.4 fbgs (7' into rock), approximate 0.1" void space. Total water loss 240-gallons					0.0		
	-13.5 / 13.5						0.0		
14.0		***Run #3*** 13.5 - 17.6 fbgs Recovery = 4.1' RQD = 92% Very Good Total water loss 140-gallons					19.1		
							9.1		
							14.1		
							22.3		
	-17.6 / 17.6	End of Borehole							



Drilled By: NW Contracting
Drill Rig Type: ATV mounted drill rig
Drill Method: Excavator and HQ Core Barrel
Comments: Excavator completed overburden investigation
Drill Date(s): 6/21 and 6/28/23

Hole Size: 14"
Stick-up: 4.5"
Datum:

Sheet: 1 of 1

Project No: 0595-021-001

Borehole Number: MW-3

Project: 389 Manhattan Avenue Site

A.K.A.:

Client: 389 Manhattan, LLC

Logged By: CMS

Site Location: Buffalo, New York

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-1.0									
	0.0 / 0.0	Ground Surface							
		Fill Brown, mostly fine sand and gravel (mostly sub-rounded and angular with some rounds), some silt, no odors.					0.0	Sample Location	
	-2.3 / 2.3	***Limestone*** Equipment refusal at 2.25 fbgs. Set 8" PVC casing at 2.25 fbgs. HQ bit to 15.3 fbgs.					0.0		
4.0		***Run #1*** 2.25 - 7.1 fbgs Recovery = 3.92' RQD = 57% Fair Moderately fractured. Total water loss 260-gallons					0.0		
	-7.1 / 7.1						0.0		
		Run #2 7.1 - 12.2 fbgs Recovery = 5.1' RQD = 64% Fair Moderately fractured. Total water loss 260-gallons					0.0		
9.0							0.0		
	-12.2 / 12.2						0.0		
		Run #3 12.2 - 15.3 fbgs Recovery = 3.1' RQD = 91% Very Good Total water loss 135-gallons					0.0		
14.0							0.0		
	-15.3 / 15.3	End of Borehole					0.0		

Bentonite Seal
Concrete Grout
8" PVC Casing
2" PVC Riser
2' PVC Screen, 0.010" slot
00N Silica Sand

Drilled By: NW Contracting
Drill Rig Type: ATV mounted drill rig
Drill Method: Excavator and HQ Core Barrel
Comments: Excavator completed overburden investigation
Drill Date(s): 6/21 and 6/27/23

Hole Size: 14"
Stick-up: 6"
Datum:

Sheet: 1 of 1

Project No: 0595-021-001

Borehole Number: MW-4

Project: 389 Manhattan Avenue Site

A.K.A.:

Client: 389 Manhattan, LLC

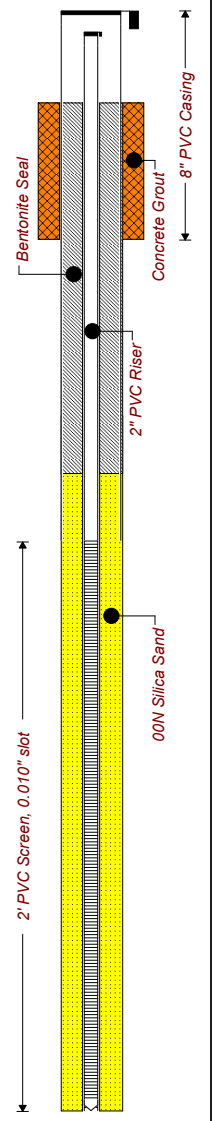
Logged By: CMS

Site Location: Buffalo, New York

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-2.0									
	0.0	Ground Surface							
	0.0	***Fill*** Brown, mostly fine sand and gravel (mostly sub-rounded and angular with some rounds), some silt, no odors.					0.0	Sample Location	
	-2.4 / 2.4	***Limestone*** Equipment refusal at 2.4 fbgs. Set 8" PVC casing at 2.4 fbgs. HQ bit to 17.7 fbgs.					0.0		
3.0		***Run #1*** 2.4 - 7.2 fbgs Recovery = 4.8' RQD = 58% Fair Moderately fractured. Little to no water loss.					57.8 77.5 15.7 1.6 7.7 0.4		
	-7.2 / 7.2						0.0		
8.0		***Run #2*** 7.2 - 12.5 fbgs Recovery = 5.24' RQD = 73% Fair Moderately fractured. Little to no water loss.					0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		
	-12.5 / 12.5								
13.0		***Run #3*** 12.5 - 17.7 fbgs Recovery = 5.1' RQD = 76% Good Gradual water loss throughout run, ~25-gallons							
	-17.7 / 17.7	End of Borehole							
18.0									



Drilled By: NW Contracting
Drill Rig Type: ATV mounted drill rig
Drill Method: Excavator and HQ Core Barrel
Comments: Excavator completed overburden investigation
Drill Date(s): 6/21 and 6/27/23

Hole Size: 14"
Stick-up: 6"
Datum:

Sheet: 1 of 1

APPENDIX C

Field Notes & Forms

BENCHMARK

DAILY LOG				
	DATE	6	21	23
	NO.			
	SHEET	1	OF	1

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN	PROJECT NO. 0595-021-001
PROJECT LOCATION: BUFFALO	CLIENT: 389 MANHATTAN, LLC
FIELD ACTIVITY: RI TEST PITS	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
745	ON SITE W/ MJ & TRAVIS (INTERN), SET UP CAMP & FENCE NEAR PLANNED MW-3
	↳ EXCAVATOR
830	START TP-15
900	END TP-15, SAMPLED
915	START TP-16
935	END TP-16, SAMPLED
945	START TP-17
1000	END TP-17, SAMPLED
1045	START TP-20
1035	END TP-20, SAMPLED
1045	START TP-18, SAMPLED
1200	END TP-18 ↵
1230	START TP-19
1400	END TP-19, SAMPLED
1315	START TP-21
1330	END TP-21, SAMPLED
1245-1320	COMPLETED MW-4, MW-3, MW-2, MW-1 TPs PRIOR TO WELL INSTALL
~1400-1430	TAKE DOWN CAMP & DEMOB

DUST CHECK:

800	0.082
830	0.075
900	0.083
930	0.075
1000	0.081
1030	0.084
1100	0.071
1130	0.091
1200	0.082
1230	0.074
1300	0.090
1330	0.086
1400	0.083
1430	0.078
1500	0.081
1530	0.069

0.0 PPM THROUGHOUT

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 80°, P. CLOUD, SE, 6 MPH P.M.: 84, P. CLOUD, E, 10 MPH	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CS, MJ, TS	
SIGNATURE Chad M Sutton	DATE: 6/21/23

BENCHMARK

DAILY LOG				
	DATE	6	26	23
	NO.			
	SHEET	1	OF	1

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN	PROJECT NO. 0595-021-001
PROJECT LOCATION: BUFFALO, NY	CLIENT: 389 MANHATTAN, LLC
FIELD ACTIVITY: BEDROCK WELL INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
840	ONSITE, CAMP #7. @ WEST CORNER NEAR DOWNWIND RECEPTOR (H.S.) & MW-3
945	NW ONSITE (2 OPERATORS)
1030	SET UP @ MW-3
1045	START MW-3
1120	FINISH INITIAL COLLAR INSTALL W/ GROUT & PVC
1125	START MW-1
1155	END MW-1 INITIAL COLLAR INSTALL W/ GROUT & PVC
1245	START MW-2
1313	THUNDER - STOP WORK
1345	RESTART MW-2
1400-	STOP WORK, ENDED DAY (THUNDER & LIGHTNING)
1500	

CAMP #7 DUST CHECK

900	0.065	1300	0.067	
930	0.063	1330	0.071	
1000	0.071	1400	0.077	
1030	0.075	1430	0.075	0.0 PPM THROUGHOUT
1120	0.068	1500	0.064	
1130	0.067	1530	0.069	
1200	0.073	1600	0.072	
1230	0.081			

~1600 TAKE DOWN CAMP

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 79°, SSW, 10, M. CLOUD P.M.: 82°, SSW, 10, CLOUD & LIGHTNING	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CS, 2 NW OPERATORS	
SIGNATURE [signature]	DATE: 6/26/23

BENCHMARK

DAILY LOG				
	DATE	6	27	23
	NO.			
	SHEET	1	OF	1

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN	PROJECT NO. 0595-021-001
PROJECT LOCATION: BUFFALO	CLIENT: 389 MANHATTAN, LLC
FIELD ACTIVITY: BEDROCK WELL INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
800	ONSITE, ~~MOBSTART~~ MW-4
810	CAMP #7 @ MW-3 NEAR H.S.
850	FINISH MW-4 ~~[illegible]~~ INITIAL COLLAR W/CASING
930	TAKE DOWN CAMP (HEAVY RAIN)
945	START ROCK CORE @ MW-3
1000	MAJOR WATER LOSS OBSERVED DURING MW-3 @ 1.7' INTO ROCK, RESTART CAMP
1130	CNK ONSITE TO ASSIST W/ ROCK CLASSIFICATION
1230	
~1430	FINISH SETTING MW-3
1512	START/SET UP @ MW-1
~~[illegible]~~	~~[illegible]~~
~1600	TAKE DOWN CAMP

CAMP CHECK

830	0.081	1430	0.077
900	0.085	1500	0.072
930	0.067	1530	0.065
1000	0.072	1600	0.081
1030	0.083		
1100	0.084	2.0 PPM	
1130	0.061	THROUGHOUT	
1200	0.071		
1230	0.065		
1300	0.081		
1330	0.082		
1400	0.067		

VISITORS ON SITE: CNK	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 70, CLOUDY (SPORADIC RAIN), SSW, 10 MPH P.M.: 70, CLOUDY, SW, 15 MPH	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CMS, NW (2 OPS), CNK	
SIGNATURE [signature]	DATE: 6/27/23

BENCHMARK

DAILY LOG				
	DATE	6	28	23
	NO.			
	SHEET	1	OF	1

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN AVE	PROJECT NO. 0595-021-001
PROJECT LOCATION: BUFFALO, NY	CLIENT: 389 MANHATTAN, LLC
FIELD ACTIVITY: BEDROCK WELL INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
800	ONSITE, NOTE UNHEALTHY AIR QUALITY DUE TO CANADIAN WILDFIRES, NYSDEC HAS BEEN NOTIFIED SETUP CAMP #7 @ MW-3 (UPWIND FOR BACKGROUND) READING 0.242 - 0.246 (939 AM)
900	START MW-1
900 - 1030	BAILED SEVERAL VOLUMES FROM MW-3 TO CHECK WATER LEVEL & RECHARGE
1035	CHECK CAMP @ UW, READING 0.172. MOVED TO DW BETWEEN MW-2 & MW-4 CURRENT WEATHER 65°, CLOUDY, NW @ 9 MPH (AQI 165) READING 0.17 @ DW LOCATION
~1330	END SETTING MW-1
1420	START & SETUP MW-2
~1600	TAKE DOWN CAMP

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 64°, WNW, 10MPH, CLOUDY P.M.: 72°, WNW, 15MPH, CLOUDY	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CMS, NW (2 OPS)	
SIGNATURE Chad M Sellers	DATE: 6/28/23

BENCHMARK

DAILY LOG				
	DATE	6	29	23
	NO.			
	SHEET	1	OF	1

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN AVE	PROJECT NO. 0595-021-001
PROJECT LOCATION: BUFFALO, NY	CLIENT: 389 MANHATTAN, LLC
FIELD ACTIVITY: BEDROCK WELL INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
740	ONSITE, SET CAMP #7 UW BETWEEN MW-2 + MW-4 FOR BACKGROUND
820	START CAMP @ UW (READING 0.147)
940	MOVE CAMP TO DW @ MW-3 + H.S. (READING 0.124 @ STARTUP)
1100	WIND SHIFT TO WSW, MOVED CAMP BACK TO BETWEEN MW-2 + MW-4 (READING 0.242 @ START) - ELEMENTARY LOCATED E OF SITE
~1300	FINISH MW-2
~1330	SET UP @ MW-4

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 60°, SUNNY, 2MPH, S/SE P.M.: 80°, P.CLOUDY, WSW, 3MPH	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CMS, NW (2 OPS)	
SIGNATURE Chad M Schad	DATE: 6/29/23

Permit Number: 1686741322

HYDRANT PERMIT

Permission is hereby granted to the following:

Customer's Name: BENCHMARK ENVIRONMETAL ENG.

Business Address: 2558 HAMBURG TPKE, SUITE 300, LACKAWANNA NY 14218

Customer Phone Number: 716-997-9584

to connect to and open the fire hydrant at:

Hydrant Location: INFRONT OF 325 MANHATTAN

Hydrant ID: 3C-0090

for the purpose of:

Project information

HYDRNT USAGE FOR CONSTRUCTION PROJECT IN AREA

This permit is effective on: 6/26/2023 **and expires on:** 6/30/2023

It is understood that the party securing this permit is liable for any damage to this hydrant during the life of this permit and until party has reported to Buffalo Water managed by Veolia that usage of this hydrant has ceased and an inspection is made.

This permit is issued with the understanding that a properly functioning RPZ backflow preventer is required when using this hydrant. This device will be provided by the permit holder. An annual test report (Form DOH-1013) is required for each device and MUST be on file at Buffalo Water. For further info about backflow devices, call 851-4747 x123.

1) The use of more than one (1) hydrant at the SAME TIME requires a separate permit for each hydrant. The permit must be available at the active hydrant location.

2) Permit holders are required to notify Buffalo Water at 851-4747 x604 on a daily basis of all hydrants being used under this permit prior to and after the use of those hydrants.

3) Any hydrants out of service (with a yellow top) shall not be used.

4) Backflow prevention device must be on site, attached and used when operating any hydrant.

Issued By:

Permit Office (716) 851 - 4747 x122 **Service Center (716) 851 - 4747 x604**

Wednesday, June 14, 2023 11:17:08 AM

BUFFALO WATER ENGINEERING
2 PORTER AVE. BUFFALO, NY 14201
716-851-4747 EXT 122 – Mya

BUFFALO WATER
managed by VEOLIA

RECEIPT
DATE 6/14/23

MASTER PLUMBER	JOB LOCATION
NAME: Benchmark	**NAME:**
ADDRESS:	**ADDRESS:** 325 Manhattan 6/26 - 6/30
PHONE: 716-997-9554	

DESCRIPTION	MATERIAL	COST	QTY	TOTAL
1WK HP				799.62
CHECK # 11013		**GRAND TOTAL**		199.62

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: Manhattan

Project No.:

Client: Sunoco

Date: 7/6/23

Instrument Source: ☐ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units	815	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TAB	4.00 7.00 10.01		
☒ Turbidity meter	NTU	815	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☒ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	TAB	10 NTU verification < 0.4 20 100 800	 0.41 19.7 99.7 823	
☒ Sp. Cond. meter	uS mS	815	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TAB	7,000 mS @ 25 °C	7,001	7,000
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm	815	HACH Model HQ30d	080700023281 ☐ 100500041867 ☒ 140200100319 ☐		100% Satuartion	97.7% sky	✓
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: TAB **DATE:** 7/6/23

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: Manhattan Ave

Project No.:

Client: Sourcewater

Date: 7/7/23

Instrument Source: ☐ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units	830	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TAB	4.00 7.00 10.01	4.01 7.01 9.97	
☒ Turbidity meter	NTU	830	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☒ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	TAB	10 NTU verification < 0.4 20 100 800	 0.38 23 108 851	
☒ Sp. Cond. meter	uS mS	830	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TAB	7000 mS @ 25 °C	7,004	7,000
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm	830	HACH Model HQ30d	080700023281 New ☑ 100500041867 ☐ 140200100319 ☐	TAB	100% Satuartion	96.6% slw	✓
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: TAB **DATE:** 7/7/23

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Manhattan Ave Date: 7/6/23

Location: Buffalo NY Project No.: Field Team: T+B

Well No. MW-1			Diameter (inches): 2"			Sample Date / Time:			
Product Depth (fbTOR): –			Water Column (ft): 6.25			DTW when sampled:			
DTW (static) (fbTOR): 13.80			One Well Volume (gal): 1.02			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 20.05			Total Volume Purged (gal): 8.25			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
956	0 Initial	0	6.93	16.9	2766	<1000	3.0	90	Turbid No odor
1005	1 17.65	1.0	7.27	16.6	2851	<1000	3.35	32	" "
1015	2 DRY	2.25	7.20	15.8	2856	<1000	2.13	46	" "
951	3 14.09	–	7.25	15.1	2742	54.2	4.12	0	sl Turbid No odor
959	4 17.85	3.75	7.21	15.0	2896	641	5.01	14	Turbid "
1004	5 DRY	4.25	7.23	14.3	2910	<1000	3.84	37	" "
1632	6 DRY	6.25	7.21	14.1	2894	<1000	2.98	76	" "
1427	7 14.15	–	7.16	16.1		736	6.11		
1434	8 DRY	8.25	6.83	18.5	2955	>1000	4.34	75	
	9 14.80		7.14	15.2	2926	382	2.90	100	
1504	10 DRY	–	7.22	16.4	2900	295	3.42	94	
Sample Information:									
	S1								
	S2								

717

Well No. MW-2			Diameter (inches): 2"			Sample Date / Time: 7/6/23			
Product Depth (fbTOR): –			Water Column (ft): 6.34			DTW when sampled: –			
DTW (static) (fbTOR): 11.69			One Well Volume (gal): 1.03			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 18.03			Total Volume Purged (gal): 55.0			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1033	0 Initial	0	6.70	19.0	3438	539	1.47	21	Turbid No odor
1637	1 13.05	1.5	6.70	16.5	3487	<1000	1.61	29	" "
1642	2 13.10	2.5	6.70	15.6	3513	<1000	2.08	45	" "
1647	3 12.20	4.0	6.69	15.0	3518	<1000	1.85	62	" "
1653	4 12.72	5.0	6.73	16.6	3549	<1000	2.41	73	" "
1103	5 14.63	7.5	6.81	15.5	3576	773	1.69	85	" "
1109	6 14.59	10.0	6.71	15.5	3587	210	1.56	90	" "
1115	7 14.71	15.0	6.70	17.4	3669	145	1.43	96	" "
1121	8 14.75	20.0	6.69	16.3	3631	75.9	1.42	94	sl Turbid "
1130	9 14.78	25.0	6.75	16.5	3660	25.8	1.86	87	clear "
1147	10 15.54	35.0	6.78	16.5	3672	16.1	1.55	88	
Sample Information:		0.2 gpm							
1159	S1 15.30	45.0	6.74	17.7	3692	12.5	1.44	95	" "
1214	S2 15.53	55.0	6.72	20.4	3766	7.67	1.90	80	" "

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Manhattan Ave Date: 7/6/23

Location: Buffalo Project No.: Field Team: TAB

Well No. MW-4			Diameter (inches): 2"			Sample Date / Time:			
Product Depth (fbTOR): -			Water Column (ft): 7.05			DTW when sampled:			
DTW (static) (fbTOR): 12.13			One Well Volume (gal): 1.14			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 19.18			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1229	0 Initial	0	6.68	18.0	4650	264	1.91	-45	Turbid No Odor
1235	1 12.65	1.5	6.65	16.6	4944	<1000	1.52	-51	" Slight
1241	2 12.40	3.0	6.65	17.1	4990	<1000	1.63	-49	" "
1247	3 12.70	5.0	6.74	15.9	4960	<1000	1.80	-49	" "
1338	4 14.72	7.5	6.78	15.6	5097	<1000	1.54	-52	" "
1342	5 15.30	10.0	6.69	16.4	5154	<1000	1.27	-41	" "
1347	6 14.0	15.0	6.71	17.1	5338	<1000	1.01	-42	" "
1353	7 13.75	20.0	6.75	17.1	5435	133	0.96	-46	" "
1359	8 13.90	25.0	6.76	17.3	5512	111	1.09	-58	" "
1410	9 14.30	35.0	6.74	18.3	5564	44.0	0.78	-49	" "
1421	10 14.10	45.0	6.75	18.8	5623	23.6	0.93	-52	
Sample Information: 9.8 ppm									
~~1355~~ 1433	S1 13.75	~~55.0~~	6.76	14.5	5666	13.5	0.22	-56	" "
	S2								

Well No. MW-3			Diameter (inches): 2"			Sample Date / Time: 7/6/23			
Product Depth (fbTOR):			Water Column (ft): 6.57			DTW when sampled: -			
DTW (static) (fbTOR): 9.61			One Well Volume (gal): 1.07			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 16.18			Total Volume Purged (gal): 55			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
3.04	0 Initial	0	7.27	24.7	3371	18.9		15	Clear No Odor
1510	1 10.05	1.0	7.28	19.1	3458	980		33	Turbid "
1514	2 10.10	2.5	7.21	17.6	3585	<1000		35	" "
1517	3 10.15	3.5	7.18	17.0	3618	<1000		37	" "
1521	4 10.30	5.0	7.20	17.2	3632	<1000		36	" "
1528	5 11.41	7.5	7.22	17.9	3559	<1000		36	" "
1530	6 12.21	10.0	7.16	16.7	3606	289		37	Slt Turbid "
1538	7 12.30	15.0	7.20	18.0	3643	67.6		33	Clear "
1544	8 12.53	20.0	7.29	17.8	3648	31.5		32	" "
1551	9 12.60	25	7.14	17.9	3671	10.9		36	" "
1601	10 13.10	35	7.19	17.7	3676	7.07		40	" "
Sample Information:									
1611	S1 13.70	45	7.18	16.6	3707	5.78		45	" "
1621	S2 12.71	55	7.28	16.7	3720	2.88		48	" "

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Groundwater Field Form.xls
GWFF - BM

PREPARED BY: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Mud Hen Ave Buffalo NY Date: 7/7/23

Location: Project No.: Field Team:

Well No. MW-2	Diameter (inches): 2"	Sample Date / Time: —
Product Depth (fbTOR): 12.05	Water Column (ft):	DTW when sampled: —
DTW (static) (fbTOR): 18.03	One Well Volume (gal):	Purpose: ☐ Development ☐ Sample ☐ Purge & Sample
Total Depth (fbTOR):	Total Volume Purged (gal):	Purge Method: —

TOP 16.25

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
	0	Initial		1.22	13.05		4.22	12.35		15.16	12.14
~~15.05~~	1	~~14.8~~		1.34	12.90		4.52	12.32		20.16	12.13
~~23.97~~	2	~~13.8~~		1.55	12.71		5.22	12.31		25.16	12.12
~~40.14~~	3	~~14.05~~		2.06	12.63		5.52	12.29		30.16	12.11
20	4	14.82		2.31	12.55		6.56	12.25		35.16	12.09
29.67	5	14.40		2.43	12.50		7.56	12.22			
36.09	6	14.05		2.54	12.47		9.07	12.20			
46.85	7	13.80		3.13	12.44		10.10	12.18			
53.42	8	13.60		3.27	12.42		12.10	12.18			
59.77	9	13.43		3.37	12.40		14.12	12.16			
1.10	10	13.25		3.47	12.33		16.16	12.15			
Sample Information:											
	S1										
	S2										

~~1.22 13.05, 12.90 — 1.34, 12.71 — 1.55, 12.63 — 2.06, 12.55 — 2.31, 12.50 — 2.43~~, 12.47, 2.54, 12.44, 3.13, 12.42, 3.27, 12.40, 3.37, 12.33, 3.47

Well No. MW-4	Diameter (inches):	Sample Date / Time:
Product Depth (fbTOR): 12.20	Water Column (ft):	DTW when sampled:
DTW (static) (fbTOR):	One Well Volume (gal):	Purpose: ☐ Development ☐ Sample ☐ Purge & Sample
Total Depth (fbTOR):	Total Volume Purged (gal):	Purge Method:

TOP 18.20

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
	0	Initial		1.13	13.15		2.18	12.73		4.12	12.50
0	1	16.70		1.18	13.08		2.22	12.71		4.42	12.46
15	2	14.70		1.24	13.02		2.32	12.65		5.12	12.44
20.44	3	14.37		1.31	12.97		2.42	12.63		5.42	12.42
30.31	4	14.05		1.38	12.91		2.52	12.60		6.42	12.40
43.13	5	13.68		1.45	12.87		3.02	12.59		7.42	12.36
49.6	6	13.52		1.51	12.83		3.12	12.58		8.42	12.35
54.5	7	13.43		1.55	12.81		3.22	12.55		9.42	12.34
58.3	8	13.35		2.01	12.78		3.32	12.53		10.48	12.32
1.05	9	13.25		2.07	12.76		3.42	12.51		11.48	12.32
1.09	10	13.20		2.11	12.75		4.02	12.51		16.48	12.28
Sample Information:										21.48	12.27
	S1										
	S2										

2.84, 2.91, 2.13, 3.91, 2.40, 3.97, 2.38, 3.47, 2.35, 2.32, 4.52, 2.91, 5.52, 2.29, 5.52, 2.20

REMARKS: Rising Head Test

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 m
ORP	

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY:

12.09 35.16 — 12.11 30.16 — 12.13 25.16 — 12.13 20.16 — 12.14 18.16 — 12.15 16.16 — 12.11 14.12 — 12.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Monticello Ave
Location: Buffalo NY
Project No.:
Date: 7/[illegible]/23
Field Team: TAB

Bottom 16.18

TOP ~~5.44~~ 14.01

Well No. MW-3			Diameter (inches): 2"			Sample Date / Time: —			
Product Depth (fbTOR): ~~9.93~~			Water Column (ft): 6.45			DTW when sampled: —			
DTW (static) (fbTOR): 9.37			One Well Volume (gal): 1.05			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 16.18			Total Volume Purged (gal): —			Purge Method: —			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial		1.01	11.40		2.05	10.84		3.43 | 10.45
12	1 12.68		1.06	11.34		2.09	10.82		3.53 | 10.44
16	2 12.53		1.12	11.26		2.12	10.80		4.03 | 10.42
18	3 12.41		1.19	11.18		2.18	10.77		4.18 | 10.40
20	4 12.21		1.24	11.13		2.22	10.73		4.49 | 10.33
24	5 12.04		1.30	11.08		2.31	10.70		5.18 | 10.29
28	6 12		1.40	10.99		2.43	10.65		5.48 | 10.26
34	7 11.93		1.45	10.96		2.53	10.60		6.18 | 10.21
40	8 11.80		1.52	10.91		2.83	10.55		6.48 | 10.16
46	9 11.64		1.55	10.89		3.23	10.51		7.48 | 10.12
52	10 11.54		2.00	10.87		3.33	10.48		8.50 | 10.09
Sample Information:									10.00 | 10.07
	S1								11.00 | 10.04
	S2								12.00 | 10.01

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								continued
	1								17.00 | 9.92
	2								22.00 | 9.88
	3								27.00 | 9.83
	4								32.00 | 9.79
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

MW-3

REMARKS: Rising head Test

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:
Project Name: Manhattan Ave
Project No.:
Client: Samsung

Date: 7/13/23

Instrument Source: ☐ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☑ pH meter	units	0700	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☑ 6243003 ☐ 6223973 ☐	T+B	4.00	3.97	4.0
						7.00	6.96	7.0
						10.01	9.95	10.0
☑ Turbidity meter	NTU	0700	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☑ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	T+B	10 NTU verification		
						< 0.4	0.52	0.4
						20	19.8	20
						100	95.4	100
						800	797	800
☑ Sp. Cond. meter	uS mS	0700	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☑ 6243003 ☐ 6223973 ☐	T+B	7,000 mS @ 25 °C	6,988	7,000
☐ PID	ppm		MinRAE 2000			open air zero		MIBK response factor = 1.0
						____ ppm Iso. Gas		
☑ Dissolved Oxygen	ppm	0700	HACH Model HQ30d	080700023281 ☐ New 100500041867 ☐ 140200100319 ☐	T+B	100% Satuartion	96.6% Slope	—
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: T+B **DATE:** 7/13/23

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:
Project Name: Manhattan Ave
Project No.:
Client: Stantec

Date: 7/14/23

Instrument Source: ☐ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☑ pH meter	units	800	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TKB	4.00	3.98	4
						7.00	7.01	7
						10.01	10.02	10
☑ Turbidity meter	NTU	800	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☒ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	TKB	10 NTU verification		
						< 0.4	0.56	0.4
						20	22.3	20
						100	92.9	100
						800	754	800
☐ Sp. Cond. meter	uS mS	0900	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☒ 6243003 ☐ 6223973 ☐	TKB	7.001 mS @ 25 °C	7,000	7,000
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☑ Dissolved Oxygen	ppm	0800	HACH Model HQ30d	080700023281 ☐ NEW — 100500041867 ☐ 140200100319 ☐	TKB	100% Satuartion	96.7%	—
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: **DATE:** 7/14/23

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Mayfield Ave Date: 7/13/23
Location: Buffalo NY Project No.: Field Team: TAB

Well No. MW-1	Diameter (inches): 2"	Sample Date / Time: 7/14/23 824
Product Depth (fbTOR): -	Water Column (ft): 4.70	DTW when sampled:
DTW (static) (fbTOR): ~~15.5~~ 15.35	One Well Volume (gal): 0.76	Purpose: ☐ Development ☐ Sample ☐ Purge & Sample
Total Depth (fbTOR): ~20.05	Total Volume Purged (gal): ~~0.94~~	Purge Method: Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	~~SC~~ 1:50 SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1513	0	Initial	0	6.76	15.5	3083	5.41	3.03	193	clear SL sulfur
1518	1	17.42	0.75	7.04	14.6	3034	98.0	3.62	129	" "
1523	2	DRY	1.50	7.18	14.7	3017	111	2.86	112	
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
824	S1	15.45	-	7.10	15.2	3091	5.50	5.69	102	" "
835	S2	17.10	-	7.16	15.1	3122	36.4	3.05	110	

7/14

Well No. MW-4	Diameter (inches): 2"	Sample Date / Time: 7/13/23 1545
Product Depth (fbTOR): -	Water Column (ft): 6.03	DTW when sampled:
DTW (static) (fbTOR): 13.15	One Well Volume (gal): 0.97	Purpose: ☐ Development ☐ Sample ☒ Purge & Sample
Total Depth (fbTOR): 19.18	Total Volume Purged (gal):	Purge Method: Low Flow

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1540	0	Initial	0	6.72	16.7	4276	>1000	1.18	-56	dirty sed No odor
1543	1	1413	2.5	6.65	16.1	4659	121	1.45	-67	SL Turb. No odor
1545	2	1413	3.0	6.67	13.1	4861	37.6	1.51	-61	clear "
1547	3	1413	3.6	6.66	14.2	4893	31.9		-59	" "
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
1549	S1	14.05	4.0	6.65	14.8	4934	23.2	1.38	-58	" "
1547	S2	14.16	5.50	6.73	15.5	5064	12.2	1.45	-65	" "

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Meadowbrook Drive
Location: Buffalo NY
Project No.:
Date: 7/13/23
Field Team: TH3

Well No. MW-2			Diameter (inches): 2"			Sample Date / Time:				
Product Depth (fbTOR): —			Water Column (ft): 4.95			DTW when sampled:				
DTW (static) (fbTOR): 13.05			One Well Volume (gal): 0.80			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR): 18.0			Total Volume Purged (gal):			Purge Method:				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
920	0 Initial	0	6.51	15.7	3049	141	1.84	234	sl Turbid	No odor
924	1 15.05	2.0	6.68	15.6	3116	52.5	1.81	156	"	"
926	2 15.7	3.5	6.62	14.6	3163	28.0	6.36	153	clear	"
930	3 14.95	5.0	6.65	13.8	3188	16.5	1.64	153	"	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
933	S1 15.10	5.25	6.63	14.0	3213	6.51	2.33	148	"	"
951	S2 14.75	9.25	6.70	15.4	3325	5.30	3.08	149	"	"

Well No. MW-3			Diameter (inches): 2"			Sample Date / Time:				
Product Depth (fbTOR): —			Water Column (ft): 4.75			DTW when sampled:				
DTW (static) (fbTOR): 11.38			One Well Volume (gal): 0.77			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR): 16.13			Total Volume Purged (gal):			Purge Method:				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
1032	0 Initial	0	7.24	16.3	3807	27.3	1.81	148	Clear	No odor
1034	1 12.11	1.0	7.19	15.3	3863	20.2	1.62	138	"	"
1037	2 12.20	1.50	7.16	15.4	3886	12.7	1.42	118	"	"
1040	3 12.23	2.0	7.15	15.2	3907	6.07	1.58	114	"	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
1042	S1 12.25	3.0	7.18	16.1	3883	4.88	1.54	111	"	"
1100	S2 12.60	5.0	7.19	16.5	3877	4.90	2.26	113	"	"

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: TH3

ROUX

DAILY LOG				
	DATE	8	17	23
	NO.			
	SHEET	1	OF	2

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN AVE	PROJECT NO. B0595-021-001
PROJECT LOCATION: BUFFALO, NY	CLIENT: SAVARINO
FIELD ACTIVITY: SVI INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
840	ONSITE
	START @ SV-2
	ATTEMPTED TO USE HAND AUGER TO ADVANCE SAMPLE LOCATION
	STONY/UNCONSOLIDATED MATERIAL CAUSING DIFFICULT ADVANCEMENT & MATERIAL FALLING IN ON ITSELF
	SWITCH TO HILTI DRILL w/ 3/4" DRILL BIT
	DRILL 3 HOLES NEXT TO EACH OTHER CREATING 2-3" DIA. HOLE
	DEPTH ~2' (BEDROCK ~2-2.5' ACROSS SITE)
	PLACE TUBING TO BOTTOM OF HOLE & FILLED HOLE w/ GLASS BEADS
	TO ~1' (1' SAMPLING ZONE)
	FILLED REMAINDER OF HOLE w/ BENTONITE CHIPS & HYDRATED
900	FINISH INSTALL OF SV-2 (OA-1 LOCATED @ THIS SPOT ALSO)
910	START SV-3
	INSTALLED AS SV-2
920	FINISH SV-3
925	START SV-1
	INSTALLED AS PREVIOUS
935	FINISH SV-3
940	RECORD LAB VAC FOR SV-2/OA-1 & PERFORM HELIUM SHROUD TEST
	HELIUM TEST OK
1005	RECORD LAB VAC FOR SV-3 & PERFORM HELIUM SHROUD TEST
	HELIUM TEST OK
1015	RECORD LAB VAC FOR SV-1 & PERFORM HELIUM SHROUD TEST
	HELIUM TEST OK

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: 73°, SSW, 8 MPH, P. SUN P.M.: 80°, SW, 10 MPH, P. SUN	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CS	
SIGNATURE Chad M Lobst	DATE: 8/17/23

ROUX

DAILY LOG				
	DATE	8	17	23
	NO.			
	SHEET	2	OF	2

FIELD ACTIVITY DAILY LOG

PROJECT NAME: 389 MANHATTAN AVE	PROJECT NO. B0595-021-001
PROJECT LOCATION: BUFFALO, NY	CLIENT:
FIELD ACTIVITY: SVI INSTALL	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION
1019	START SV-3
1020	START SV-1
1024	START SV-2
1025	START ~~OA~~-1
1030	OFF SITE
1400	ONSITE
	CHECK SV-1 - SV-3 & OA-1
	SV-1 @ -4.5, GOOD TO STOP, REMAINING STILL READING ~7-10
1403	STOP SV-1 (-4.53)
1430	CHECKED OA-1 & SV-2 & SV-3 (SV-2 STILL FAIRLY HIGH)
	READING -4.5 (OA-1) & -5.5 (SV-3)
1433	STOP OA-1 (-4.48)
1438	STOP SV-3 (-5.46)
1515	CHECK SV-2
	READING -7.4
1516	STOP SV-2 (-7.38)
1516	OFFSITE & DROPPED OF SAMPLES @ LAB

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: A.M.: ~~SEE~~ Pg 1 P.M.:	IMPORTANT TELEPHONE CALLS:
PERSONNEL ON SITE: CS	
SIGNATURE Chad M Nelson	DATE: 8/17/23

APPENDIX D

Community Air Monitoring Data

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

COMMUNITY AIR MONITORING DAILY LOG

Date: 6/21/23
Project: 389 MANHATTAN
Job No.: B0595-021-001
Client: SAVANNO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	70	85
Wind Direction:	E	E
Wind Speed:	3	15
Precipitation:	—	—

DESCRIPTION OF SITE ACTIVITIES: TEST PITS
DUST CHECKED MANUALLY THROUGHOUT DAY DUE TO CONNECTION ERROR. DID NOT EXCEED 0.09 mg/m³
NO ON-SITE CONCERNS VOC 0.0 ppm

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: [signature] Date: 6/21/23
Checked By: Date:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

COMMUNITY AIR MONITORING DAILY LOG

Date: 6/26/23
Project: 384 MANHATTAN
Job No.: B0595-021-001
Client: SAVARINO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	73	82
Wind Direction:	S	SW
Wind Speed:	10	6
Precipitation:		

DESCRIPTION OF SITE ACTIVITIES: WELL INSTALL
DUST CHECKED MANUALLY THROUGHOUT DAY. DID NOT EXCEED 0.081 mg/m³, VOCs 0.0 PPM
NO ON-SITE CONCERNS

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: Andrew Schutz Date: 6/26/23
Checked By: Date:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

COMMUNITY AIR MONITORING DAILY LOG

Date: 6/27/23
Project: 389 MANHATTAN AVE
Job No.: B0595-021-001
Client: SAVARINO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	68	70°
Wind Direction:	SSW	SW
Wind Speed:	8	15
Precipitation:	L. RAIN	—

DESCRIPTION OF SITE ACTIVITIES: WELL INSTALL

NOTE: UNIT LOST SIGNAL @ 9:22, DUST & VOC CHECKED THROUGHOUT DAY. DUST DID NOT EXCEED 0.083 mg/m³ & VOCs WERE 0.0 PPM NO ON-SITE CONCERNS

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: [signature] Date: 6/27/23
Checked By: Date:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

COMMUNITY AIR MONITORING DAILY LOG

Date: 6/28/23
Project: 389 MANHATTAN
Job No.: B0595-021-001
Client: SAVARINO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	60	72
Wind Direction:	NW	W
Wind Speed:	8	13
Precipitation:	-	-

DESCRIPTION OF SITE ACTIVITIES: WELL INSTALL — POOR AIR QUALITY, NYSDEC NOTIFIED, NO ON-SITE CONCERNS (DUE TO CANADIAN WILDFIRES)

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]	#7 (NEAR HS)	9:16-16:23			NA (SEE NOTE ABOVE)
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: Chad M Allen Date: 6/28/23
Checked By: Date:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

COMMUNITY AIR MONITORING DAILY LOG

Date: 6/29/23
Project: B0595-021-001 389 MANHATTAN
Job No.: ↓
Client: SAVANNO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	60	80
Wind Direction:	S	WSW
Wind Speed:	2	3
Precipitation:		—

DESCRIPTION OF SITE ACTIVITIES: WELL INSTALL
POOR AIR QUALITY DUE TO WILDFIRES (DEC IS AWARE), NO-ON-SITE CONCERNS

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]	#7(@HS)	8:21 - 14:28			NA (SEE NOTE ABOVE)
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: Chad M Schutt Date: 6/29/23
Checked By: Date:

ROUX

COMMUNITY AIR MONITORING DAILY LOG

Date: 9/21/23
Project: B0595-021-001 389 MANHATTAN AVE
Job No.:
Client: SAVARINO

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map):

DESCRIPTION OF SITE ACTIVITIES: GEOTECH BORING OVERSIGHT

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	77	79°
Wind Direction:	SSW	SW
Wind Speed:	11	15
Precipitation:	—	—

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

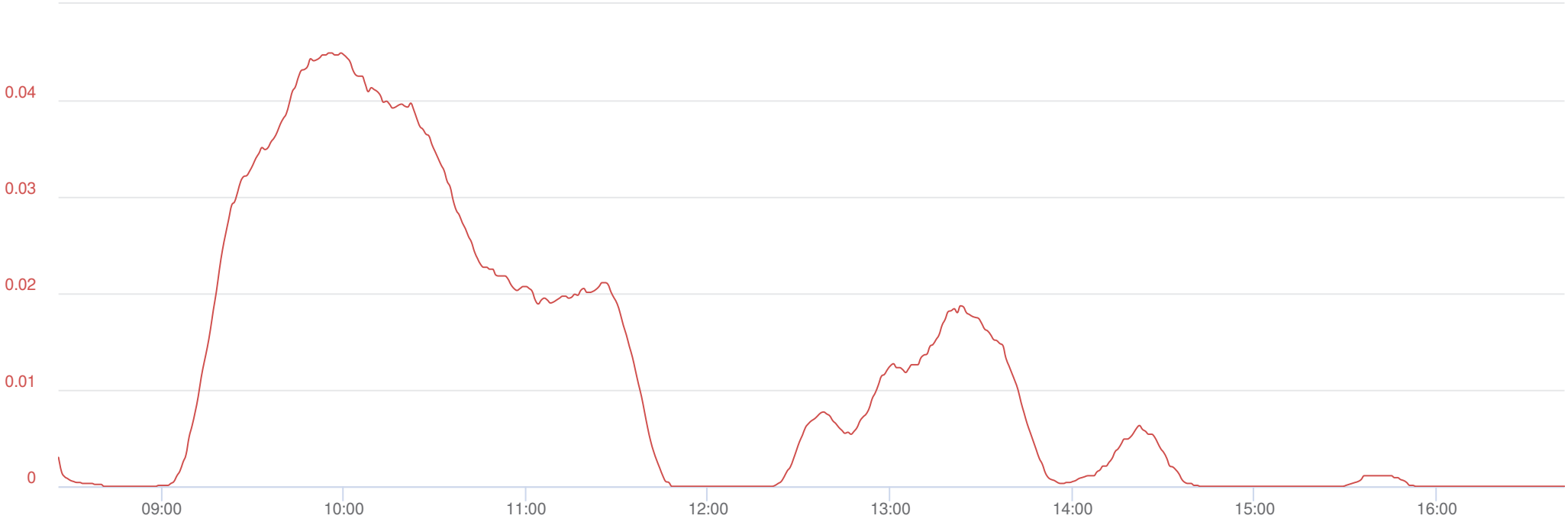
VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Benchmark within 15 minutes.

Prepared By: [signature] Date: 9/21/23
Checked By: Date:

Wed, 21st of Jun 2023, 6:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0	0	0.0449

Name CAMP #7
S/N 0B332267
Location 389 Manhattan Avenue
Buffalo, new York

© Netronix 2023

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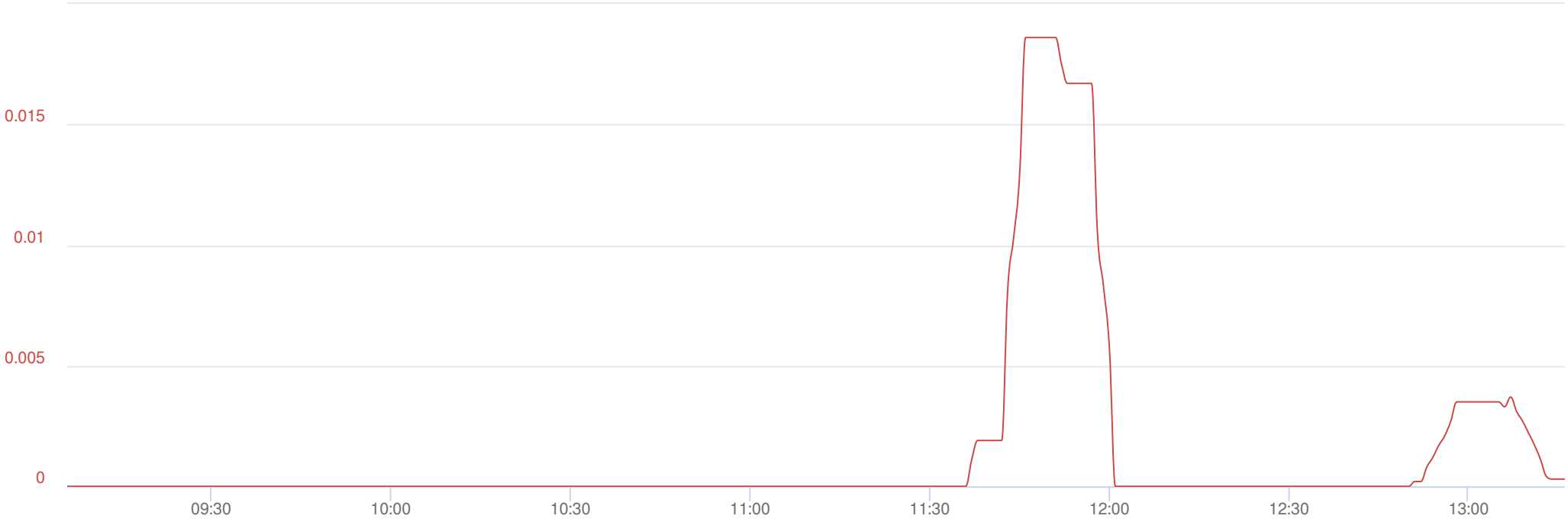
Location 389 MANHATTAN

Project / Client

Date 6/21/23

	Dust	VOC
800	0.082	mg/m³
830	0.075	
900	0.083	
930	0.075	
1000	0.081	
1030	0.084	
1100	0.071	
1130	0.091	
1200	0.082	
1230	0.074	
1300	0.090	
1330	0.086	
1400	0.083	
1430	0.078	
1500	0.081	
1530	0.069	

Mon, 26th of Jun 2023, 7:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



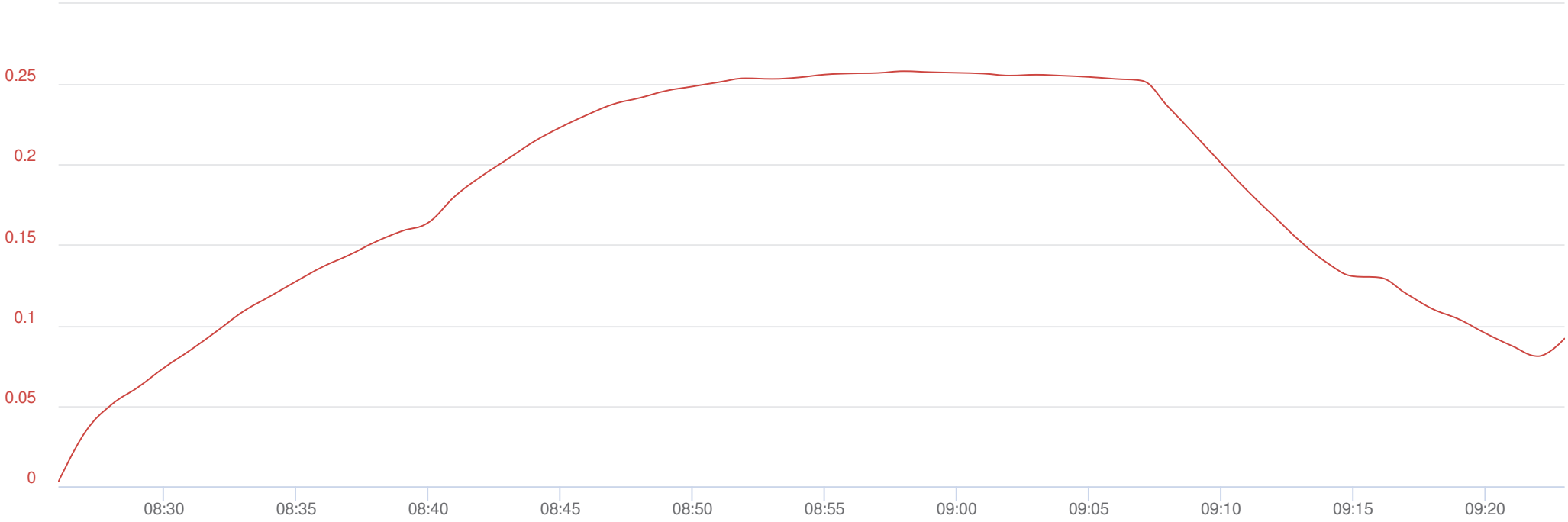
VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0	0.0013	0.0186

Name CAMP #7
S/N 0B332267
Location 389 Manhattan Ave.
Buffalo, NY

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Tue, 27th of Jun 2023, 7:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0.003	**0.1794**	**0.2581**

Name	CAMP #7
S/N	0B332267
Location	389 Manhattan Ave. Buffalo, NY

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Location 389 MANHATTAN

Project / Client

Date 6/27/23

	Dust	mg/m³
830	0.081	
900	0.085	
930	0.067	
1000	0.072	
1030	0.083	
1100	0.084	
1130	0.069	
1200	0.071	
1230	0.065	
1300	0.081	
1330	0.082	
1400	0.067	
1430	0.077	
1500	0.072	
1530	0.065	
1600	0.081	

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Location 389 MANHATTAN

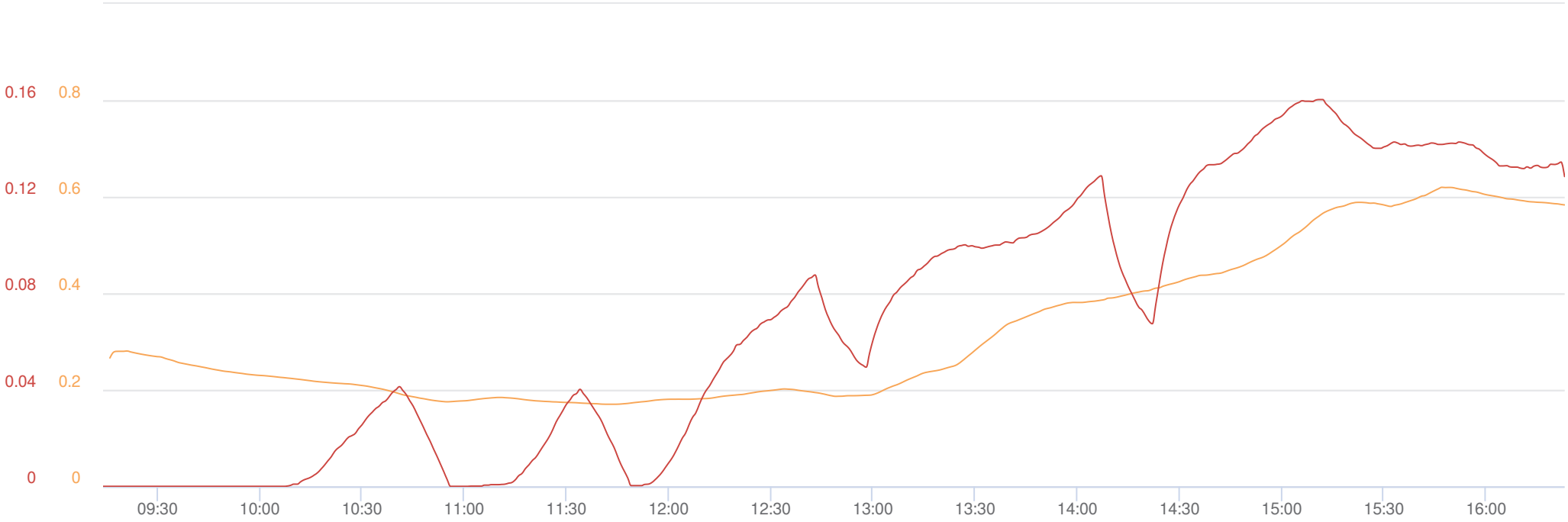
Project / Client

Date 6/26/23

	Dust	mg/m³
900	0.065	
930	0.063	
1000	0.071	
1030	0.075	
1100	0.068	
1130	0.067	
1200	0.073	
1230	0.081	
1300	0.067	
1330	0.071	
1400	0.077	
1430	0.075	
1500	0.064	
1530	0.069	
1600	0.072	

Rite in the Rain

Wed, 28th of Jun 2023, 7:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m³ AVG 15m
mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.1701	0.3204	0.6197

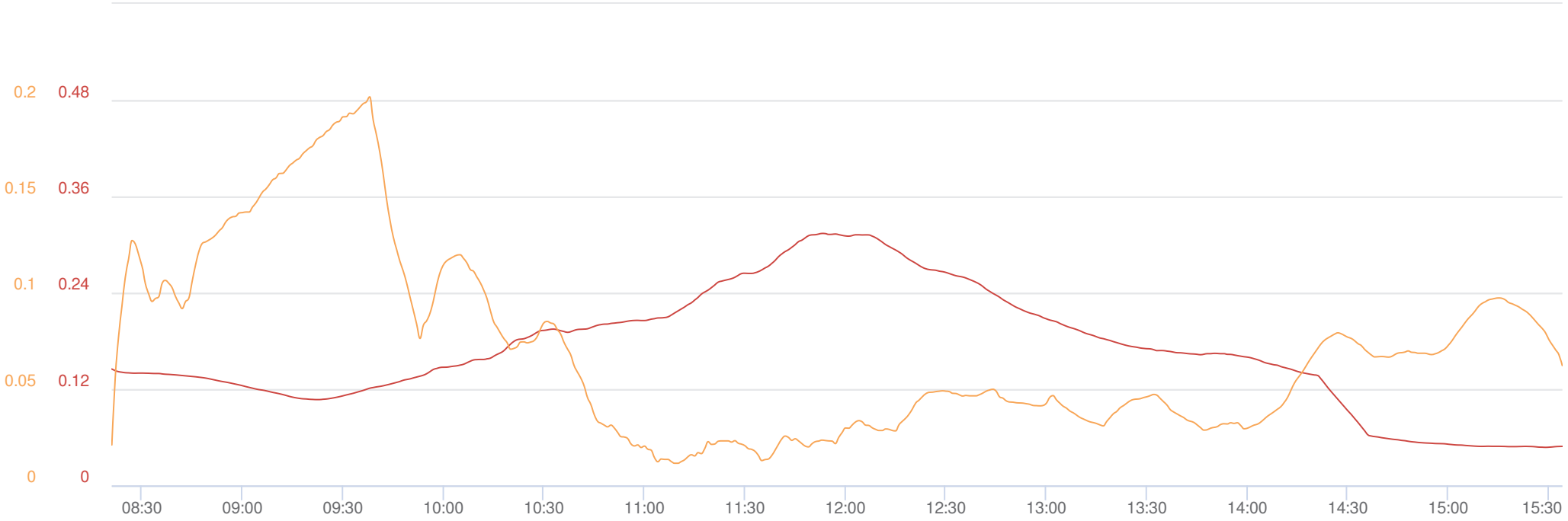
VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0	0.0696	0.1603

Name CAMP #7
S/N 0B332267
Location 389 Manhattan Ave.
Buffalo, NY

© Netronix 2023

Thu, 29th of Jun 2023, 7:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m³ AVG 15m
mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.0474	0.1692	0.3139

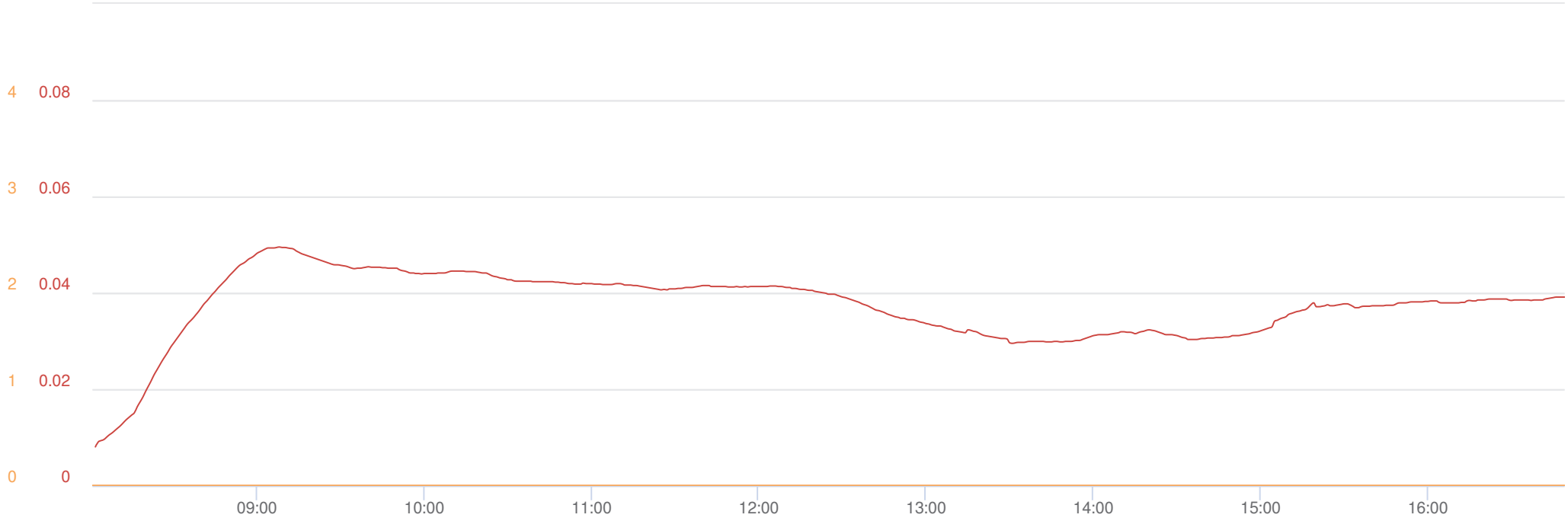
VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0.0115	0.0697	0.2017

Name CAMP #7
S/N 0B332267
Location 389 Manhattan Ave.
Buffalo, NY

© Netronix 2023

Thu, 21st of Sep 2023, 8:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m³ AVG 15m
mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.008	0.0372	0.0495

VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0	0	0

Name CAMP #7
S/N 0B332267
Location 389 Manhattan Ave.
Buffalo, NY

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APPENDIX E

Hydraulic Gradient Calculations

Hydraulic Gradient Calculations

490.5 to MW-1 (486.1 ft)

h1 (MW-2)	490.5	ft
h2 (MW-1)	486.1	ft
Δh (h1-h2)	4.4	ft
L	316	ft
i	0.01392	ft/ft

490 ft to 487 ft

h1	490	ft
h2	487	ft
Δh (h1-h2)	3	ft
L	252	ft
i	0.0119	ft/ft

486.5 ft to 490.5 ft

h1	490.5	ft
h2	486.5	ft
Δh (h1-h2)	4	ft
L	305	ft
i	0.01311	ft/ft

489 ft to 487 ft

h1	489	ft
h2	487	ft
Δh (h1-h2)	2	ft
L	174	ft
i	0.01149	ft/ft

MW-2 (490.5 ft) to 487.5 ft

h1	490.5	ft
h2	487.5	ft
Δh (h1-h2)	3	ft
L	189	ft
i	0.01587	ft/ft

Average Hydraulic Gradient	**0.01326**	**ft/ft**

Velocity Calculations

Effective Porosity (n_e)	0.13

Average effective porosity of limestone

Well Location	Hydraulic Conductivity (K)		Darcy Flux (q)		Average Linear Velocity (v)	
	cm/s	ft/day	cm/s	ft/day	cm/s	ft/day
MW-2	0.0009	2.43	1.1E-05	0.032	9.1E-05	0.2581258
MW-3	0.0012	3.41	1.6E-05	0.045	1.3E-04	0.3622812
MW-4	0.0012	3.54	1.7E-05	0.047	1.3E-04	0.3754645
Average	**0.0011**	**3.13**	**1.46E-05**	**0.041**	**1.17E-04**	**0.33**

Darcy's Law:

$$Q = KiA$$

$$i = \frac{h_1 - h_2}{L}$$

$$q = \frac{Q}{A} = Ki$$

$$v = \frac{q}{n_e}$$

Q = discharge
i = hydraulic gradient
h_1-h_2 = change in hydraulic head
L = distance
q = darcy velocity/darcy flux
n_e = effective porosity

APPENDIX F

Laboratory Analytical Data Packages

ANALYTICAL REPORT

Lab Number:	L2335669
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	389 MANHATTAN
Project Number:	0595-021-001
Report Date:	07/26/23

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2335669-01	TP-15	SOIL	BUFFALO, NY 14218	06/21/23 12:15	06/21/23
L2335669-02	TP-16	SOIL	BUFFALO, NY 14218	06/21/23 12:02	06/21/23
L2335669-03	TP-17	SOIL	BUFFALO, NY 14218	06/21/23 12:30	06/21/23
L2335669-04	TP-18	SOIL	BUFFALO, NY 14218	06/21/23 12:40	06/21/23
L2335669-05	TP-19	SOIL	BUFFALO, NY 14218	06/21/23 12:50	06/21/23
L2335669-06	TP-20	SOIL	BUFFALO, NY 14218	06/21/23 13:00	06/21/23
L2335669-07	TP-21	SOIL	BUFFALO, NY 14218	06/21/23 13:10	06/21/23
L2335669-08	MW-1 TP	SOIL	BUFFALO, NY 14218	06/21/23 13:20	06/21/23
L2335669-09	MW-2	SOIL	BUFFALO, NY 14218	06/21/23 13:30	06/21/23
L2335669-10	MW-3	SOIL	BUFFALO, NY 14218	06/21/23 13:40	06/21/23
L2335669-11	MW-4	SOIL	BUFFALO, NY 14218	06/21/23 13:50	06/21/23
L2335669-12	SS-1	SOIL	BUFFALO, NY 14218	06/21/23 14:00	06/21/23
L2335669-13	SS-2	SOIL	BUFFALO, NY 14218	06/21/23 14:10	06/21/23
L2335669-14	SS-3	SOIL	BUFFALO, NY 14218	06/21/23 14:20	06/21/23
L2335669-15	BLIND DUP	SOIL	BUFFALO, NY 14218	06/21/23 12:00	06/21/23

Project Name:	389 MANHATTAN	**Lab Number:**	L2335669
Project Number:	0595-021-001	**Report Date:**	07/26/23

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

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

Soil/sediments, 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.

HOLD POLICY - For samples submitted on hold, Alpha'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 Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	389 MANHATTAN	**Lab Number:**	L2335669
Project Number:	0595-021-001	**Report Date:**	07/26/23

Case Narrative (continued)

Report Submission

July 26, 2023: This final report includes the results of all requested analyses.

July 06, 2023: This is a preliminary report.

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

Semivolatile Organics

The WG1795953-4/-5 MS/MSD recoveries, performed on L2335669-06, are below the acceptance criteria for hexachlorocyclopentadiene (0%/0%), 2,4-dinitrophenol (0%/0%), and 4,6-dinitro-o-cresol (MSD 0%) due to the concentration of these compounds in the MS/MSD falling below the reported detection limits.

Total Metals

L2335669-01 through -15: The sample was analyzed for mercury with the method required holding time exceeded.

L2335669-01 through -15: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1799642-3/-4 MS/MSD recoveries, performed on L2335669-06, are outside the acceptance criteria for arsenic (MSD 133%), copper (131%/136%), lead (MS 195%) and zinc (131%/140%). A post digestion spike was performed and was within acceptance criteria.

The WG1799642-3/-4 MS/MSD recoveries for aluminum (383%/958%), calcium (838%/1280%), iron (1320%/2470%), magnesium (0%/0%) and manganese (187%/233%), performed on L2335669-06, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG1799642-3/-4 MS/MSD RPD for lead (32%), performed on L2335669-06, is above the acceptance criteria.

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

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 07/26/23

ORGANICS

VOLATILES

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 20:16
Analyst: MAG
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.93	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.93	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.93	0.12	1
Dibromochloromethane	ND		ug/kg	0.93	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.93	0.25	1
Tetrachloroethene	0.36	J	ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.93	0.50	1
Ethylbenzene	ND		ug/kg	0.93	0.13	1
Chloromethane	ND		ug/kg	3.7	0.86	1
Bromomethane	ND		ug/kg	1.8	0.54	1
Vinyl chloride	ND		ug/kg	0.93	0.31	1
Chloroethane	ND		ug/kg	1.8	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02 Date Collected: 06/21/23 12:02

Client ID: TP-16 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.19	1
p/m-Xylene	ND		ug/kg	1.8	0.52	1
o-Xylene	ND		ug/kg	0.93	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.16	1
Styrene	ND		ug/kg	0.93	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.85	1
Acetone	7.6	J	ug/kg	9.3	4.4	1
Carbon disulfide	ND		ug/kg	9.3	4.2	1
2-Butanone	ND		ug/kg	9.3	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	1.2	1
2-Hexanone	ND		ug/kg	9.3	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.93	0.26	1
n-Butylbenzene	ND		ug/kg	0.93	0.15	1
sec-Butylbenzene	ND		ug/kg	0.93	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Isopropylbenzene	ND		ug/kg	0.93	0.10	1
p-Isopropyltoluene	0.17	J	ug/kg	0.93	0.10	1
n-Propylbenzene	ND		ug/kg	0.93	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1
Methyl Acetate	ND		ug/kg	3.7	0.88	1
Cyclohexane	ND		ug/kg	9.3	0.50	1
1,4-Dioxane	ND		ug/kg	74	32.	1
Freon-113	ND		ug/kg	3.7	0.64	1
Methyl cyclohexane	ND		ug/kg	3.7	0.56	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	101		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 20:58
Analyst: MAG
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.22	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.62	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03 Date Collected: 06/21/23 12:30

Client ID: TP-17 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.2	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Styrene	ND		ug/kg	1.2	0.22	1
Dichlorodifluoromethane	ND		ug/kg	12	1.0	1
Acetone	9.4	J	ug/kg	12	5.5	1
Carbon disulfide	ND		ug/kg	12	5.2	1
2-Butanone	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	0.23	J	ug/kg	1.2	0.12	1
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
Methyl Acetate	ND		ug/kg	4.6	1.1	1
Cyclohexane	ND		ug/kg	12	0.62	1
1,4-Dioxane	ND		ug/kg	92	40.	1
Freon-113	ND		ug/kg	4.6	0.80	1
Methyl cyclohexane	ND		ug/kg	4.6	0.69	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	102		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 20:37
Analyst: MAG
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.31	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04 Date Collected: 06/21/23 12:40

Client ID: TP-18 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	17		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.5	1
2-Hexanone	ND		ug/kg	11	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	0.49	J	ug/kg	1.1	0.12	1
n-Propylbenzene	ND		ug/kg	1.1	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	0.26	J	ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
Methyl Acetate	ND		ug/kg	4.6	1.1	1
Cyclohexane	ND		ug/kg	11	0.62	1
1,4-Dioxane	ND		ug/kg	92	40.	1
Freon-113	ND		ug/kg	4.6	0.80	1
Methyl cyclohexane	ND		ug/kg	4.6	0.69	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	99		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 21:18
Analyst: MAG
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.4	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	0.44	J	ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.90	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.22	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.2	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.70	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.2	1.2	1
Bromomethane	ND		ug/kg	2.6	0.75	1
Vinyl chloride	ND		ug/kg	1.3	0.43	1
Chloroethane	ND		ug/kg	2.6	0.58	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.18	1
Trichloroethene	0.87		ug/kg	0.64	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.18	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.72	1
o-Xylene	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	140		ug/kg	13	6.2	1
Carbon disulfide	ND		ug/kg	13	5.9	1
2-Butanone	14		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.35	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.43	1
Methyl Acetate	ND		ug/kg	5.2	1.2	1
Cyclohexane	ND		ug/kg	13	0.70	1
1,4-Dioxane	ND		ug/kg	100	45.	1
Freon-113	ND		ug/kg	5.2	0.89	1
Methyl cyclohexane	ND		ug/kg	5.2	0.78	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	97		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 21:39
Analyst: MAG
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.18	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.19	1
Benzene	ND		ug/kg	0.59	0.19	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.3	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1
Trichloroethene	0.32	J	ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06 Date Collected: 06/21/23 13:00

Client ID: TP-20 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.24	1
p/m-Xylene	ND		ug/kg	2.3	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	9.1	J	ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
Methyl Acetate	ND		ug/kg	4.7	1.1	1
Cyclohexane	ND		ug/kg	12	0.64	1
1,4-Dioxane	ND		ug/kg	94	41.	1
Freon-113	ND		ug/kg	4.7	0.81	1
Methyl cyclohexane	ND		ug/kg	4.7	0.71	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	106		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/02/23 22:00
Analyst: MAG
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.97	0.14	1
Chloroform	ND		ug/kg	1.4	0.14	1
Carbon tetrachloride	ND		ug/kg	0.97	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.97	0.12	1
Dibromochloromethane	ND		ug/kg	0.97	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.97	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.97	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.97	0.53	1
Ethylbenzene	ND		ug/kg	0.97	0.14	1
Chloromethane	ND		ug/kg	3.9	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.97	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	0.32	J	ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15 Date Collected: 06/21/23 12:00

Client ID: BLIND DUP Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.20	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.97	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.17	1
Styrene	ND		ug/kg	0.97	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.89	1
Acetone	7.9	J	ug/kg	9.7	4.7	1
Carbon disulfide	ND		ug/kg	9.7	4.4	1
2-Butanone	ND		ug/kg	9.7	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	1.2	1
2-Hexanone	ND		ug/kg	9.7	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.97	0.27	1
n-Butylbenzene	ND		ug/kg	0.97	0.16	1
sec-Butylbenzene	ND		ug/kg	0.97	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.97	1
Isopropylbenzene	ND		ug/kg	0.97	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.10	1
n-Propylbenzene	ND		ug/kg	0.97	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
Methyl Acetate	ND		ug/kg	3.9	0.92	1
Cyclohexane	ND		ug/kg	9.7	0.53	1
1,4-Dioxane	ND		ug/kg	78	34.	1
Freon-113	ND		ug/kg	3.9	0.67	1
Methyl cyclohexane	ND		ug/kg	3.9	0.58	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	103		70-130

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/02/23 15:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-06,15 Batch: WG1799020-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/02/23 15:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-06,15 Batch: WG1799020-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	7.9	J	ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/02/23 15:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-06,15 Batch: WG1799020-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 Batch: WG1799020-3 WG1799020-4								
Methylene chloride	95		97		70-130	2		30
1,1-Dichloroethane	102		102		70-130	0		30
Chloroform	99		100		70-130	1		30
Carbon tetrachloride	95		100		70-130	5		30
1,2-Dichloropropane	93		94		70-130	1		30
Dibromochloromethane	82		87		70-130	6		30
1,1,2-Trichloroethane	89		92		70-130	3		30
Tetrachloroethene	87		89		70-130	2		30
Chlorobenzene	88		91		70-130	3		30
Trichlorofluoromethane	94		96		70-139	2		30
1,2-Dichloroethane	97		99		70-130	2		30
1,1,1-Trichloroethane	107		109		70-130	2		30
Bromodichloromethane	94		97		70-130	3		30
trans-1,3-Dichloropropene	86		89		70-130	3		30
cis-1,3-Dichloropropene	91		95		70-130	4		30
Bromoform	84		91		70-130	8		30
1,1,2,2-Tetrachloroethane	87		95		70-130	9		30
Benzene	101		102		70-130	1		30
Toluene	93		93		70-130	0		30
Ethylbenzene	96		97		70-130	1		30
Chloromethane	76		77		52-130	1		30
Bromomethane	115		112		57-147	3		30
Vinyl chloride	86		88		67-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 Batch: WG1799020-3 WG1799020-4								
Chloroethane	89		87		50-151	2		30
1,1-Dichloroethene	95		93		65-135	2		30
trans-1,2-Dichloroethene	98		95		70-130	3		30
Trichloroethene	100		104		70-130	4		30
1,2-Dichlorobenzene	84		88		70-130	5		30
1,3-Dichlorobenzene	86		90		70-130	5		30
1,4-Dichlorobenzene	86		88		70-130	2		30
Methyl tert butyl ether	110		113		66-130	3		30
p/m-Xylene	93		94		70-130	1		30
o-Xylene	92		93		70-130	1		30
cis-1,2-Dichloroethene	95		96		70-130	1		30
Styrene	93		95		70-130	2		30
Dichlorodifluoromethane	96		96		30-146	0		30
Acetone	129		130		54-140	1		30
Carbon disulfide	87		87		59-130	0		30
2-Butanone	72		78		70-130	8		30
4-Methyl-2-pentanone	86		90		70-130	5		30
2-Hexanone	76		78		70-130	3		30
Bromochloromethane	87		88		70-130	1		30
1,2-Dibromoethane	89		91		70-130	2		30
n-Butylbenzene	97		100		70-130	3		30
sec-Butylbenzene	96		100		70-130	4		30
1,2-Dibromo-3-chloropropane	78		82		68-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 Batch: WG1799020-3 WG1799020-4								
Isopropylbenzene	95		99		70-130	4		30
p-Isopropyltoluene	92		95		70-130	3		30
n-Propylbenzene	96		98		70-130	2		30
1,2,3-Trichlorobenzene	89		93		70-130	4		30
1,2,4-Trichlorobenzene	88		93		70-130	6		30
1,3,5-Trimethylbenzene	95		99		70-130	4		30
1,2,4-Trimethylbenzene	92		96		70-130	4		30
Methyl Acetate	103		108		51-146	5		30
Cyclohexane	104		105		59-142	1		30
1,4-Dioxane	89		98		65-136	10		30
Freon-113	96		94		50-139	2		30
Methyl cyclohexane	100		102		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	104		107		70-130
Dibromofluoromethane	98		101		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 QC Batch ID: WG1799020-6 WG1799020-7 QC Sample: L2335669-06 Client ID: TP-20												
Methylene chloride	ND	114	110	100		92	81		70-130	21		30
1,1-Dichloroethane	ND	114	120	109		100	89		70-130	20		30
Chloroform	ND	114	120	105		94	83		70-130	24		30
Carbon tetrachloride	ND	114	110	94		81	72		70-130	27		30
1,2-Dichloropropane	ND	114	110	95		85	75		70-130	23		30
Dibromochloromethane	ND	114	92	81		67	**59**	Q	70-130	**31**	Q	30
1,1,2-Trichloroethane	ND	114	100	90		78	**69**	Q	70-130	26		30
Tetrachloroethene	ND	114	81	71		55	**48**	Q	70-130	**38**	Q	30
Chlorobenzene	ND	114	83	73		59	**52**	Q	70-130	**34**	Q	30
Trichlorofluoromethane	ND	114	120	103		93	82		70-139	22		30
1,2-Dichloroethane	ND	114	110	99		90	79		70-130	22		30
1,1,1-Trichloroethane	ND	114	130	112		98	86		70-130	26		30
Bromodichloromethane	ND	114	110	97		83	73		70-130	28		30
trans-1,3-Dichloropropene	ND	114	84	74		65	**57**	Q	70-130	25		30
cis-1,3-Dichloropropene	ND	114	88	77		68	**60**	Q	70-130	25		30
Bromoform	ND	114	94	83		63	**56**	Q	70-130	**39**	Q	30
1,1,2,2-Tetrachloroethane	ND	114	95	84		65	**57**	Q	70-130	**38**	Q	30
Benzene	ND	114	120	103		92	81		70-130	23		30
Toluene	ND	114	99	88		74	**65**	Q	70-130	30		30
Ethylbenzene	ND	114	92	81		64	**56**	Q	70-130	**37**	Q	30
Chloromethane	ND	114	99	87		85	74		52-130	16		30
Bromomethane	ND	114	120	105		95	84		57-147	22		30
Vinyl chloride	ND	114	110	97		93	82		67-130	16		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 QC Batch ID: WG1799020-6 WG1799020-7 QC Sample: L2335669-06 Client ID: TP-20												
Chloroethane	ND	114	100	92		87	77		50-151	17		30
1,1-Dichloroethene	ND	114	110	94		87	76		65-135	21		30
trans-1,2-Dichloroethene	ND	114	110	96		86	75		70-130	24		30
Trichloroethene	0.32J	114	110	94		82	72		70-130	27		30
1,2-Dichlorobenzene	ND	114	62	**54**	Q	37	**33**	Q	70-130	**49**	Q	30
1,3-Dichlorobenzene	ND	114	64	**56**	Q	39	**35**	Q	70-130	**47**	Q	30
1,4-Dichlorobenzene	ND	114	62	**55**	Q	38	**34**	Q	70-130	**48**	Q	30
Methyl tert butyl ether	ND	114	130	117		110	93		66-130	23		30
p/m-Xylene	ND	227	170	77		120	**52**	Q	70-130	**38**	Q	30
o-Xylene	ND	227	180	78		120	**53**	Q	70-130	**38**	Q	30
cis-1,2-Dichloroethene	ND	114	100	92		85	75		70-130	20		30
Styrene	ND	227	160	72		110	**49**	Q	70-130	**38**	Q	30
Dichlorodifluoromethane	ND	114	120	103		97	86		30-146	18		30
Acetone	9.1J	114	110	99		100	90		54-140	9		30
Carbon disulfide	ND	114	80	70		58	**51**	Q	59-130	**33**	Q	30
2-Butanone	ND	114	68	**60**	Q	61	**54**	Q	70-130	10		30
4-Methyl-2-pentanone	ND	114	88	78		75	**66**	Q	70-130	16		30
2-Hexanone	ND	114	62	**54**	Q	54	**48**	Q	70-130	13		30
Bromochloromethane	ND	114	99	87		78	**69**	Q	70-130	23		30
1,2-Dibromoethane	ND	114	91	80		71	**62**	Q	70-130	25		30
n-Butylbenzene	ND	114	60	**52**	Q	39	**34**	Q	70-130	**42**	Q	30
sec-Butylbenzene	ND	114	72	**64**	Q	45	**40**	Q	70-130	**47**	Q	30
1,2-Dibromo-3-chloropropane	ND	114	70	**62**	Q	50	**44**	Q	68-130	**33**	Q	30

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-06,15 QC Batch ID: WG1799020-6 WG1799020-7 QC Sample: L2335669-06 Client ID: TP-20												
Isopropylbenzene	ND	114	94	82		57	**50**	Q	70-130	**49**	Q	30
p-Isopropyltoluene	ND	114	67	**59**	Q	42	**37**	Q	70-130	**47**	Q	30
n-Propylbenzene	ND	114	85	75		52	**45**	Q	70-130	**49**	Q	30
1,2,3-Trichlorobenzene	ND	114	31	**28**	Q	21	**19**	Q	70-130	**38**	Q	30
1,2,4-Trichlorobenzene	ND	114	34	**30**	Q	24	**21**	Q	70-130	**34**	Q	30
1,3,5-Trimethylbenzene	ND	114	84	74		50	**44**	Q	70-130	**49**	Q	30
1,2,4-Trimethylbenzene	ND	114	80	70		48	**43**	Q	70-130	**49**	Q	30
Methyl Acetate	ND	114	68	60		53	**47**	Q	51-146	23		30
Cyclohexane	ND	114	100	90		70	62		59-142	**37**	Q	30
1,4-Dioxane	ND	5680	5800	102		6000	106		65-136	4		30
Freon-113	ND	114	100	92		73	65		50-139	**34**	Q	30
Methyl cyclohexane	ND	114	77	**68**	Q	53	**46**	Q	70-130	**38**	Q	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		109		70-130
4-Bromofluorobenzene	115		109		70-130
Dibromofluoromethane	103		99		70-130
Toluene-d8	103		104		70-130

SEMIVOLATILES

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01
Client ID: TP-15
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:15
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/03/23 23:40
Analyst: ALS
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	35	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	46.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	1500		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	48	J	ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	60.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	810		ug/kg	100	20.	1
Benzo(a)pyrene	790		ug/kg	140	43.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01 Date Collected: 06/21/23 12:15

Client ID: TP-15 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1000		ug/kg	100	29.	1
Benzo(k)fluoranthene	340		ug/kg	100	28.	1
Chrysene	830		ug/kg	100	18.	1
Acenaphthylene	99	J	ug/kg	140	27.	1
Anthracene	200		ug/kg	100	34.	1
Benzo(ghi)perylene	510		ug/kg	140	20.	1
Fluorene	40	J	ug/kg	180	17.	1
Phenanthrene	600		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	110		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	550		ug/kg	140	24.	1
Pyrene	1200		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	72.	1
Dibenzofuran	30	J	ug/kg	180	16.	1
2-Methylnaphthalene	46	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	26.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	68	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	61.	1
Benzaldehyde	ND		ug/kg	230	47.	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01
Client ID: TP-15
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:15
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	53.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	35.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	86		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	78		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/06/23 04:09
Analyst: LJG
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	46.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	660		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	37	J	ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	60.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	360		ug/kg	100	20.	1
Benzo(a)pyrene	400		ug/kg	140	43.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02 Date Collected: 06/21/23 12:02

Client ID: TP-16 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	500		ug/kg	100	29.	1
Benzo(k)fluoranthene	180		ug/kg	100	28.	1
Chrysene	370		ug/kg	100	18.	1
Acenaphthylene	48	J	ug/kg	140	27.	1
Anthracene	120		ug/kg	100	34.	1
Benzo(ghi)perylene	250		ug/kg	140	20.	1
Fluorene	33	J	ug/kg	180	17.	1
Phenanthrene	370		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	62	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	260		ug/kg	140	24.	1
Pyrene	560		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	72.	1
Dibenzofuran	25	J	ug/kg	180	16.	1
2-Methylnaphthalene	43	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	26.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	47	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	61.	1
Benzaldehyde	ND		ug/kg	230	47.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	53.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	35.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	56		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 22:09
Analyst: CHB
Percent Solids: 93%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.795	0.050	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.398	0.056	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.199	0.043	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.795	0.080	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.199	0.046	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.199	0.023	1
Perfluoroheptanoic Acid (PFHpA)	0.032	J	ng/g	0.199	0.023	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.199	0.059	1
Perfluorooctanoic Acid (PFOA)	0.095	J	ng/g	0.199	0.052	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.795	0.278	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.199	0.037	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.199	0.078	1
Perfluorooctanesulfonic Acid (PFOS)	0.262		ng/g	0.199	0.079	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.199	0.075	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.795	0.385	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.199	0.042	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.199	0.099	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.199	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.199	0.032	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.199	0.043	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.199	0.082	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.199	0.041	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.199	0.053	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.199	0.106	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.795	0.098	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.795	0.145	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.199	0.038	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.795	0.195	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.795	0.166	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.199	0.099	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.199	0.111	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.99	0.249	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.99	0.507	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.398	0.041	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.398	0.031	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.398	0.083	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.398	0.095	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.994	0.143	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.97	0.502	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.97	1.75	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	78		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	71		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	79		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	75		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	76		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	76		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	79		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	55		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	75		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	75		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	78		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	69		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	80		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	58		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	70		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	57		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	66		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	74		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	65		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	72		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	55		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	66		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	62		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	60		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 00:29
Analyst: ALS
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	240		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	3600		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	83	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	310		ug/kg	190	65.	1
Butyl benzyl phthalate	50	J	ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	1800		ug/kg	110	21.	1
Benzo(a)pyrene	1600		ug/kg	150	46.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03 Date Collected: 06/21/23 12:30

Client ID: TP-17 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	2000		ug/kg	110	32.	1
Benzo(k)fluoranthene	750		ug/kg	110	30.	1
Chrysene	1800		ug/kg	110	20.	1
Acenaphthylene	62	J	ug/kg	150	29.	1
Anthracene	550		ug/kg	110	36.	1
Benzo(ghi)perylene	920		ug/kg	150	22.	1
Fluorene	210		ug/kg	190	18.	1
Phenanthrene	2500		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	230		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	1100		ug/kg	150	26.	1
Pyrene	2800		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	24.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	120	J	ug/kg	190	18.	1
2-Methylnaphthalene	72	J	ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	380		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	55		10-136
4-Terphenyl-d14	51		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 22:22
Analyst: CHB
Percent Solids: 88%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.756	0.048	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.378	0.053	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.189	0.041	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.756	0.076	1
Perfluorohexanoic Acid (PFHxA)	0.045	JF	ng/g	0.189	0.044	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.189	0.022	1
Perfluoroheptanoic Acid (PFHpA)	0.038	J	ng/g	0.189	0.022	1
Perfluorohexanesulfonic Acid (PFHxS)	0.061	J	ng/g	0.189	0.056	1
Perfluorooctanoic Acid (PFOA)	0.333		ng/g	0.189	0.049	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.756	0.265	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.189	0.035	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.189	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	1.90		ng/g	0.189	0.075	1
Perfluorodecanoic Acid (PFDA)	0.128	J	ng/g	0.189	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.756	0.366	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.189	0.040	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.189	0.095	1
Perfluoroundecanoic Acid (PFUnA)	0.053	J	ng/g	0.189	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	0.068	J	ng/g	0.189	0.030	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.189	0.041	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.189	0.078	1
Perfluorododecanoic Acid (PFDoA)	0.061	J	ng/g	0.189	0.039	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.189	0.050	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.189	0.100	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.756	0.093	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.756	0.138	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.189	0.036	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.756	0.185	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.756	0.158	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.189	0.095	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.189	0.106	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.89	0.237	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.89	0.482	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.378	0.039	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.378	0.030	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.378	0.079	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.378	0.090	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.945	0.136	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.73	0.477	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.73	1.66	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	73		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	61		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	67		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	65		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	67		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	74		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	65		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	71		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	73		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	86		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	86		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	50		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	79		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	54		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	67		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	93		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	80		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	64		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	53		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	65		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	74		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	64		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 00:54
Analyst: ALS
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	2100		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	370		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	1100		ug/kg	100	20.	1
Benzo(a)pyrene	920		ug/kg	140	43.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04 Date Collected: 06/21/23 12:40

Client ID: TP-18 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1300		ug/kg	100	30.	1
Benzo(k)fluoranthene	380		ug/kg	100	28.	1
Chrysene	1100		ug/kg	100	18.	1
Acenaphthylene	140		ug/kg	140	27.	1
Anthracene	340		ug/kg	100	34.	1
Benzo(ghi)perylene	500		ug/kg	140	21.	1
Fluorene	160	J	ug/kg	180	17.	1
Phenanthrene	1200		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	130		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	580		ug/kg	140	25.	1
Pyrene	1800		ug/kg	100	18.	1
Biphenyl	40	J	ug/kg	400	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	160	J	ug/kg	180	17.	1
2-Methylnaphthalene	220		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	160	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	62.	1
Benzaldehyde	ND		ug/kg	230	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	31		10-136
4-Terphenyl-d14	61		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 22:35
Analyst: CHB
Percent Solids: 92%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.717	0.045	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.358	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.179	0.039	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.717	0.072	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.179	0.042	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.179	0.021	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.179	0.021	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.179	0.053	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.179	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.717	0.251	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.179	0.033	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.179	0.070	1
Perfluorooctanesulfonic Acid (PFOS)	0.158	J	ng/g	0.179	0.071	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.179	0.067	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.717	0.347	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.179	0.038	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.179	0.090	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.179	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.179	0.029	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.179	0.039	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.179	0.074	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.179	0.037	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.179	0.047	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.179	0.095	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.717	0.088	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.717	0.131	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.179	0.034	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.717	0.176	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.717	0.150	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.179	0.090	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.179	0.100	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.79	0.224	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.79	0.457	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.358	0.037	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.358	0.028	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.358	0.075	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.358	0.085	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.896	0.129	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.48	0.452	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.48	1.58	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	73		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	71		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	73		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	68		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	78		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	75		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	78		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	64		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	72		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	73		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	71		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	95		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	46		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	78		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	58		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	70		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	84		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	75		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	72		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	59		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	74		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	76		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	68		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/06/23 04:33
Analyst: LJG
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	86	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1700		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	180	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	730		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	920		ug/kg	120	22.	1
Benzo(a)pyrene	960		ug/kg	150	47.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05 Date Collected: 06/21/23 12:50

Client ID: TP-19 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1200		ug/kg	120	33.	1
Benzo(k)fluoranthene	420		ug/kg	120	31.	1
Chrysene	960		ug/kg	120	20.	1
Acenaphthylene	86	J	ug/kg	150	30.	1
Anthracene	290		ug/kg	120	38.	1
Benzo(ghi)perylene	480		ug/kg	150	23.	1
Fluorene	130	J	ug/kg	190	19.	1
Phenanthrene	1300		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	140		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	560		ug/kg	150	27.	1
Pyrene	1400		ug/kg	120	19.	1
Biphenyl	75	J	ug/kg	440	25.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	240		ug/kg	190	18.	1
2-Methylnaphthalene	1000		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	130	J	ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	68.	1
Benzaldehyde	ND		ug/kg	260	52.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1
1,4-Dioxane	ND		ug/kg	29	8.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	62		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 22:47
Analyst: CHB
Percent Solids: 85%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.770	0.049	1
Perfluoropentanoic Acid (PFPeA)	0.085	J	ng/g	0.385	0.054	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.192	0.042	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.770	0.078	1
Perfluorohexanoic Acid (PFHxA)	0.131	J	ng/g	0.192	0.045	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.192	0.022	1
Perfluoroheptanoic Acid (PFHpA)	0.092	J	ng/g	0.192	0.022	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.192	0.057	1
Perfluorooctanoic Acid (PFOA)	0.385		ng/g	0.192	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.770	0.270	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.192	0.035	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.192	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	0.377		ng/g	0.192	0.076	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.192	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.770	0.373	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.192	0.041	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.192	0.096	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.192	0.049	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.192	0.031	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.192	0.042	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.192	0.079	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.192	0.039	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.192	0.051	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.192	0.102	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.770	0.095	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.770	0.141	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.192	0.037	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.770	0.189	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.770	0.161	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.192	0.096	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.192	0.108	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.92	0.241	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.92	0.491	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.385	0.039	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.385	0.030	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.385	0.080	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.385	0.092	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.962	0.139	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.81	0.486	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.81	1.69	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	60		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	59		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	60		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	59		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	61		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	65		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	65		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	60		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	61		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	61		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	71		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	84		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	43		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	66		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	49		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	64		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	67		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	66		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	62		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	46		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	52		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	58		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	51		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 01:42
Analyst: ALS
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	460		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	30	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	270		ug/kg	110	20.	1
Benzo(a)pyrene	290		ug/kg	140	44.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06 Date Collected: 06/21/23 13:00

Client ID: TP-20 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	360		ug/kg	110	30.	1
Benzo(k)fluoranthene	130		ug/kg	110	28.	1
Chrysene	300		ug/kg	110	18.	1
Acenaphthylene	55	J	ug/kg	140	28.	1
Anthracene	81	J	ug/kg	110	35.	1
Benzo(ghi)perylene	190		ug/kg	140	21.	1
Fluorene	27	J	ug/kg	180	17.	1
Phenanthrene	230		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	42	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	140	25.	1
Pyrene	420		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	17	J	ug/kg	180	17.	1
2-Methylnaphthalene	29	J	ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	37	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	62.	1
Benzaldehyde	ND		ug/kg	240	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	68		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 23:00
Analyst: CHB
Percent Solids: 91%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.790	0.050	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.395	0.055	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.198	0.043	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.790	0.080	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.198	0.046	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.198	0.023	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.198	0.023	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.198	0.059	1
Perfluorooctanoic Acid (PFOA)	0.285		ng/g	0.198	0.051	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.790	0.277	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.198	0.036	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.198	0.078	1
Perfluorooctanesulfonic Acid (PFOS)	0.206		ng/g	0.198	0.078	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.198	0.074	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.790	0.383	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.198	0.042	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.198	0.099	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.198	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.198	0.032	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.198	0.043	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.198	0.081	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.198	0.040	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.198	0.052	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.198	0.105	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.790	0.097	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.790	0.145	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.198	0.038	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.790	0.194	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.790	0.165	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.198	0.099	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.198	0.111	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.98	0.247	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.98	0.504	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.395	0.040	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.395	0.031	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.395	0.082	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.395	0.094	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.988	0.142	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.94	0.499	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.94	1.74	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	72		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	65		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	67		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	69		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	70		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	73		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	49		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	68		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	86		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	70		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	74		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	80		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	36		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	50		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	62		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	64		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	69		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	73		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	49		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	60		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	65		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	57		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07
Client ID: TP-21
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 02:07
Analyst: ALS
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	3100		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	110	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	1800		ug/kg	100	19.	1
Benzo(a)pyrene	1600		ug/kg	140	42.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07 Date Collected: 06/21/23 13:10

Client ID: TP-21 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	2200		ug/kg	100	29.	1
Benzo(k)fluoranthene	540		ug/kg	100	27.	1
Chrysene	1800		ug/kg	100	18.	1
Acenaphthylene	120	J	ug/kg	140	26.	1
Anthracene	460		ug/kg	100	33.	1
Benzo(ghi)perylene	860		ug/kg	140	20.	1
Fluorene	150	J	ug/kg	170	16.	1
Phenanthrene	1800		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	210		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	1000		ug/kg	140	24.	1
Pyrene	2600		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	22.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	97	J	ug/kg	170	16.	1
2-Methylnaphthalene	130	J	ug/kg	200	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Carbazole	210		ug/kg	170	16.	1
Atrazine	ND		ug/kg	140	60.	1
Benzaldehyde	ND		ug/kg	220	46.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07
Client ID: TP-21
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	170	52.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	34.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	66		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08
Client ID: MW-1 TP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/06/23 04:56
Analyst: LJG
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	40	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	860		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	68	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	62	J	ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	400		ug/kg	110	20.	1
Benzo(a)pyrene	460		ug/kg	140	44.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08 Date Collected: 06/21/23 13:20

Client ID: MW-1 TP Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	580		ug/kg	110	30.	1
Benzo(k)fluoranthene	230		ug/kg	110	29.	1
Chrysene	440		ug/kg	110	19.	1
Acenaphthylene	32	J	ug/kg	140	28.	1
Anthracene	120		ug/kg	110	35.	1
Benzo(ghi)perylene	310		ug/kg	140	21.	1
Fluorene	48	J	ug/kg	180	17.	1
Phenanthrene	540		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	70	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	140	25.	1
Pyrene	690		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	44	J	ug/kg	180	17.	1
2-Methylnaphthalene	100	J	ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	69	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	63.	1
Benzaldehyde	ND		ug/kg	240	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08
Client ID: MW-1 TP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	46		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	64		10-136
4-Terphenyl-d14	52		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09
Client ID: MW-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 02:55
Analyst: ALS
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	750		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	3200		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	1100		ug/kg	180	23.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	1900		ug/kg	110	21.	1
Benzo(a)pyrene	1300		ug/kg	150	45.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09 Date Collected: 06/21/23 13:30

Client ID: MW-2 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1500		ug/kg	110	31.	1
Benzo(k)fluoranthene	630		ug/kg	110	30.	1
Chrysene	1500		ug/kg	110	19.	1
Acenaphthylene	87	J	ug/kg	150	29.	1
Anthracene	1400		ug/kg	110	36.	1
Benzo(ghi)perylene	500		ug/kg	150	22.	1
Fluorene	810		ug/kg	180	18.	1
Phenanthrene	3800		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	160		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	640		ug/kg	150	26.	1
Pyrene	2500		ug/kg	110	18.	1
Biphenyl	100	J	ug/kg	420	24.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	600		ug/kg	180	18.	1
2-Methylnaphthalene	650		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	93	J	ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	72	J	ug/kg	180	28.	1
2-Methylphenol	81	J	ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	210	J	ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	36.	1
Carbazole	640		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09
Client ID: MW-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1
1,4-Dioxane	ND		ug/kg	28	8.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	62		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10
Client ID: MW-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 03:19
Analyst: ALS
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	51	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	1200		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	45	J	ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	680		ug/kg	100	20.	1
Benzo(a)pyrene	580		ug/kg	140	43.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10 Date Collected: 06/21/23 13:40

Client ID: MW-3 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	720		ug/kg	100	30.	1
Benzo(k)fluoranthene	250		ug/kg	100	28.	1
Chrysene	620		ug/kg	100	18.	1
Acenaphthylene	74	J	ug/kg	140	27.	1
Anthracene	190		ug/kg	100	34.	1
Benzo(ghi)perylene	300		ug/kg	140	21.	1
Fluorene	67	J	ug/kg	180	17.	1
Phenanthrene	710		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	350		ug/kg	140	24.	1
Pyrene	1000		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	37	J	ug/kg	180	17.	1
2-Methylnaphthalene	48	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	90	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	62.	1
Benzaldehyde	ND		ug/kg	230	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10
Client ID: MW-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	51		10-136
4-Terphenyl-d14	47		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11
Client ID: MW-4
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 03:44
Analyst: ALS
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	65	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	2600		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	53	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	220		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	1100		ug/kg	110	20.	1
Benzo(a)pyrene	1300		ug/kg	140	43.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11 Date Collected: 06/21/23 13:50

Client ID: MW-4 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1800		ug/kg	110	30.	1
Benzo(k)fluoranthene	640		ug/kg	110	28.	1
Chrysene	1500		ug/kg	110	18.	1
Acenaphthylene	84	J	ug/kg	140	27.	1
Anthracene	220		ug/kg	110	34.	1
Benzo(ghi)perylene	840		ug/kg	140	21.	1
Fluorene	86	J	ug/kg	180	17.	1
Phenanthrene	1300		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	160		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	950		ug/kg	140	25.	1
Pyrene	2000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	23.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	42	J	ug/kg	180	17.	1
2-Methylnaphthalene	50	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	210		ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	62.	1
Benzaldehyde	ND		ug/kg	230	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11
Client ID: MW-4
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	63		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 04:08
Analyst: ALS
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	31	J	ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1300		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	47	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	680		ug/kg	110	20.	1
Benzo(a)pyrene	660		ug/kg	140	44.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12 Date Collected: 06/21/23 14:00

Client ID: SS-1 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	930		ug/kg	110	30.	1
Benzo(k)fluoranthene	250		ug/kg	110	29.	1
Chrysene	750		ug/kg	110	19.	1
Acenaphthylene	93	J	ug/kg	140	28.	1
Anthracene	150		ug/kg	110	35.	1
Benzo(ghi)perylene	460		ug/kg	140	21.	1
Fluorene	50	J	ug/kg	180	17.	1
Phenanthrene	660		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	95	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	480		ug/kg	140	25.	1
Pyrene	1100		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	23.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	26	J	ug/kg	180	17.	1
2-Methylnaphthalene	55	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	100	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	63.	1
Benzaldehyde	ND		ug/kg	240	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	55.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	27	8.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	61		10-136
4-Terphenyl-d14	56		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 23:39
Analyst: CHB
Percent Solids: 92%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.116	J	ng/g	0.775	0.049	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.388	0.054	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.194	0.042	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.775	0.078	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.194	0.045	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.194	0.023	1
Perfluoroheptanoic Acid (PFHpA)	0.047	J	ng/g	0.194	0.023	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.194	0.057	1
Perfluorooctanoic Acid (PFOA)	0.085	J	ng/g	0.194	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.775	0.271	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.194	0.036	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.194	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	0.186	J	ng/g	0.194	0.077	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.194	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.775	0.375	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.194	0.041	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.194	0.097	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.194	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.194	0.031	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.194	0.042	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.194	0.080	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.194	0.040	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.194	0.051	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.194	0.103	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.775	0.095	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.775	0.142	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.194	0.037	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.775	0.190	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.775	0.162	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.194	0.097	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.194	0.108	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.94	0.243	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.94	0.495	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.388	0.040	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.388	0.030	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.388	0.081	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.388	0.092	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.969	0.140	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.84	0.489	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.84	1.70	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	66		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	65		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	66		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	60		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	66		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	66		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	70		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	55		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	65		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	71		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	73		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	73		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	84		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	43		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	82		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	52		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	74		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	82		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	79		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	64		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	52		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	63		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	78		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	68		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/04/23 04:32
Analyst: ALS
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	260		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	6100		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	160	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	3200		ug/kg	100	20.	1
Benzo(a)pyrene	2900		ug/kg	140	42.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13 Date Collected: 06/21/23 14:10

Client ID: SS-2 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	4300		ug/kg	100	29.	1
Benzo(k)fluoranthene	940		ug/kg	100	28.	1
Chrysene	3200		ug/kg	100	18.	1
Acenaphthylene	220		ug/kg	140	27.	1
Anthracene	900		ug/kg	100	34.	1
Benzo(ghi)perylene	1500		ug/kg	140	20.	1
Fluorene	280		ug/kg	170	17.	1
Phenanthrene	3700		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	390		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	1800		ug/kg	140	24.	1
Pyrene	4900		ug/kg	100	17.	1
Biphenyl	27	J	ug/kg	390	22.	1
4-Chloroaniline	ND		ug/kg	170	32.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	180		ug/kg	170	16.	1
2-Methylnaphthalene	150	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	830	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	110	J	ug/kg	250	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Carbazole	520		ug/kg	170	17.	1
Atrazine	ND		ug/kg	140	61.	1
Benzaldehyde	ND		ug/kg	230	47.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13 Date Collected: 06/21/23 14:10

Client ID: SS-2 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	170	53.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	35.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		25-120
Phenol-d6	50		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	52		30-120
2,4,6-Tribromophenol	45		10-136
4-Terphenyl-d14	46		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/19/23 23:52
Analyst: CHB
Percent Solids: 96%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.088	J	ng/g	0.735	0.046	1
Perfluoropentanoic Acid (PFPeA)	0.059	J	ng/g	0.368	0.052	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.184	0.040	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.735	0.074	1
Perfluorohexanoic Acid (PFHxA)	0.052	J	ng/g	0.184	0.043	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.184	0.021	1
Perfluoroheptanoic Acid (PFHpA)	0.059	J	ng/g	0.184	0.021	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.184	0.054	1
Perfluorooctanoic Acid (PFOA)	0.066	J	ng/g	0.184	0.048	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.735	0.257	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.184	0.034	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.184	0.072	1
Perfluorooctanesulfonic Acid (PFOS)	0.257		ng/g	0.184	0.073	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.184	0.069	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.735	0.356	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.184	0.039	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.184	0.092	1
Perfluoroundecanoic Acid (PFUnA)	0.052	J	ng/g	0.184	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.184	0.029	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.184	0.040	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.184	0.076	1
Perfluorododecanoic Acid (PFDoA)	0.059	J	ng/g	0.184	0.038	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.184	0.049	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.184	0.098	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.735	0.090	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.735	0.134	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.184	0.035	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.735	0.180	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.735	0.154	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.184	0.092	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.184	0.103	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.84	0.230	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.84	0.469	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.368	0.038	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.368	0.029	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.368	0.077	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.368	0.088	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.919	0.132	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.60	0.464	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.60	1.62	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	76		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	68		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	79		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	76		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	74		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	76		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	62		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	77		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	75		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	77		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	78		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	121		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	61		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	73		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	64		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	93		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	76		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	81		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	75		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	62		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	74		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	99		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	81		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/03/23 21:11
Analyst: ALS
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	20	J	ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	770		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	23	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	380		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	420		ug/kg	110	20.	1
Benzo(a)pyrene	390		ug/kg	140	44.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14 Date Collected: 06/21/23 14:20

Client ID: SS-3 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	510		ug/kg	110	30.	1
Benzo(k)fluoranthene	140		ug/kg	110	29.	1
Chrysene	430		ug/kg	110	19.	1
Acenaphthylene	45	J	ug/kg	140	28.	1
Anthracene	100	J	ug/kg	110	35.	1
Benzo(ghi)perylene	260		ug/kg	140	21.	1
Fluorene	25	J	ug/kg	180	17.	1
Phenanthrene	310		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	60	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	270		ug/kg	140	25.	1
Pyrene	700		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	23.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	25	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	38	J	ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	63.	1
Benzaldehyde	ND		ug/kg	240	48.	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	79		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/20/23 00:05
Analyst: CHB
Percent Solids: 92%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.170	J	ng/g	0.773	0.049	1
Perfluoropentanoic Acid (PFPeA)	0.077	J	ng/g	0.387	0.054	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.193	0.042	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.773	0.078	1
Perfluorohexanoic Acid (PFHxA)	0.046	J	ng/g	0.193	0.045	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.193	0.022	1
Perfluoroheptanoic Acid (PFHpA)	0.054	J	ng/g	0.193	0.022	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.193	0.057	1
Perfluorooctanoic Acid (PFOA)	0.147	J	ng/g	0.193	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.773	0.271	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.193	0.036	1
Perfluorononanoic Acid (PFNA)	0.077	J	ng/g	0.193	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	0.286		ng/g	0.193	0.077	1
Perfluorodecanoic Acid (PFDA)	0.100	J	ng/g	0.193	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.773	0.374	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.193	0.041	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.193	0.097	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.193	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.193	0.031	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.193	0.042	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.193	0.080	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.193	0.039	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.193	0.051	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.193	0.103	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.773	0.095	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.773	0.142	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.193	0.037	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14 Date Collected: 06/21/23 14:20

Client ID: SS-3 Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.773	0.189	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.773	0.162	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.193	0.097	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.193	0.108	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.93	0.242	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.93	0.493	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.387	0.039	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.387	0.030	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.387	0.080	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.387	0.092	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.967	0.139	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.83	0.488	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.83	1.70	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	71		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	66		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	70		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	70		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	68		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	74		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	54		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	70		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	71		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	86		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	62		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	68		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	60		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	73		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	74		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	75		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	68		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	55		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	70		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	88		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	73		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/03/23 21:36
Analyst: ALS
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	490		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	2800		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	260		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	1400		ug/kg	100	19.	1
Benzo(a)pyrene	1200		ug/kg	140	42.	1

Project Name: 389 MANHATTAN **Lab Number:** L2335669

Project Number: 0595-021-001 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15 Date Collected: 06/21/23 12:00

Client ID: BLIND DUP Date Received: 06/21/23

Sample Location: BUFFALO, NY 14218 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1400		ug/kg	100	29.	1
Benzo(k)fluoranthene	480		ug/kg	100	28.	1
Chrysene	1200		ug/kg	100	18.	1
Acenaphthylene	67	J	ug/kg	140	27.	1
Anthracene	730		ug/kg	100	34.	1
Benzo(ghi)perylene	690		ug/kg	140	20.	1
Fluorene	340		ug/kg	170	17.	1
Phenanthrene	2400		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	150		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	800		ug/kg	140	24.	1
Pyrene	2300		ug/kg	100	17.	1
Biphenyl	35	J	ug/kg	390	22.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	190		ug/kg	170	16.	1
2-Methylnaphthalene	140	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	830	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Carbazole	320		ug/kg	170	17.	1
Atrazine	ND		ug/kg	140	60.	1
Benzaldehyde	ND		ug/kg	230	47.	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	170	52.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	35.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	75		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 144,1633
Analytical Date: 07/20/23 00:17
Analyst: CHB
Percent Solids: 95%

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.754	0.048	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.377	0.053	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.188	0.041	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.754	0.076	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.188	0.044	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.188	0.022	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.188	0.022	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.188	0.056	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.188	0.049	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.754	0.264	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.188	0.035	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.188	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	0.181	J	ng/g	0.188	0.075	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.188	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.754	0.365	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.188	0.040	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.188	0.094	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.188	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.188	0.030	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.188	0.041	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.188	0.078	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.188	0.038	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.188	0.050	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.188	0.100	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.754	0.093	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.754	0.138	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.188	0.036	1

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.754	0.185	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.754	0.158	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.188	0.094	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.188	0.106	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	1.88	0.236	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	1.88	0.481	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.377	0.038	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.377	0.029	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.377	0.078	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.377	0.090	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	0.943	0.136	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	4.71	0.476	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	4.71	1.66	1

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	75		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	72		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	79		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	69		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	77		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	71		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	76		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	62		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	71		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	82		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	82		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	82		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	84		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	66		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	83		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	66		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	76		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	78		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	78		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	72		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	64		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	80		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	87		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	81		20-150

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/27/23 09:15
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-15 Batch: WG1795953-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/27/23 09:15
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-15 Batch: WG1795953-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/27/23 09:15
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-15 Batch: WG1795953-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	100		25-120
Phenol-d6	101		10-120
Nitrobenzene-d5	117		23-120
2-Fluorobiphenyl	95		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	102		18-120

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 07/19/23 21:30
Analyst: CHB

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-06,12-15 Batch: WG1803663-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.800	0.050
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.400	0.056
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.200	0.043
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.800	0.081
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.200	0.046
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.200	0.023
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.200	0.023
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.200	0.059
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.200	0.052
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.800	0.280
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.200	0.037
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.200	0.078
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.200	0.079
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.200	0.075
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.800	0.387
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	0.200	0.042
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.200	0.100
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.200	0.051
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.200	0.032
Perfluorooctanesulfonamide (PFOSA)	ND		ng/g	0.200	0.043
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.200	0.082
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.200	0.041
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.200	0.053
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/g	0.200	0.106
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/g	0.800	0.098
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.800	0.146

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 07/19/23 21:30
Analyst: CHB

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-06,12-15 Batch: WG1803663-1					
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/g	0.200	0.038
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/g	0.800	0.196
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/g	0.800	0.167
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/g	0.200	0.100
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/g	0.200	0.112
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/g	2.00	0.250
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/g	2.00	0.510
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/g	0.400	0.041
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/g	0.400	0.031
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/g	0.400	0.083
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/g	0.400	0.095
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/g	1.00	0.144
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/g	5.00	0.505
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/g	5.00	1.76

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 07/19/23 21:30
Analyst: CHB

Extraction Method: EPA 1633
Extraction Date: 07/15/23 13:54
Cleanup Method: EPA 1633
Cleanup Date: 07/17/23

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-06,12-15 Batch: WG1803663-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	83		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	84		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	79		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	74		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	88		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	84		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	82		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	74		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	76		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	81		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	90		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	83		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	64		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	71		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	86		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	67		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	77		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	76		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	38		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	92		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	52		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	54		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	73		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	71		20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

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Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 Batch: WG1795953-2 WG1795953-3								
Acenaphthene	89		79		31-137	12		50
Hexachlorobenzene	88		78		40-140	12		50
Bis(2-chloroethyl)ether	101		97		40-140	4		50
2-Chloronaphthalene	96		91		40-140	5		50
3,3'-Dichlorobenzidine	99		83		40-140	18		50
2,4-Dinitrotoluene	**143**	Q	123		40-132	15		50
2,6-Dinitrotoluene	130		124		40-140	5		50
Fluoranthene	100		87		40-140	14		50
4-Chlorophenyl phenyl ether	99		85		40-140	15		50
4-Bromophenyl phenyl ether	94		84		40-140	11		50
Bis(2-chloroisopropyl)ether	94		90		40-140	4		50
Bis(2-chloroethoxy)methane	106		102		40-117	4		50
Hexachlorobutadiene	106		98		40-140	8		50
Hexachlorocyclopentadiene	108		103		40-140	5		50
Hexachloroethane	107		105		40-140	2		50
Isophorone	110		107		40-140	3		50
Naphthalene	92		87		40-140	6		50
Nitrobenzene	120		117		40-140	3		50
NDPA/DPA	98		87		36-157	12		50
n-Nitrosodi-n-propylamine	120		111		32-121	8		50
Bis(2-ethylhexyl)phthalate	130		114		40-140	13		50
Butyl benzyl phthalate	124		103		40-140	19		50
Di-n-butylphthalate	116		103		40-140	12		50

Lab Control Sample Analysis
Batch Quality Control

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 Batch: WG1795953-2 WG1795953-3								
Di-n-octylphthalate	**142**	Q	120		40-140	17		50
Diethyl phthalate	105		93		40-140	12		50
Dimethyl phthalate	103		97		40-140	6		50
Benzo(a)anthracene	104		90		40-140	14		50
Benzo(a)pyrene	114		96		40-140	17		50
Benzo(b)fluoranthene	98		89		40-140	10		50
Benzo(k)fluoranthene	106		84		40-140	23		50
Chrysene	100		90		40-140	11		50
Acenaphthylene	105		98		40-140	7		50
Anthracene	98		85		40-140	14		50
Benzo(ghi)perylene	94		82		40-140	14		50
Fluorene	92		84		40-140	9		50
Phenanthrene	94		85		40-140	10		50
Dibenzo(a,h)anthracene	92		82		40-140	11		50
Indeno(1,2,3-cd)pyrene	97		85		40-140	13		50
Pyrene	101		86		35-142	16		50
Biphenyl	93		89		37-127	4		50
4-Chloroaniline	80		75		40-140	6		50
2-Nitroaniline	124		120		47-134	3		50
3-Nitroaniline	92		82		26-129	11		50
4-Nitroaniline	111		99		41-125	11		50
Dibenzofuran	96		86		40-140	11		50
2-Methylnaphthalene	95		90		40-140	5		50

Lab Control Sample Analysis
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Project Name: 389 MANHATTAN
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Lab Number: L2335669
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 Batch: WG1795953-2 WG1795953-3								
1,2,4,5-Tetrachlorobenzene	102		96		40-117	6		50
Acetophenone	110		103		14-144	7		50
2,4,6-Trichlorophenol	117		111		30-130	5		50
p-Chloro-m-cresol	**130**	Q	**115**	Q	26-103	12		50
2-Chlorophenol	94		93		25-102	1		50
2,4-Dichlorophenol	102		98		30-130	4		50
2,4-Dimethylphenol	107		102		30-130	5		50
2-Nitrophenol	128		119		30-130	7		50
4-Nitrophenol	**130**	Q	114		11-114	13		50
2,4-Dinitrophenol	**134**	Q	121		4-130	10		50
4,6-Dinitro-o-cresol	**153**	Q	**134**	Q	10-130	13		50
Pentachlorophenol	95		84		17-109	12		50
Phenol	**115**	Q	**111**	Q	26-90	4		50
2-Methylphenol	100		92		30-130.	8		50
3-Methylphenol/4-Methylphenol	101		98		30-130	3		50
2,4,5-Trichlorophenol	111		105		30-130	6		50
Carbazole	100		87		54-128	14		50
Atrazine	117		106		40-140	10		50
Benzaldehyde	100		94		40-140	6		50
Caprolactam	**134**	Q	124		15-130	8		50
2,3,4,6-Tetrachlorophenol	107		95		40-140	12		50
1,4-Dioxane	73		76		40-140	4		50

Lab Control Sample Analysis
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 Batch: WG1795953-2 WG1795953-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	103		101		25-120
Phenol-d6	106		103		10-120
Nitrobenzene-d5	**127**	Q	**121**	Q	23-120
2-Fluorobiphenyl	96		89		30-120
2,4,6-Tribromophenol	91		88		10-136
4-Terphenyl-d14	95		80		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
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Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	92		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	81		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	90		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	87		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	80		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	80		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	92		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	90		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	105		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	88		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	86		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	88		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	84		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	90		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	86		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	80		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	88		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	105		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	65		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	82		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	95		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	105		-		40-150	-		30

Lab Control Sample Analysis
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Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTrDA)	68		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	120		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	79		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	98		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	44		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	88		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	63		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	78		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	88		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	85		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	80		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	79		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	85		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	84		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	92		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	84		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	73		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	45		-		40-150	-		30

Lab Control Sample Analysis
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Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-2 LOW LEVEL								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	82				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	80				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	84				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	74				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	85				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	85				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	80				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	71				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	77				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	83				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	79				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	82				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	70				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	55				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	66				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	57				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	65				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	57				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	30				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	83				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	46				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	48				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	58				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	59				20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-3								
Perfluorobutanoic Acid (PFBA)	93		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	94		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	97		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	95		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	92		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	94		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	95		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	91		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	114		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	98		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	90		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	100		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	85		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	87		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	103		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	89		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	95		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	89		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	78		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	93		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	95		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	96		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

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Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-3								
Perfluorotridecanoic Acid (PFTrDA)	71		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	94		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	90		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	114		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	42		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	93		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	80		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	92		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	92		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	93		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	93		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	91		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	98		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	95		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	108		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	92		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	83		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	53		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 Batch: WG1803663-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	81				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	75				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	80				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	78				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	80				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	82				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	82				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	66				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	79				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	78				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	86				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	87				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	71				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	62				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	79				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	66				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	69				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	70				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	33				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	80				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	49				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	53				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	72				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	66				20-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1795953-4 WG1795953-5 QC Sample: L2335669-06 Client ID: TP-20												
Acenaphthene	ND	1460	1100	76		1100	76		31-137	0		50
Hexachlorobenzene	ND	1460	1100	76		1100	76		40-140	0		50
Bis(2-chloroethyl)ether	ND	1460	1200	82		1200	83		40-140	0		50
2-Chloronaphthalene	ND	1460	1200	82		1100	76		40-140	9		50
3,3'-Dichlorobenzidine	ND	1460	350	**24**	Q	510	**35**	Q	40-140	37		50
2,4-Dinitrotoluene	ND	1460	1000	69		860	59		40-132	15		50
2,6-Dinitrotoluene	ND	1460	980	67		870	60		40-140	12		50
Fluoranthene	460	1460	1600	78		1500	72		40-140	6		50
4-Chlorophenyl phenyl ether	ND	1460	1000	69		990	68		40-140	1		50
4-Bromophenyl phenyl ether	ND	1460	1000	69		990	68		40-140	1		50
Bis(2-chloroisopropyl)ether	ND	1460	1100	76		1100	76		40-140	0		50
Bis(2-chloroethoxy)methane	ND	1460	1200	82		1200	83		40-117	0		50
Hexachlorobutadiene	ND	1460	920	63		870	60		40-140	6		50
Hexachlorocyclopentadiene	ND	1460	ND	**0**	Q	ND	**0**	Q	40-140	NC		50
Hexachloroethane	ND	1460	900	62		830	57		40-140	8		50
Isophorone	ND	1460	1200	82		1200	83		40-140	0		50
Naphthalene	30J	1460	1200	82		1100	76		40-140	9		50
Nitrobenzene	ND	1460	1300	89		1300	90		40-140	0		50
NDPA/DPA	ND	1460	1200	82		1100	76		36-157	9		50
n-Nitrosodi-n-propylamine	ND	1460	1300	89		1200	83		32-121	8		50
Bis(2-ethylhexyl)phthalate	ND	1460	1300	89		1300	90		40-140	0		50
Butyl benzyl phthalate	ND	1460	1200	82		1100	76		40-140	9		50
Di-n-butylphthalate	ND	1460	1200	82		1200	83		40-140	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1795953-4 WG1795953-5 QC Sample: L2335669-06 Client ID: TP-20												
Di-n-octylphthalate	ND	1460	1200	82		1200	83		40-140	0		50
Diethyl phthalate	ND	1460	1100	76		1100	76		40-140	0		50
Dimethyl phthalate	ND	1460	1100	76		1100	76		40-140	0		50
Benzo(a)anthracene	270	1460	1400	78		1300	71		40-140	7		50
Benzo(a)pyrene	290	1460	1300	69		1200	63		40-140	8		50
Benzo(b)fluoranthene	360	1460	1400	71		1300	65		40-140	7		50
Benzo(k)fluoranthene	130	1460	1000	60		970	58		40-140	3		50
Chrysene	300	1460	1400	76		1300	69		40-140	7		50
Acenaphthylene	55J	1460	1300	89		1300	90		40-140	0		50
Anthracene	81J	1460	1200	82		1200	83		40-140	0		50
Benzo(ghi)perylene	190	1460	1200	69		1100	63		40-140	9		50
Fluorene	27J	1460	1200	82		1100	76		40-140	9		50
Phenanthrene	230	1460	1400	80		1300	74		40-140	7		50
Dibenzo(a,h)anthracene	42J	1460	1100	76		990	68		40-140	11		50
Indeno(1,2,3-cd)pyrene	200	1460	1200	69		1200	69		40-140	0		50
Pyrene	420	1460	1500	74		1400	68		35-142	7		50
Biphenyl	ND	1460	1100	76		1100	76		37-127	0		50
4-Chloroaniline	ND	1460	960	66		990	68		40-140	3		50
2-Nitroaniline	ND	1460	1300	89		1300	90		47-134	0		50
3-Nitroaniline	ND	1460	1100	76		1200	83		26-129	9		50
4-Nitroaniline	ND	1460	1100	76		1200	83		41-125	9		50
Dibenzofuran	17J	1460	1200	82		1100	76		40-140	9		50
2-Methylnaphthalene	29J	1460	1200	82		1000	69		40-140	18		50

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1795953-4 WG1795953-5 QC Sample: L2335669-06 Client ID: TP-20												
1,2,4,5-Tetrachlorobenzene	ND	1460	1000	69		980	68		40-117	2		50
Acetophenone	ND	1460	1300	89		1200	83		14-144	8		50
2,4,6-Trichlorophenol	ND	1460	1100	76		1000	69		30-130	10		50
p-Chloro-m-cresol	ND	1460	1300	89		1200	83		26-103	8		50
2-Chlorophenol	ND	1460	1200	82		1100	76		25-102	9		50
2,4-Dichlorophenol	ND	1460	1200	82		1200	83		30-130	0		50
2,4-Dimethylphenol	ND	1460	1200	82		1100	76		30-130	9		50
2-Nitrophenol	ND	1460	1100	76		930	64		30-130	17		50
4-Nitrophenol	ND	1460	1100	76		960	66		11-114	14		50
2,4-Dinitrophenol	ND	1460	ND	**0**	Q	ND	**0**	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	1460	180J	12		ND	**0**	Q	10-130	NC		50
Pentachlorophenol	ND	1460	960	66		900	62		17-109	6		50
Phenol	ND	1460	1200	82		1200	83		26-90	0		50
2-Methylphenol	ND	1460	1200	82		1200	83		30-130.	0		50
3-Methylphenol/4-Methylphenol	ND	1460	1300	89		1200	83		30-130	8		50
2,4,5-Trichlorophenol	ND	1460	1200	82		1100	76		30-130	9		50
Carbazole	37J	1460	1200	82		1200	83		54-128	0		50
Atrazine	ND	1460	1200	82		1200	83		40-140	0		50
Benzaldehyde	ND	1460	1300	89		1200	83		40-140	8		50
Caprolactam	ND	1460	1100	76		1100	76		15-130	0		50
2,3,4,6-Tetrachlorophenol	ND	1460	1100	76		1000	69		40-140	10		50
1,4-Dioxane	ND	1460	650	45		680	47		40-140	5		50

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1795953-4 WG1795953-5 QC Sample: L2335669-06 Client ID: TP-20												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
2,4,6-Tribromophenol	77		75		10-136
2-Fluorobiphenyl	72		72		30-120
2-Fluorophenol	81		77		25-120
4-Terphenyl-d14	68		67		18-120
Nitrobenzene-d5	85		82		23-120
Phenol-d6	84		81		10-120

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1803663-4 WG1803663-5 QC Sample: L2335669-06 Client ID: TP-20												
Perfluorobutanoic Acid (PFBA)	ND	7.88	7.27	92		6.66	89		40-150	9		30
Perfluoropentanoic Acid (PFPeA)	ND	3.94	3.66	93		3.28	88		40-150	11		30
Perfluorobutanesulfonic Acid (PFBS)	ND	1.75	1.68	96		1.55	93		40-150	8		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	7.38	7.56	102		6.49	92		40-150	15		30
Perfluorohexanoic Acid (PFHxA)	ND	1.97	2.04	104		1.70	91		40-150	18		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	1.85	1.65	89		1.47	83		40-150	12		30
Perfluoroheptanoic Acid (PFHpA)	ND	1.97	1.94	99		1.76	94		40-150	10		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.8	1.61	89		1.54	90		40-150	4		30
Perfluorooctanoic Acid (PFOA)	0.285	1.97	2.28	101		2.32	109		40-150	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	7.48	7.38	99		6.67	94		40-150	10		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.88	1.65	88		1.69	95		40-150	2		30
Perfluorononanoic Acid (PFNA)	ND	1.97	1.97	100		1.69	90		40-150	15		30
Perfluorooctanesulfonic Acid (PFOS)	0.206	1.83	1.78	86		1.80	92		40-150	1		30
Perfluorodecanoic Acid (PFDA)	ND	1.97	2.06	105		1.68	90		40-150	20		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	7.56	7.27	96		6.92	96		40-150	5		30
Perfluorononanesulfonic Acid (PFNS)	ND	1.89	1.73	91		1.70	94		40-150	2		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.97	1.88	96		1.75	93		40-150	7		30
Perfluoroundecanoic Acid (PFUnA)	ND	1.97	1.98	101		1.72	92		40-150	14		30
Perfluorodecanesulfonic Acid (PFDS)	ND	1.9	1.61	85		1.60	88		40-150	1		30
Perfluorooctanesulfonamide (PFOSA)	ND	1.97	1.87	95		1.76	94		40-150	6		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.97	2.06	105		1.76	94		40-150	16		30
Perfluorododecanoic Acid (PFDoA)	ND	1.97	1.77	90		1.38	74		40-150	25		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1803663-4 WG1803663-5 QC Sample: L2335669-06 Client ID: TP-20												
Perfluorotridecanoic Acid (PFTrDA)	ND	1.97	1.81	92		1.49	80		40-150	19		30
Perfluorotetradecanoic Acid (PFTeDA)	ND	1.97	1.76	89		1.70	91		40-150	3		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	7.88	7.47	95		6.56	88		40-150	13		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	7.44	8.40	113		7.70	109		40-150	9		30
Perfluorododecanesulfonic Acid (PFDoS)	ND	1.91	1.67	87		1.59	87		40-150	5		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	7.36	7.42	101		6.59	94		40-150	12		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	7.44	7.07	95		6.03	85		40-150	16		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND	1.97	1.87	95		1.62	86		40-150	14		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND	1.97	1.87	95		1.74	93		40-150	7		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND	19.7	21.0	107		17.0	91		40-150	21		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND	19.7	19.2	98		17.3	92		40-150	10		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	3.94	3.67	93		3.12	83		40-150	16		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	3.94	3.88	99		3.55	95		40-150	9		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	3.5	3.28	94		3.00	90		40-150	9		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	3.94	4.28	109		4.35	116		40-150	2		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND	9.85	8.88	90		7.81	83		40-150	13		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND	49.2	40.0	81		33.9	72		40-150	17		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND	49.2	23.2	47		24.8	53		40-150	7		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1803663-4 WG1803663-5 QC Sample: L2335669-06 Client ID: TP-20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	89		85		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	64		71		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	69		72		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	61		72		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	67		70		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	59		64		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	52		61		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	40		50		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	69		81		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	75		76		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	55		58		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	70		71		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	70		74		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	82		74		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	71		78		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	75		72		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	74		71		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	83		81		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	85		75		20-150
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	72		74		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	70		68		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	56		56		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	78		70		20-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1803663-4 WG1803663-5 QC Sample: L2335669-06 Client ID: TP-20												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	77		77		20-150

PCBS

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01
Client ID: TP-15
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:15
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:15
Analyst: JM
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	52.7	4.68	1	A
Aroclor 1221	ND		ug/kg	52.7	5.28	1	A
Aroclor 1232	ND		ug/kg	52.7	11.2	1	A
Aroclor 1242	ND		ug/kg	52.7	7.11	1	A
Aroclor 1248	ND		ug/kg	52.7	7.91	1	A
Aroclor 1254	8.26	JP	ug/kg	52.7	5.77	1	B
Aroclor 1260	ND		ug/kg	52.7	9.74	1	A
Aroclor 1262	ND		ug/kg	52.7	6.70	1	A
Aroclor 1268	ND		ug/kg	52.7	5.46	1	A
PCBs, Total	8.26	J	ug/kg	52.7	4.68	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:23
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	49.3	4.38	1	A
Aroclor 1221	ND		ug/kg	49.3	4.94	1	A
Aroclor 1232	ND		ug/kg	49.3	10.4	1	A
Aroclor 1242	ND		ug/kg	49.3	6.65	1	A
Aroclor 1248	ND		ug/kg	49.3	7.40	1	A
Aroclor 1254	ND		ug/kg	49.3	5.40	1	A
Aroclor 1260	ND		ug/kg	49.3	9.12	1	B
Aroclor 1262	ND		ug/kg	49.3	6.26	1	A
Aroclor 1268	ND		ug/kg	49.3	5.11	1	A
PCBs, Total	ND		ug/kg	49.3	4.38	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:31
Analyst: JM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	52.4	4.65	1	A
Aroclor 1221	ND		ug/kg	52.4	5.25	1	A
Aroclor 1232	ND		ug/kg	52.4	11.1	1	A
Aroclor 1242	ND		ug/kg	52.4	7.06	1	A
Aroclor 1248	ND		ug/kg	52.4	7.86	1	A
Aroclor 1254	72.4		ug/kg	52.4	5.73	1	B
Aroclor 1260	45.9	J	ug/kg	52.4	9.69	1	B
Aroclor 1262	ND		ug/kg	52.4	6.66	1	A
Aroclor 1268	ND		ug/kg	52.4	5.43	1	A
PCBs, Total	118	J	ug/kg	52.4	4.65	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:39
Analyst: JM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.3	4.73	1	A
Aroclor 1221	ND		ug/kg	53.3	5.34	1	A
Aroclor 1232	ND		ug/kg	53.3	11.3	1	A
Aroclor 1242	ND		ug/kg	53.3	7.18	1	A
Aroclor 1248	ND		ug/kg	53.3	7.99	1	A
Aroclor 1254	11.1	J	ug/kg	53.3	5.83	1	B
Aroclor 1260	ND		ug/kg	53.3	9.85	1	B
Aroclor 1262	ND		ug/kg	53.3	6.77	1	A
Aroclor 1268	ND		ug/kg	53.3	5.52	1	A
PCBs, Total	11.1	J	ug/kg	53.3	4.73	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:47
Analyst: JM
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	56.1	4.98	1	A
Aroclor 1221	ND		ug/kg	56.1	5.62	1	A
Aroclor 1232	ND		ug/kg	56.1	11.9	1	A
Aroclor 1242	ND		ug/kg	56.1	7.56	1	A
Aroclor 1248	ND		ug/kg	56.1	8.41	1	A
Aroclor 1254	ND		ug/kg	56.1	6.14	1	A
Aroclor 1260	41.6	J	ug/kg	56.1	10.4	1	B
Aroclor 1262	ND		ug/kg	56.1	7.12	1	A
Aroclor 1268	ND		ug/kg	56.1	5.81	1	A
PCBs, Total	41.6	J	ug/kg	56.1	4.98	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 10:51
Analyst: JM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.8	4.86	1	A
Aroclor 1221	ND		ug/kg	54.8	5.49	1	A
Aroclor 1232	ND		ug/kg	54.8	11.6	1	A
Aroclor 1242	ND		ug/kg	54.8	7.38	1	A
Aroclor 1248	ND		ug/kg	54.8	8.22	1	A
Aroclor 1254	ND		ug/kg	54.8	5.99	1	A
Aroclor 1260	ND		ug/kg	54.8	10.1	1	A
Aroclor 1262	ND		ug/kg	54.8	6.96	1	A
Aroclor 1268	ND		ug/kg	54.8	5.68	1	A
PCBs, Total	ND		ug/kg	54.8	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07
Client ID: TP-21
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 11:55
Analyst: JM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	48.2	4.28	1	A
Aroclor 1221	ND		ug/kg	48.2	4.82	1	A
Aroclor 1232	ND		ug/kg	48.2	10.2	1	A
Aroclor 1242	ND		ug/kg	48.2	6.49	1	A
Aroclor 1248	ND		ug/kg	48.2	7.22	1	A
Aroclor 1254	12.2	JP	ug/kg	48.2	5.27	1	B
Aroclor 1260	9.65	J	ug/kg	48.2	8.90	1	A
Aroclor 1262	ND		ug/kg	48.2	6.12	1	A
Aroclor 1268	ND		ug/kg	48.2	4.99	1	A
PCBs, Total	21.9	J	ug/kg	48.2	4.28	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08
Client ID: MW-1 TP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:03
Analyst: JM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.4	4.83	1	A
Aroclor 1221	ND		ug/kg	54.4	5.45	1	A
Aroclor 1232	ND		ug/kg	54.4	11.5	1	A
Aroclor 1242	ND		ug/kg	54.4	7.33	1	A
Aroclor 1248	ND		ug/kg	54.4	8.16	1	A
Aroclor 1254	ND		ug/kg	54.4	5.95	1	A
Aroclor 1260	22.6	J	ug/kg	54.4	10.0	1	A
Aroclor 1262	ND		ug/kg	54.4	6.90	1	A
Aroclor 1268	ND		ug/kg	54.4	5.63	1	A
PCBs, Total	22.6	J	ug/kg	54.4	4.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09
Client ID: MW-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:11
Analyst: JM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.8	4.87	1	A
Aroclor 1221	ND		ug/kg	54.8	5.49	1	A
Aroclor 1232	ND		ug/kg	54.8	11.6	1	A
Aroclor 1242	ND		ug/kg	54.8	7.39	1	A
Aroclor 1248	ND		ug/kg	54.8	8.22	1	A
Aroclor 1254	ND		ug/kg	54.8	6.00	1	A
Aroclor 1260	ND		ug/kg	54.8	10.1	1	B
Aroclor 1262	ND		ug/kg	54.8	6.96	1	A
Aroclor 1268	ND		ug/kg	54.8	5.68	1	A
PCBs, Total	ND		ug/kg	54.8	4.87	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10
Client ID: MW-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:19
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	52.1	4.63	1	A
Aroclor 1221	ND		ug/kg	52.1	5.22	1	A
Aroclor 1232	ND		ug/kg	52.1	11.0	1	A
Aroclor 1242	ND		ug/kg	52.1	7.03	1	A
Aroclor 1248	ND		ug/kg	52.1	7.82	1	A
Aroclor 1254	8.51	J	ug/kg	52.1	5.70	1	B
Aroclor 1260	ND		ug/kg	52.1	9.63	1	B
Aroclor 1262	ND		ug/kg	52.1	6.62	1	A
Aroclor 1268	ND		ug/kg	52.1	5.40	1	A
PCBs, Total	8.51	J	ug/kg	52.1	4.63	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11
Client ID: MW-4
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:27
Analyst: JM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 02:40
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.0	4.71	1	A
Aroclor 1221	ND		ug/kg	53.0	5.32	1	A
Aroclor 1232	ND		ug/kg	53.0	11.2	1	A
Aroclor 1242	ND		ug/kg	53.0	7.15	1	A
Aroclor 1248	ND		ug/kg	53.0	7.96	1	A
Aroclor 1254	37.9	JP	ug/kg	53.0	5.80	1	B
Aroclor 1260	ND		ug/kg	53.0	9.80	1	B
Aroclor 1262	ND		ug/kg	53.0	6.74	1	A
Aroclor 1268	ND		ug/kg	53.0	5.50	1	A
PCBs, Total	37.9	J	ug/kg	53.0	4.71	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:35
Analyst: JM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 02:42
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.3	4.73	1	A
Aroclor 1221	ND		ug/kg	53.3	5.34	1	A
Aroclor 1232	ND		ug/kg	53.3	11.3	1	A
Aroclor 1242	ND		ug/kg	53.3	7.18	1	A
Aroclor 1248	ND		ug/kg	53.3	7.99	1	A
Aroclor 1254	ND		ug/kg	53.3	5.83	1	A
Aroclor 1260	ND		ug/kg	53.3	9.85	1	A
Aroclor 1262	ND		ug/kg	53.3	6.77	1	A
Aroclor 1268	ND		ug/kg	53.3	5.52	1	A
PCBs, Total	ND		ug/kg	53.3	4.73	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:43
Analyst: JM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 02:43
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	51.9	4.61	1	A
Aroclor 1221	ND		ug/kg	51.9	5.20	1	A
Aroclor 1232	ND		ug/kg	51.9	11.0	1	A
Aroclor 1242	ND		ug/kg	51.9	6.99	1	A
Aroclor 1248	ND		ug/kg	51.9	7.78	1	A
Aroclor 1254	33.9	J	ug/kg	51.9	5.68	1	B
Aroclor 1260	18.0	J	ug/kg	51.9	9.59	1	B
Aroclor 1262	ND		ug/kg	51.9	6.59	1	A
Aroclor 1268	ND		ug/kg	51.9	5.38	1	A
PCBs, Total	51.9	J	ug/kg	51.9	4.61	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:51
Analyst: JM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 02:45
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.3	4.74	1	A
Aroclor 1221	ND		ug/kg	53.3	5.34	1	A
Aroclor 1232	ND		ug/kg	53.3	11.3	1	A
Aroclor 1242	ND		ug/kg	53.3	7.19	1	A
Aroclor 1248	ND		ug/kg	53.3	8.00	1	A
Aroclor 1254	ND		ug/kg	53.3	5.83	1	A
Aroclor 1260	ND		ug/kg	53.3	9.85	1	A
Aroclor 1262	ND		ug/kg	53.3	6.77	1	A
Aroclor 1268	ND		ug/kg	53.3	5.52	1	A
PCBs, Total	ND		ug/kg	53.3	4.74	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 12:59
Analyst: JM
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 02:47
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.3	4.47	1	A
Aroclor 1221	ND		ug/kg	50.3	5.04	1	A
Aroclor 1232	ND		ug/kg	50.3	10.7	1	A
Aroclor 1242	ND		ug/kg	50.3	6.79	1	A
Aroclor 1248	ND		ug/kg	50.3	7.55	1	A
Aroclor 1254	ND		ug/kg	50.3	5.51	1	A
Aroclor 1260	12.2	J	ug/kg	50.3	9.30	1	A
Aroclor 1262	ND		ug/kg	50.3	6.39	1	A
Aroclor 1268	ND		ug/kg	50.3	5.22	1	A
PCBs, Total	12.2	J	ug/kg	50.3	4.47	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/27/23 10:27
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 06/26/23 01:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-15 Batch: WG1795954-1						
Aroclor 1016	ND		ug/kg	47.4	4.21	A
Aroclor 1221	ND		ug/kg	47.4	4.75	A
Aroclor 1232	ND		ug/kg	47.4	10.0	A
Aroclor 1242	ND		ug/kg	47.4	6.39	A
Aroclor 1248	ND		ug/kg	47.4	7.11	A
Aroclor 1254	ND		ug/kg	47.4	5.18	A
Aroclor 1260	ND		ug/kg	47.4	8.76	A
Aroclor 1262	ND		ug/kg	47.4	6.02	A
Aroclor 1268	ND		ug/kg	47.4	4.91	A
PCBs, Total	ND		ug/kg	47.4	4.21	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	84		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-15 Batch: WG1795954-2 WG1795954-3									
Aroclor 1016	73		72		40-140	1		50	A
Aroclor 1260	69		70		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		81		30-150	A
Decachlorobiphenyl	82		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		84		30-150	B
Decachlorobiphenyl	85		87		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1795954-4 WG1795954-5 QC Sample: L2335669-06 Client ID: TP-20													
Aroclor 1016	ND	317	203	64		205	62		40-140	1		50	A
Aroclor 1260	ND	317	192	61		196	60		40-140	2		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		71		30-150	A
Decachlorobiphenyl	65		68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		73		30-150	B
Decachlorobiphenyl	67		69		30-150	B

PESTICIDES

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 11:02
Analyst: AAR
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.320	1	A
Lindane	ND		ug/kg	0.681	0.304	1	A
Alpha-BHC	ND		ug/kg	0.681	0.193	1	A
Beta-BHC	ND		ug/kg	1.63	0.620	1	A
Heptachlor	ND		ug/kg	0.817	0.366	1	A
Aldrin	ND		ug/kg	1.63	0.575	1	A
Heptachlor epoxide	ND		ug/kg	3.06	0.919	1	B
Endrin	ND		ug/kg	0.681	0.279	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.715	1	A
Endrin ketone	ND		ug/kg	1.63	0.421	1	A
Dieldrin	6.65		ug/kg	1.02	0.511	1	B
4,4'-DDE	6.98		ug/kg	1.63	0.378	1	B
4,4'-DDD	1.92		ug/kg	1.63	0.583	1	B
4,4'-DDT	6.78		ug/kg	1.63	1.31	1	A
Endosulfan I	ND		ug/kg	1.63	0.386	1	A
Endosulfan II	ND		ug/kg	1.63	0.546	1	A
Endosulfan sulfate	ND		ug/kg	0.681	0.324	1	A
Methoxychlor	ND		ug/kg	3.06	0.953	1	A
Toxaphene	ND		ug/kg	30.6	8.58	1	A
cis-Chlordane	1.98	JIP	ug/kg	2.04	0.569	1	B
trans-Chlordane	1.70	JIP	ug/kg	2.04	0.539	1	B
Chlordane	ND		ug/kg	13.6	5.41	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 12:15
Analyst: AR
Percent Solids: 93%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	174	11.0	1	A
2,4,5-T	ND		ug/kg	174	5.40	1	A
2,4,5-TP (Silvex)	ND		ug/kg	174	4.63	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	98		30-150	A
DCAA	87		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 11:13
Analyst: AAR
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.343	1	A
Lindane	ND		ug/kg	0.729	0.326	1	A
Alpha-BHC	ND		ug/kg	0.729	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.664	1	A
Heptachlor	ND		ug/kg	0.875	0.392	1	A
Aldrin	2.70		ug/kg	1.75	0.616	1	B
Heptachlor epoxide	3.06	J	ug/kg	3.28	0.985	1	B
Endrin	ND		ug/kg	0.729	0.299	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.766	1	A
Endrin ketone	ND		ug/kg	1.75	0.451	1	A
Dieldrin	30.0		ug/kg	1.09	0.547	1	B
4,4'-DDE	24.3		ug/kg	1.75	0.405	1	B
4,4'-DDD	9.09		ug/kg	1.75	0.624	1	B
4,4'-DDT	11.0	IP	ug/kg	1.75	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.414	1	A
Endosulfan II	ND		ug/kg	1.75	0.585	1	A
Endosulfan sulfate	ND		ug/kg	0.729	0.347	1	A
Methoxychlor	ND		ug/kg	3.28	1.02	1	A
Toxaphene	ND		ug/kg	32.8	9.19	1	A
cis-Chlordane	11.7		ug/kg	2.19	0.610	1	A
trans-Chlordane	9.68		ug/kg	2.19	0.578	1	B
Chlordane	36.1	IP	ug/kg	14.6	5.80	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 12:33
Analyst: AR
Percent Solids: 88%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.78	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	80		30-150	A
DCAA	73		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 11:24
Analyst: AAR
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.325	1	A
Lindane	ND		ug/kg	0.691	0.309	1	A
Alpha-BHC	ND		ug/kg	0.691	0.196	1	A
Beta-BHC	ND		ug/kg	1.66	0.629	1	A
Heptachlor	ND		ug/kg	0.830	0.372	1	A
Aldrin	ND		ug/kg	1.66	0.584	1	A
Heptachlor epoxide	1.23	J	ug/kg	3.11	0.933	1	A
Endrin	ND		ug/kg	0.691	0.283	1	A
Endrin aldehyde	ND		ug/kg	2.07	0.726	1	A
Endrin ketone	ND		ug/kg	1.66	0.427	1	A
Dieldrin	5.85		ug/kg	1.04	0.518	1	B
4,4'-DDE	6.15		ug/kg	1.66	0.384	1	A
4,4'-DDD	1.15	J	ug/kg	1.66	0.592	1	A
4,4'-DDT	ND	IP	ug/kg	1.66	1.33	1	A
Endosulfan I	ND		ug/kg	1.66	0.392	1	A
Endosulfan II	ND		ug/kg	1.66	0.554	1	A
Endosulfan sulfate	ND		ug/kg	0.691	0.329	1	A
Methoxychlor	ND		ug/kg	3.11	0.968	1	A
Toxaphene	ND		ug/kg	31.1	8.71	1	A
cis-Chlordane	3.68		ug/kg	2.07	0.578	1	A
trans-Chlordane	2.66	IP	ug/kg	2.07	0.548	1	B
Chlordane	24.3		ug/kg	13.8	5.50	1	B

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 12:52
Analyst: AR
Percent Solids: 92%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.46	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	79		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 11:34
Analyst: AAR
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.361	1	A
Lindane	ND		ug/kg	0.769	0.344	1	A
Alpha-BHC	ND		ug/kg	0.769	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.700	1	A
Heptachlor	ND		ug/kg	0.922	0.414	1	A
Aldrin	ND		ug/kg	1.84	0.650	1	A
Heptachlor epoxide	ND		ug/kg	3.46	1.04	1	B
Endrin	ND		ug/kg	0.769	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.807	1	A
Endrin ketone	ND		ug/kg	1.84	0.475	1	A
Dieldrin	ND		ug/kg	1.15	0.576	1	A
4,4'-DDE	2.76		ug/kg	1.84	0.427	1	A
4,4'-DDD	0.993	J	ug/kg	1.84	0.658	1	B
4,4'-DDT	4.70		ug/kg	1.84	1.48	1	B
Endosulfan I	ND		ug/kg	1.84	0.436	1	A
Endosulfan II	ND		ug/kg	1.84	0.616	1	A
Endosulfan sulfate	ND		ug/kg	0.769	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.69	1	A
cis-Chlordane	ND	IP	ug/kg	2.31	0.643	1	B
trans-Chlordane	2.51	IP	ug/kg	2.31	0.609	1	A
Chlordane	ND		ug/kg	15.4	6.11	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 13:10
Analyst: AR
Percent Solids: 85%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	194	12.2	1	A
2,4,5-T	ND		ug/kg	194	6.01	1	A
2,4,5-TP (Silvex)	ND		ug/kg	194	5.16	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	88		30-150	A
DCAA	95		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 11:45
Analyst: AAR
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.340	1	A
Lindane	ND		ug/kg	0.722	0.323	1	A
Alpha-BHC	ND		ug/kg	0.722	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.657	1	A
Heptachlor	ND		ug/kg	0.867	0.389	1	A
Aldrin	ND		ug/kg	1.73	0.610	1	A
Heptachlor epoxide	ND		ug/kg	3.25	0.975	1	A
Endrin	ND		ug/kg	0.722	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.759	1	A
Endrin ketone	ND		ug/kg	1.73	0.446	1	A
Dieldrin	2.51		ug/kg	1.08	0.542	1	B
4,4'-DDE	4.78		ug/kg	1.73	0.401	1	B
4,4'-DDD	1.06	JIP	ug/kg	1.73	0.618	1	A
4,4'-DDT	4.84		ug/kg	1.73	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.410	1	A
Endosulfan II	ND		ug/kg	1.73	0.579	1	A
Endosulfan sulfate	ND		ug/kg	0.722	0.344	1	A
Methoxychlor	ND		ug/kg	3.25	1.01	1	A
Toxaphene	ND		ug/kg	32.5	9.10	1	A
cis-Chlordane	0.785	J	ug/kg	2.17	0.604	1	B
trans-Chlordane	0.816	JIP	ug/kg	2.17	0.572	1	B
Chlordane	ND		ug/kg	14.4	5.74	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 13:28
Analyst: AR
Percent Solids: 91%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.3	1	A
2,4,5-T	ND		ug/kg	180	5.57	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	84		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 12:19
Analyst: AAR
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.336	1	A
Lindane	ND		ug/kg	0.716	0.320	1	A
Alpha-BHC	ND		ug/kg	0.716	0.203	1	A
Beta-BHC	ND		ug/kg	1.72	0.651	1	A
Heptachlor	ND		ug/kg	0.859	0.385	1	A
Aldrin	ND		ug/kg	1.72	0.605	1	A
Heptachlor epoxide	ND		ug/kg	3.22	0.966	1	A
Endrin	ND		ug/kg	0.716	0.293	1	A
Endrin aldehyde	ND		ug/kg	2.15	0.752	1	A
Endrin ketone	ND		ug/kg	1.72	0.442	1	A
Dieldrin	ND		ug/kg	1.07	0.537	1	A
4,4'-DDE	4.66		ug/kg	1.72	0.397	1	A
4,4'-DDD	0.830	J	ug/kg	1.72	0.613	1	B
4,4'-DDT	7.65		ug/kg	1.72	1.38	1	B
Endosulfan I	ND		ug/kg	1.72	0.406	1	A
Endosulfan II	ND		ug/kg	1.72	0.574	1	A
Endosulfan sulfate	ND		ug/kg	0.716	0.341	1	A
Methoxychlor	ND		ug/kg	3.22	1.00	1	A
Toxaphene	ND		ug/kg	32.2	9.02	1	A
cis-Chlordane	1.28	J	ug/kg	2.15	0.598	1	A
trans-Chlordane	1.10	JIP	ug/kg	2.15	0.567	1	B
Chlordane	ND		ug/kg	14.3	5.69	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 14:23
Analyst: AR
Percent Solids: 92%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.47	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	94		30-150	A
DCAA	90		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 12:30
Analyst: AAR
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.60	0.313	1	A
Lindane	ND		ug/kg	0.667	0.298	1	A
Alpha-BHC	ND		ug/kg	0.667	0.189	1	A
Beta-BHC	ND		ug/kg	1.60	0.607	1	A
Heptachlor	ND		ug/kg	0.800	0.359	1	A
Aldrin	ND		ug/kg	1.60	0.563	1	A
Heptachlor epoxide	ND		ug/kg	3.00	0.900	1	A
Endrin	ND		ug/kg	0.667	0.273	1	A
Endrin aldehyde	ND		ug/kg	2.00	0.700	1	A
Endrin ketone	ND		ug/kg	1.60	0.412	1	A
Dieldrin	ND		ug/kg	1.00	0.500	1	A
4,4'-DDE	2.61	IP	ug/kg	1.60	0.370	1	B
4,4'-DDD	ND		ug/kg	1.60	0.571	1	A
4,4'-DDT	2.90	IP	ug/kg	1.60	1.29	1	A
Endosulfan I	ND		ug/kg	1.60	0.378	1	A
Endosulfan II	ND		ug/kg	1.60	0.535	1	A
Endosulfan sulfate	ND		ug/kg	0.667	0.317	1	A
Methoxychlor	ND		ug/kg	3.00	0.933	1	A
Toxaphene	ND		ug/kg	30.0	8.40	1	A
cis-Chlordane	2.99		ug/kg	2.00	0.557	1	A
trans-Chlordane	2.01	IP	ug/kg	2.00	0.528	1	B
Chlordane	ND		ug/kg	13.3	5.30	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 14:42
Analyst: AR
Percent Solids: 96%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	172	10.8	1	A
2,4,5-T	ND		ug/kg	172	5.32	1	A
2,4,5-TP (Silvex)	ND		ug/kg	172	4.57	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	86		30-150	A
DCAA	86		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 12:41
Analyst: AAR
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.326	1	A
Lindane	ND		ug/kg	0.692	0.310	1	A
Alpha-BHC	ND		ug/kg	0.692	0.197	1	A
Beta-BHC	ND		ug/kg	1.66	0.630	1	A
Heptachlor	ND		ug/kg	0.831	0.373	1	A
Aldrin	ND		ug/kg	1.66	0.585	1	A
Heptachlor epoxide	ND		ug/kg	3.12	0.935	1	A
Endrin	ND		ug/kg	0.692	0.284	1	A
Endrin aldehyde	ND		ug/kg	2.08	0.727	1	A
Endrin ketone	ND		ug/kg	1.66	0.428	1	A
Dieldrin	3.72		ug/kg	1.04	0.519	1	A
4,4'-DDE	6.46		ug/kg	1.66	0.384	1	A
4,4'-DDD	ND		ug/kg	1.66	0.593	1	A
4,4'-DDT	5.31		ug/kg	1.66	1.34	1	B
Endosulfan I	ND		ug/kg	1.66	0.393	1	A
Endosulfan II	ND		ug/kg	1.66	0.555	1	A
Endosulfan sulfate	ND		ug/kg	0.692	0.330	1	A
Methoxychlor	ND		ug/kg	3.12	0.970	1	A
Toxaphene	ND		ug/kg	31.2	8.73	1	A
cis-Chlordane	ND	IP	ug/kg	2.08	0.579	1	B
trans-Chlordane	2.84		ug/kg	2.08	0.548	1	B
Chlordane	ND		ug/kg	13.8	5.51	1	A

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 15:00
Analyst: AR
Percent Solids: 92%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.47	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.70	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		30-150	A
DCAA	101		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/28/23 12:52
Analyst: AAR
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.320	1	A
Lindane	ND		ug/kg	0.680	0.304	1	A
Alpha-BHC	ND		ug/kg	0.680	0.193	1	A
Beta-BHC	ND		ug/kg	1.63	0.619	1	A
Heptachlor	ND		ug/kg	0.816	0.366	1	A
Aldrin	ND		ug/kg	1.63	0.575	1	A
Heptachlor epoxide	ND		ug/kg	3.06	0.918	1	B
Endrin	ND		ug/kg	0.680	0.279	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.714	1	A
Endrin ketone	ND		ug/kg	1.63	0.420	1	A
Dieldrin	4.66		ug/kg	1.02	0.510	1	A
4,4'-DDE	6.80		ug/kg	1.63	0.378	1	B
4,4'-DDD	2.01		ug/kg	1.63	0.582	1	B
4,4'-DDT	6.16		ug/kg	1.63	1.31	1	B
Endosulfan I	ND		ug/kg	1.63	0.386	1	A
Endosulfan II	ND		ug/kg	1.63	0.546	1	A
Endosulfan sulfate	ND		ug/kg	0.680	0.324	1	A
Methoxychlor	ND		ug/kg	3.06	0.952	1	A
Toxaphene	ND		ug/kg	30.6	8.57	1	A
cis-Chlordane	1.22	JIP	ug/kg	2.04	0.569	1	B
trans-Chlordane	1.30	JIP	ug/kg	2.04	0.539	1	B
Chlordane	17.5		ug/kg	13.6	5.41	1	B

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/02/23 15:19
Analyst: AR
Percent Solids: 95%
Methylation Date: 07/01/23 21:17

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	169	10.7	1	A
2,4,5-T	ND		ug/kg	169	5.25	1	A
2,4,5-TP (Silvex)	ND		ug/kg	169	4.50	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	91		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/28/23 09:45
Analyst: AKM

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-06,12-15 Batch: WG1795960-1						
Delta-BHC	ND		ug/kg	1.56	0.306	A
Lindane	ND		ug/kg	0.651	0.291	A
Alpha-BHC	ND		ug/kg	0.651	0.185	A
Beta-BHC	ND		ug/kg	1.56	0.592	A
Heptachlor	ND		ug/kg	0.781	0.350	A
Aldrin	ND		ug/kg	1.56	0.550	A
Heptachlor epoxide	ND		ug/kg	2.93	0.878	A
Endrin	ND		ug/kg	0.651	0.267	A
Endrin aldehyde	ND		ug/kg	1.95	0.683	A
Endrin ketone	ND		ug/kg	1.56	0.402	A
Dieldrin	ND		ug/kg	0.976	0.488	A
4,4'-DDE	ND		ug/kg	1.56	0.361	A
4,4'-DDD	ND		ug/kg	1.56	0.557	A
4,4'-DDT	ND		ug/kg	1.56	1.26	A
Endosulfan I	ND		ug/kg	1.56	0.369	A
Endosulfan II	ND		ug/kg	1.56	0.522	A
Endosulfan sulfate	ND		ug/kg	0.651	0.310	A
Methoxychlor	ND		ug/kg	2.93	0.911	A
Toxaphene	ND		ug/kg	29.3	8.20	A
cis-Chlordane	ND		ug/kg	1.95	0.544	A
trans-Chlordane	ND		ug/kg	1.95	0.515	A
Chlordane	ND		ug/kg	13.0	5.17	A

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/28/23 09:45
Analyst: AKM

Extraction Method: EPA 3546
Extraction Date: 06/26/23 04:48
Cleanup Method: EPA 3620B
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-06,12-15 Batch: WG1795960-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/02/23 11:02
Analyst: AR

Extraction Method: EPA 8151A
Extraction Date: 06/30/23 15:29

Methylation Date: 07/01/23 21:17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 02-06,12-15 Batch: WG1798483-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.04	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	75		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06,12-15 Batch: WG1795960-2 WG1795960-3									
Delta-BHC	83		75		30-150	10		30	A
Lindane	86		79		30-150	8		30	A
Alpha-BHC	78		72		30-150	8		30	A
Beta-BHC	86		77		30-150	11		30	A
Heptachlor	88		81		30-150	8		30	A
Aldrin	86		80		30-150	7		30	A
Heptachlor epoxide	88		81		30-150	8		30	A
Endrin	92		84		30-150	9		30	A
Endrin aldehyde	77		69		30-150	11		30	A
Endrin ketone	90		83		30-150	8		30	A
Dieldrin	97		89		30-150	9		30	A
4,4'-DDE	89		82		30-150	8		30	A
4,4'-DDD	94		87		30-150	8		30	A
4,4'-DDT	95		89		30-150	7		30	A
Endosulfan I	85		76		30-150	11		30	A
Endosulfan II	83		78		30-150	6		30	A
Endosulfan sulfate	84		76		30-150	10		30	A
Methoxychlor	91		83		30-150	9		30	A
cis-Chlordane	83		77		30-150	8		30	A
trans-Chlordane	99		95		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06,12-15 Batch: WG1795960-2 WG1795960-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		69		30-150	A
Decachlorobiphenyl	72		65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		73		30-150	B
Decachlorobiphenyl	72		63		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02-06,12-15 Batch: WG1798483-2 WG1798483-3									
2,4-D	115		120		30-150	4		30	A
2,4,5-T	91		99		30-150	8		30	A
2,4,5-TP (Silvex)	89		97		30-150	9		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	88		97		30-150	A
DCAA	94		106		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1795960-4 WG1795960-5 QC Sample: L2335669-06 Client ID: TP-20													
Delta-BHC	ND	35.7	30.8	86		33.6	93		30-150	9		50	A
Lindane	ND	35.7	31.5	88		34.3	95		30-150	9		50	A
Alpha-BHC	ND	35.7	29.6	83		32.7	91		30-150	10		50	A
Beta-BHC	ND	35.7	27.9	78		33.2	92		30-150	17		50	A
Heptachlor	ND	35.7	32.8	92		36.4	101		30-150	10		50	A
Aldrin	ND	35.7	31.5	88		34.5	96		30-150	9		50	A
Heptachlor epoxide	ND	35.7	32.3	90		35.5	98		30-150	9		50	A
Endrin	ND	35.7	32.5	91		35.6	99		30-150	9		50	A
Endrin aldehyde	ND	35.7	22.7	64		26.7	74		30-150	16		50	A
Endrin ketone	ND	35.7	29.3	82		31.9	88		30-150	8		50	A
Dieldrin	2.51	35.7	39.7	104		41.5	108		30-150	4		50	B
4,4'-DDE	4.78	35.7	41.0	101		43.2	106		30-150	5		50	B
4,4'-DDD	1.06JIP	35.7	34.3	96		37.2	103		30-150	8		50	A
4,4'-DDT	4.84	35.7	36.3	88		40.1	98		30-150	10		50	A
Endosulfan I	ND	35.7	30.3	85		33.4	93		30-150	10		50	A
Endosulfan II	ND	35.7	29.0	81		32.1	89		30-150	10		50	A
Endosulfan sulfate	ND	35.7	27.4	77		29.9	83		30-150	9		50	A
Methoxychlor	ND	35.7	29.5	83		33.4	93		30-150	12		50	A
cis-Chlordane	0.785J	35.7	33.7	94		36.2	100		30-150	7		50	B
trans-Chlordane	0.816JIP	35.7	36.9	103		38.8	108		30-150	5		50	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1795960-4 WG1795960-5 QC Sample: L2335669-06 Client ID: TP-20												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		83		30-150	A
Decachlorobiphenyl	53		56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		94		30-150	B
Decachlorobiphenyl	67		64		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02-06,12-15 QC Batch ID: WG1798483-4 WG1798483-5 QC Sample: L2335669-06 Client ID: TP-20													
2,4-D	ND	181	204	113		247	137		30-150	19		30	A
2,4,5-T	ND	181	164J	91		173J	96		30-150	5		30	A
2,4,5-TP (Silvex)	ND	181	164J	91		186	103		30-150	13		30	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	101		108		30-150	A
DCAA	96		103		30-150	B

METALS

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01
Client ID: TP-15
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:15
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6550		mg/kg	8.24	2.22	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Antimony, Total	0.644	J	mg/kg	4.12	0.313	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Arsenic, Total	6.32		mg/kg	0.824	0.171	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Barium, Total	62.1		mg/kg	0.824	0.143	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.325	J	mg/kg	0.412	0.027	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.475	J	mg/kg	0.824	0.081	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Calcium, Total	86000		mg/kg	41.2	14.4	10	07/06/23 06:25	07/24/23 16:35	EPA 3050B	1,6010D	DMB
Chromium, Total	22.3		mg/kg	0.824	0.079	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Cobalt, Total	5.32		mg/kg	1.65	0.137	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Copper, Total	50.7		mg/kg	0.824	0.212	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Iron, Total	14000		mg/kg	4.12	0.744	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Lead, Total	49.6		mg/kg	4.12	0.221	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Magnesium, Total	18300		mg/kg	8.24	1.27	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Manganese, Total	603		mg/kg	0.824	0.131	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Mercury, Total	0.114		mg/kg	0.067	0.044	1	07/06/23 07:55	07/21/23 16:49	EPA 7471B	1,7471B	GMG
Nickel, Total	12.9		mg/kg	2.06	0.199	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Potassium, Total	746		mg/kg	206	11.9	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.65	0.212	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.412	0.233	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Sodium, Total	132	J	mg/kg	165	2.59	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.65	0.259	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Vanadium, Total	19.0		mg/kg	0.824	0.167	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB
Zinc, Total	107		mg/kg	4.12	0.241	2	07/06/23 06:25	07/24/23 13:55	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5660		mg/kg	8.42	2.27	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Antimony, Total	0.420	J	mg/kg	4.21	0.320	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Arsenic, Total	5.45		mg/kg	0.842	0.175	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Barium, Total	43.9		mg/kg	0.842	0.146	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.268	J	mg/kg	0.421	0.028	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.355	J	mg/kg	0.842	0.083	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Calcium, Total	54800		mg/kg	8.42	2.95	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Chromium, Total	11.6		mg/kg	0.842	0.081	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Cobalt, Total	4.72		mg/kg	1.68	0.140	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Copper, Total	17.2		mg/kg	0.842	0.217	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Iron, Total	10900		mg/kg	4.21	0.760	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Lead, Total	33.7		mg/kg	4.21	0.226	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Magnesium, Total	12400		mg/kg	8.42	1.30	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Manganese, Total	340		mg/kg	0.842	0.134	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Mercury, Total	0.138		mg/kg	0.068	0.045	1	07/06/23 07:55	07/21/23 16:52	EPA 7471B	1,7471B	GMG
Nickel, Total	10.2		mg/kg	2.10	0.204	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Potassium, Total	658		mg/kg	210	12.1	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.68	0.217	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.421	0.238	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Sodium, Total	96.8	J	mg/kg	168	2.65	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.68	0.265	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Vanadium, Total	15.2		mg/kg	0.842	0.171	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB
Zinc, Total	63.8		mg/kg	4.21	0.247	2	07/06/23 06:25	07/24/23 14:00	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3930		mg/kg	8.60	2.32	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Antimony, Total	0.397	J	mg/kg	4.30	0.327	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Arsenic, Total	7.06		mg/kg	0.860	0.179	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Barium, Total	36.0		mg/kg	0.860	0.150	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.229	J	mg/kg	0.430	0.028	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.447	J	mg/kg	0.860	0.084	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Calcium, Total	96200		mg/kg	43.0	15.0	10	07/06/23 06:25	07/24/23 16:39	EPA 3050B	1,6010D	DMB
Chromium, Total	20.1		mg/kg	0.860	0.083	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Cobalt, Total	3.05		mg/kg	1.72	0.143	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Copper, Total	30.8		mg/kg	0.860	0.222	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Iron, Total	9130		mg/kg	4.30	0.776	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Lead, Total	68.8		mg/kg	4.30	0.230	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Magnesium, Total	12200		mg/kg	8.60	1.32	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Manganese, Total	336		mg/kg	0.860	0.137	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Mercury, Total	0.221		mg/kg	0.072	0.047	1	07/06/23 07:55	07/21/23 16:58	EPA 7471B	1,7471B	GMG
Nickel, Total	8.17		mg/kg	2.15	0.208	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Potassium, Total	410		mg/kg	215	12.4	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.72	0.222	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.430	0.243	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Sodium, Total	106	J	mg/kg	172	2.71	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.72	0.271	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Vanadium, Total	9.38		mg/kg	0.860	0.174	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB
Zinc, Total	88.7		mg/kg	4.30	0.252	2	07/06/23 06:25	07/24/23 14:05	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5780		mg/kg	8.49	2.29	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Antimony, Total	0.586	J	mg/kg	4.25	0.323	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Arsenic, Total	7.66		mg/kg	0.849	0.177	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Barium, Total	61.0		mg/kg	0.849	0.148	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.361	J	mg/kg	0.425	0.028	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.511	J	mg/kg	0.849	0.083	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Calcium, Total	111000		mg/kg	42.5	14.9	10	07/06/23 06:25	07/24/23 16:44	EPA 3050B	1,6010D	DMB
Chromium, Total	14.2		mg/kg	0.849	0.082	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Cobalt, Total	5.15		mg/kg	1.70	0.141	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Copper, Total	25.8		mg/kg	0.849	0.219	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Iron, Total	17000		mg/kg	4.25	0.767	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Lead, Total	47.1		mg/kg	4.25	0.228	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Magnesium, Total	14100		mg/kg	8.49	1.31	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Manganese, Total	585		mg/kg	0.849	0.135	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Mercury, Total	0.127		mg/kg	0.068	0.044	1	07/06/23 07:55	07/21/23 17:01	EPA 7471B	1,7471B	GMG
Nickel, Total	9.04		mg/kg	2.12	0.206	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Potassium, Total	680		mg/kg	212	12.2	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.70	0.219	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.425	0.240	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Sodium, Total	387		mg/kg	170	2.68	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.70	0.268	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Vanadium, Total	17.9		mg/kg	0.849	0.172	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB
Zinc, Total	67.6		mg/kg	4.25	0.249	2	07/06/23 06:25	07/24/23 14:10	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10600		mg/kg	8.97	2.42	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Antimony, Total	0.988	J	mg/kg	4.48	0.341	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Arsenic, Total	8.48		mg/kg	0.897	0.186	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Barium, Total	52.2		mg/kg	0.897	0.156	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.484		mg/kg	0.448	0.030	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.626	J	mg/kg	0.897	0.088	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Calcium, Total	6680		mg/kg	8.97	3.14	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Chromium, Total	13.8		mg/kg	0.897	0.086	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Cobalt, Total	9.79		mg/kg	1.79	0.149	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Copper, Total	66.0		mg/kg	0.897	0.231	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Iron, Total	17700		mg/kg	4.48	0.810	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Lead, Total	82.7		mg/kg	4.48	0.240	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Magnesium, Total	2350		mg/kg	8.97	1.38	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Manganese, Total	252		mg/kg	0.897	0.143	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Mercury, Total	0.188		mg/kg	0.074	0.048	1	07/06/23 07:55	07/21/23 18:20	EPA 7471B	1,7471B	GMG
Nickel, Total	19.4		mg/kg	2.24	0.217	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Potassium, Total	437		mg/kg	224	12.9	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.79	0.231	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.448	0.254	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Sodium, Total	358		mg/kg	179	2.82	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.79	0.282	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Vanadium, Total	21.7		mg/kg	0.897	0.182	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB
Zinc, Total	125		mg/kg	4.48	0.263	2	07/06/23 06:25	07/24/23 14:14	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5560		mg/kg	8.62	2.33	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Antimony, Total	0.525	J	mg/kg	4.31	0.328	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Arsenic, Total	5.59		mg/kg	0.862	0.179	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Barium, Total	43.7		mg/kg	0.862	0.150	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.319	J	mg/kg	0.431	0.028	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.322	J	mg/kg	0.862	0.085	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Calcium, Total	40400		mg/kg	8.62	3.02	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Chromium, Total	9.44		mg/kg	0.862	0.083	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Cobalt, Total	4.18		mg/kg	1.72	0.143	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Copper, Total	15.9		mg/kg	0.862	0.222	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Iron, Total	10600		mg/kg	4.31	0.778	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Lead, Total	29.5		mg/kg	4.31	0.231	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Magnesium, Total	9800		mg/kg	8.62	1.33	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Manganese, Total	285		mg/kg	0.862	0.137	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Mercury, Total	0.121		mg/kg	0.070	0.046	1	07/06/23 07:55	07/21/23 16:36	EPA 7471B	1,7471B	GMG
Nickel, Total	11.6		mg/kg	2.15	0.208	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Potassium, Total	560		mg/kg	215	12.4	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.72	0.222	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.431	0.244	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Sodium, Total	406		mg/kg	172	2.71	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.72	0.271	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Vanadium, Total	13.9		mg/kg	0.862	0.175	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB
Zinc, Total	51.4		mg/kg	4.31	0.252	2	07/06/23 06:25	07/24/23 14:19	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07
Client ID: TP-21
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7280		mg/kg	8.12	2.19	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Antimony, Total	0.643	J	mg/kg	4.06	0.309	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Arsenic, Total	14.2		mg/kg	0.812	0.169	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Barium, Total	65.8		mg/kg	0.812	0.141	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.446		mg/kg	0.406	0.027	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.884		mg/kg	0.812	0.080	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Calcium, Total	71200		mg/kg	8.12	2.84	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Chromium, Total	13.5		mg/kg	0.812	0.078	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Cobalt, Total	7.59		mg/kg	1.62	0.135	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Copper, Total	53.2		mg/kg	0.812	0.210	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Iron, Total	14900		mg/kg	4.06	0.733	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Lead, Total	84.1		mg/kg	4.06	0.218	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Magnesium, Total	10900		mg/kg	8.12	1.25	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Manganese, Total	497		mg/kg	0.812	0.129	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Mercury, Total	0.181		mg/kg	0.067	0.044	1	07/06/23 07:55	07/21/23 17:14	EPA 7471B	1,7471B	GMG
Nickel, Total	19.6		mg/kg	2.03	0.196	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Potassium, Total	673		mg/kg	203	11.7	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.62	0.210	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.406	0.230	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Sodium, Total	122	J	mg/kg	162	2.56	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Thallium, Total	0.285	J	mg/kg	1.62	0.256	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Vanadium, Total	17.5		mg/kg	0.812	0.165	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB
Zinc, Total	188		mg/kg	4.06	0.238	2	07/06/23 06:25	07/24/23 14:57	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08
Client ID: MW-1 TP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7310		mg/kg	8.52	2.30	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Antimony, Total	0.738	J	mg/kg	4.26	0.324	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Arsenic, Total	5.29		mg/kg	0.852	0.177	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Barium, Total	69.0		mg/kg	0.852	0.148	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.384	J	mg/kg	0.426	0.028	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.405	J	mg/kg	0.852	0.083	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Calcium, Total	51800		mg/kg	8.52	2.98	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Chromium, Total	12.6		mg/kg	0.852	0.082	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Cobalt, Total	6.63		mg/kg	1.70	0.141	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Copper, Total	32.5		mg/kg	0.852	0.220	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Iron, Total	13400		mg/kg	4.26	0.769	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Lead, Total	34.2		mg/kg	4.26	0.228	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Magnesium, Total	8230		mg/kg	8.52	1.31	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Manganese, Total	375		mg/kg	0.852	0.135	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Mercury, Total	0.102		mg/kg	0.069	0.045	1	07/06/23 07:55	07/21/23 17:17	EPA 7471B	1,7471B	GMG
Nickel, Total	13.6		mg/kg	2.13	0.206	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Potassium, Total	660		mg/kg	213	12.3	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.70	0.220	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.426	0.241	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Sodium, Total	88.5	J	mg/kg	170	2.68	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.70	0.268	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Vanadium, Total	17.4		mg/kg	0.852	0.173	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB
Zinc, Total	83.5		mg/kg	4.26	0.250	2	07/06/23 06:25	07/24/23 15:02	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09
Client ID: MW-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3430		mg/kg	8.96	2.42	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Antimony, Total	4.01	J	mg/kg	4.48	0.340	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Arsenic, Total	13.1		mg/kg	0.896	0.186	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Barium, Total	34.0		mg/kg	0.896	0.156	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.194	J	mg/kg	0.448	0.030	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Cadmium, Total	1.66		mg/kg	0.896	0.088	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Calcium, Total	64900		mg/kg	8.96	3.14	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Chromium, Total	7.27		mg/kg	0.896	0.086	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Cobalt, Total	3.91		mg/kg	1.79	0.149	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Copper, Total	736		mg/kg	0.896	0.231	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Iron, Total	16100		mg/kg	4.48	0.809	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Lead, Total	453		mg/kg	4.48	0.240	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Magnesium, Total	33300		mg/kg	8.96	1.38	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Manganese, Total	226		mg/kg	0.896	0.142	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Mercury, Total	0.124		mg/kg	0.074	0.048	1	07/06/23 07:55	07/21/23 17:21	EPA 7471B	1,7471B	GMG
Nickel, Total	20.6		mg/kg	2.24	0.217	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Potassium, Total	432		mg/kg	224	12.9	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.79	0.231	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Silver, Total	0.612		mg/kg	0.448	0.254	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Sodium, Total	419		mg/kg	179	2.82	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.79	0.282	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Vanadium, Total	8.98		mg/kg	0.896	0.182	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB
Zinc, Total	1000		mg/kg	4.48	0.262	2	07/06/23 06:25	07/24/23 15:07	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10
Client ID: MW-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6520		mg/kg	8.24	2.22	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Antimony, Total	0.724	J	mg/kg	4.12	0.313	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Arsenic, Total	6.31		mg/kg	0.824	0.171	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Barium, Total	62.6		mg/kg	0.824	0.143	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.304	J	mg/kg	0.412	0.027	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.620	J	mg/kg	0.824	0.081	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Calcium, Total	73400		mg/kg	8.24	2.88	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Chromium, Total	33.3		mg/kg	0.824	0.079	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Cobalt, Total	5.67		mg/kg	1.65	0.137	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Copper, Total	127		mg/kg	0.824	0.212	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Iron, Total	15400		mg/kg	4.12	0.744	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Lead, Total	62.4		mg/kg	4.12	0.221	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Magnesium, Total	15200		mg/kg	8.24	1.27	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Manganese, Total	991		mg/kg	0.824	0.131	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Mercury, Total	0.144		mg/kg	0.069	0.045	1	07/06/23 07:55	07/21/23 17:24	EPA 7471B	1,7471B	GMG
Nickel, Total	13.7		mg/kg	2.06	0.199	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Potassium, Total	832		mg/kg	206	11.8	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.65	0.212	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.412	0.233	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Sodium, Total	139	J	mg/kg	165	2.59	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Thallium, Total	0.523	J	mg/kg	1.65	0.259	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Vanadium, Total	24.2		mg/kg	0.824	0.167	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB
Zinc, Total	182		mg/kg	4.12	0.241	2	07/06/23 06:25	07/24/23 15:11	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11
Client ID: MW-4
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 13:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3020		mg/kg	8.61	2.32	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Antimony, Total	ND		mg/kg	4.30	0.327	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Arsenic, Total	5.43		mg/kg	0.861	0.179	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Barium, Total	39.7		mg/kg	0.861	0.150	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.254	J	mg/kg	0.430	0.028	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.336	J	mg/kg	0.861	0.084	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Calcium, Total	160000		mg/kg	43.0	15.1	10	07/06/23 06:25	07/24/23 19:53	EPA 3050B	1,6010D	DMB
Chromium, Total	6.85		mg/kg	0.861	0.083	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Cobalt, Total	2.24		mg/kg	1.72	0.143	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Copper, Total	14.2		mg/kg	0.861	0.222	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Iron, Total	5660		mg/kg	4.30	0.777	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Lead, Total	56.3		mg/kg	4.30	0.231	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Magnesium, Total	13600		mg/kg	8.61	1.32	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Manganese, Total	249		mg/kg	0.861	0.137	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Mercury, Total	0.106		mg/kg	0.069	0.045	1	07/06/23 07:55	07/21/23 17:27	EPA 7471B	1,7471B	GMG
Nickel, Total	7.66		mg/kg	2.15	0.208	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Potassium, Total	483		mg/kg	215	12.4	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.72	0.222	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.430	0.244	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Sodium, Total	183		mg/kg	172	2.71	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.72	0.271	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Vanadium, Total	7.56		mg/kg	0.861	0.175	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB
Zinc, Total	80.1		mg/kg	4.30	0.252	2	07/06/23 06:25	07/24/23 15:16	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4640		mg/kg	8.42	2.27	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Antimony, Total	0.387	J	mg/kg	4.21	0.320	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Arsenic, Total	4.29		mg/kg	0.842	0.175	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Barium, Total	33.2		mg/kg	0.842	0.146	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.219	J	mg/kg	0.421	0.028	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.309	J	mg/kg	0.842	0.083	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Calcium, Total	43200		mg/kg	8.42	2.95	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Chromium, Total	9.00		mg/kg	0.842	0.081	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Cobalt, Total	3.97		mg/kg	1.68	0.140	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Copper, Total	16.0		mg/kg	0.842	0.217	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Iron, Total	10200		mg/kg	4.21	0.761	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Lead, Total	33.4		mg/kg	4.21	0.226	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Magnesium, Total	10400		mg/kg	8.42	1.30	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Manganese, Total	250		mg/kg	0.842	0.134	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Mercury, Total	0.130		mg/kg	0.069	0.045	1	07/06/23 07:55	07/21/23 17:31	EPA 7471B	1,7471B	GMG
Nickel, Total	8.16		mg/kg	2.11	0.204	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Potassium, Total	628		mg/kg	211	12.1	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.68	0.217	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.421	0.238	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Sodium, Total	85.5	J	mg/kg	168	2.65	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.68	0.265	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Vanadium, Total	11.9		mg/kg	0.842	0.171	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB
Zinc, Total	55.3		mg/kg	4.21	0.247	2	07/06/23 06:25	07/24/23 15:21	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5160		mg/kg	8.13	2.19	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Antimony, Total	1.10	J	mg/kg	4.06	0.309	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Arsenic, Total	6.45		mg/kg	0.813	0.169	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Barium, Total	49.9		mg/kg	0.813	0.141	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.330	J	mg/kg	0.406	0.027	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.964		mg/kg	0.813	0.080	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Calcium, Total	59700		mg/kg	8.13	2.84	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Chromium, Total	11.1		mg/kg	0.813	0.078	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Cobalt, Total	4.41		mg/kg	1.62	0.135	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Copper, Total	721		mg/kg	0.813	0.210	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Iron, Total	10000		mg/kg	4.06	0.734	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Lead, Total	148		mg/kg	4.06	0.218	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Magnesium, Total	8770		mg/kg	8.13	1.25	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Manganese, Total	313		mg/kg	0.813	0.129	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Mercury, Total	0.141		mg/kg	0.066	0.043	1	07/06/23 07:55	07/21/23 17:34	EPA 7471B	1,7471B	GMG
Nickel, Total	15.3		mg/kg	2.03	0.197	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Potassium, Total	652		mg/kg	203	11.7	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.62	0.210	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Silver, Total	0.260	J	mg/kg	0.406	0.230	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Sodium, Total	96.1	J	mg/kg	162	2.56	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.62	0.256	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Vanadium, Total	13.9		mg/kg	0.813	0.165	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB
Zinc, Total	491		mg/kg	4.06	0.238	2	07/06/23 06:25	07/24/23 15:26	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Lab Number: L2335669
Project Number: 0595-021-001
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6420		mg/kg	8.54	2.30	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Antimony, Total	0.517	J	mg/kg	4.27	0.324	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Arsenic, Total	5.23		mg/kg	0.854	0.178	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Barium, Total	59.2		mg/kg	0.854	0.148	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.316	J	mg/kg	0.427	0.028	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.439	J	mg/kg	0.854	0.084	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Calcium, Total	69400		mg/kg	8.54	2.99	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Chromium, Total	12.3		mg/kg	0.854	0.082	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Cobalt, Total	5.88		mg/kg	1.71	0.142	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Copper, Total	22.3		mg/kg	0.854	0.220	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Iron, Total	12200		mg/kg	4.27	0.771	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Lead, Total	36.6		mg/kg	4.27	0.229	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Magnesium, Total	15000		mg/kg	8.54	1.32	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Manganese, Total	470		mg/kg	0.854	0.136	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Mercury, Total	0.130		mg/kg	0.069	0.045	1	07/06/23 07:55	07/21/23 17:37	EPA 7471B	1,7471B	GMG
Nickel, Total	12.1		mg/kg	2.14	0.207	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Potassium, Total	850		mg/kg	214	12.3	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.71	0.220	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.427	0.242	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Sodium, Total	113	J	mg/kg	171	2.69	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Thallium, Total	ND		mg/kg	1.71	0.269	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Vanadium, Total	16.6		mg/kg	0.854	0.173	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB
Zinc, Total	78.5		mg/kg	4.27	0.250	2	07/06/23 06:25	07/24/23 15:31	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6860		mg/kg	8.18	2.21	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Antimony, Total	0.571	J	mg/kg	4.09	0.311	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Arsenic, Total	7.33		mg/kg	0.818	0.170	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Barium, Total	57.9		mg/kg	0.818	0.142	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Beryllium, Total	0.319	J	mg/kg	0.409	0.027	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.467	J	mg/kg	0.818	0.080	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Calcium, Total	70900		mg/kg	8.18	2.86	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Chromium, Total	16.9		mg/kg	0.818	0.079	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Cobalt, Total	5.42		mg/kg	1.64	0.136	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Copper, Total	54.0		mg/kg	0.818	0.211	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Iron, Total	13300		mg/kg	4.09	0.738	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Lead, Total	47.6		mg/kg	4.09	0.219	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Magnesium, Total	15000		mg/kg	8.18	1.26	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Manganese, Total	559		mg/kg	0.818	0.130	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Mercury, Total	0.138		mg/kg	0.067	0.044	1	07/06/23 07:55	07/21/23 17:41	EPA 7471B	1,7471B	GMG
Nickel, Total	13.3		mg/kg	2.04	0.198	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Potassium, Total	830		mg/kg	204	11.8	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Selenium, Total	ND		mg/kg	1.64	0.211	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Silver, Total	ND		mg/kg	0.409	0.231	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Sodium, Total	213		mg/kg	164	2.58	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Thallium, Total	0.274	J	mg/kg	1.64	0.258	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Vanadium, Total	19.1		mg/kg	0.818	0.166	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB
Zinc, Total	115		mg/kg	4.09	0.240	2	07/06/23 06:25	07/24/23 15:36	EPA 3050B	1,6010D	DMB

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-15 Batch: WG1799642-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Barium, Total	ND		mg/kg	0.400	0.070	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Copper, Total	ND		mg/kg	0.400	0.103	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Iron, Total	ND		mg/kg	2.00	0.361	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Lead, Total	ND		mg/kg	2.00	0.107	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Manganese, Total	ND		mg/kg	0.400	0.064	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Potassium, Total	ND		mg/kg	100	5.76	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Silver, Total	ND		mg/kg	0.200	0.113	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Sodium, Total	ND		mg/kg	80.0	1.26	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/06/23 06:25	07/24/23 12:54	1,6010D	DMB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-15 Batch: WG1799643-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/06/23 07:55	07/21/23 16:29	1,7471B	GMG

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-15 Batch: WG1799642-2 SRM Lot Number: D119-540								
Aluminum, Total	83		-		48-152	-		
Antimony, Total	121		-		10-190	-		
Arsenic, Total	110		-		83-117	-		
Barium, Total	105		-		82-118	-		
Beryllium, Total	107		-		83-117	-		
Cadmium, Total	110		-		82-117	-		
Calcium, Total	107		-		81-118	-		
Chromium, Total	112		-		82-119	-		
Cobalt, Total	112		-		83-117	-		
Copper, Total	112		-		84-116	-		
Iron, Total	101		-		60-140	-		
Lead, Total	110		-		82-118	-		
Magnesium, Total	100		-		76-124	-		
Manganese, Total	112		-		82-118	-		
Nickel, Total	111		-		82-117	-		
Potassium, Total	98		-		70-130	-		
Selenium, Total	115		-		79-121	-		
Silver, Total	111		-		80-120	-		
Sodium, Total	109		-		74-126	-		
Thallium, Total	116		-		81-119	-		
Vanadium, Total	112		-		79-121	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-15 Batch: WG1799642-2 SRM Lot Number: D119-540					
Zinc, Total	110	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-15 Batch: WG1799643-2 SRM Lot Number: D119-540					
Mercury, Total	105	-	73-127	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1799642-3 WG1799642-4 QC Sample: L2335669-06 Client ID: TP-20												
Aluminum, Total	5560	167	6200	**383**	Q	7190	**958**	Q	75-125	15		20
Antimony, Total	0.525J	41.8	37.5	90		38.3	90		75-125	2		20
Arsenic, Total	5.59	10	17.2	116		19.2	**133**	Q	75-125	11		20
Barium, Total	43.7	167	196	91		211	98		75-125	7		20
Beryllium, Total	0.319J	4.18	3.98	95		4.25	100		75-125	7		20
Cadmium, Total	0.322J	4.42	4.79	108		5.14	114		75-125	7		20
Calcium, Total	40400	835	47400	**838**	Q	51300	**1280**	Q	75-125	8		20
Chromium, Total	9.44	16.7	26.0	99		28.9	114		75-125	11		20
Cobalt, Total	4.18	41.8	45.1	98		48.1	103		75-125	6		20
Copper, Total	15.9	20.9	43.3	**131**	Q	44.8	**136**	Q	75-125	3		20
Iron, Total	10600	83.5	11700	**1320**	Q	12700	**2470**	Q	75-125	8		20
Lead, Total	29.5	44.2	116	**195**	Q	84.4	122		75-125	**32**	Q	20
Magnesium, Total	9800	835	9480	**0**	Q	9580	**0**	Q	75-125	1		20
Manganese, Total	285	41.8	363	**187**	Q	384	**233**	Q	75-125	6		20
Nickel, Total	11.6	41.8	52.2	97		56.4	105		75-125	8		20
Potassium, Total	560	835	1490	111		1590	121		75-125	6		20
Selenium, Total	ND	10	10.0	100		11.2	110		75-125	11		20
Silver, Total	ND	4.18	4.20	100		4.53	106		75-125	8		20
Sodium, Total	406	835	1230	99		1330	109		75-125	8		20
Thallium, Total	ND	10	9.39	94		9.85	96		75-125	5		20
Vanadium, Total	13.9	41.8	55.6	100		61.7	112		75-125	10		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1799642-3 WG1799642-4 QC Sample: L2335669-06 Client ID: TP-20											
Zinc, Total	51.4	41.8	106	**131**	Q	111	**140**	Q	75-125	5	20
Total Metals - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1799643-3 WG1799643-4 QC Sample: L2335669-06 Client ID: TP-20											
Mercury, Total	0.121	1.39	1.50	99		1.54	101		80-120	3	20

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Serial Dilution Analysis
Batch Quality Control

Lab Number: L2335669
Report Date: 07/26/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1799642-6 QC Sample: L2335669-06 Client ID: TP-20						
Aluminum, Total	5560	5890	mg/kg	6		20
Barium, Total	43.7	46.7	mg/kg	7		20
Calcium, Total	40400	45200	mg/kg	12		20
Iron, Total	10600	12000	mg/kg	13		20
Magnesium, Total	9800	10400	mg/kg	6		20
Manganese, Total	285	315	mg/kg	11		20

INORGANICS
&
MISCELLANEOUS

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-01
Client ID: TP-15
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 12:15
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.9		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-02
Client ID: TP-16
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:02
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.0		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-03
Client ID: TP-17
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-04
Client ID: TP-18
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 12:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.9		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-05
Client ID: TP-19
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 12:50
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.3		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-06
Client ID: TP-20
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.0		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-07
Client ID: TP-21
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:10
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.6		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-08
Client ID: MW-1 TP
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 13:20
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.6		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-09
Client ID: MW-2
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:30
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-10
Client ID: MW-3
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 13:40
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-11
Client ID: MW-4
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 13:50
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.4		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-12
Client ID: SS-1
Sample Location: BUFFALO, NY 14218

Date Collected: 06/21/23 14:00
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.8		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-13
Client ID: SS-2
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 14:10
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.6		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-14
Client ID: SS-3
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 14:20
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.2		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2335669-15
Client ID: BLIND DUP
Sample Location: BUFFALO, NY 14218
Sample Depth:
Matrix: Soil

Date Collected: 06/21/23 12:00
Date Received: 06/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.4		%	0.100	NA	1	-	06/22/23 12:41	121,2540G	ROI

Lab Duplicate Analysis

Batch Quality Control

Project Name: 389 MANHATTAN

Project Number: 0595-021-001

Lab Number: L2335669

Report Date: 07/26/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1794760-1 QC Sample: L2335669-06 Client ID: TP-20						
Solids, Total	91.0	92.1	%	1		20

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-01A	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-01B	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),SB-TI(180),V-TI(180),CO-TI(180),FE-TI(180),HG-T(28),MN-TI(180),MG-TI(180),CD-TI(180),CA-TI(180),NA-TI(180),K-TI(180)
L2335669-01C	Glass 250ml/8oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-02A	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-02B	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-02C	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-02D	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-02E	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),CR-TI(180),AL-TI(180),CU-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),HG-T(28),MG-TI(180),FE-TI(180),MN-TI(180),NA-TI(180),CA-TI(180),CD-TI(180),K-TI(180)
L2335669-02F	Plastic 8oz unpreserved	B	NA		2.1	Y	Absent		A2-1633-DRAFT(90)
L2335669-02G	Glass 500ml/16oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-02X	Vial MeOH preserved split	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-02Y	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-02Z	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-03A	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-03B	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-03C	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-03D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-03E	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),PB-TI(180),CU-TI(180),SB-TI(180),ZN-TI(180),SE-TI(180),V-TI(180),CO-TI(180),MG-TI(180),FE-TI(180),MN-TI(180),HG-T(28),CA-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2335669-03F	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-03G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-03X	Vial MeOH preserved split	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-03Y	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-03Z	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-04A	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-04B	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-04C	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-04D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-04E	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),CR-TI(180),AL-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CU-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),MN-TI(180),HG-T(28),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L2335669-04F	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-04G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-04X	Vial MeOH preserved split	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-04Y	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-04Z	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-05A	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-05B	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-05C	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-05D	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-05E	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),SB-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MN-TI(180),FE-TI(180),MG-TI(180),HG-T(28),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2335669-05F	Plastic 8oz unpreserved	B	NA		2.1	Y	Absent		A2-1633-DRAFT(90)
L2335669-05G	Glass 500ml/16oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-05X	Vial MeOH preserved split	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-05Y	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-05Z	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06A	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06A1	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06A2	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06B	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06B1	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06B2	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06C	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06C1	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06C2	5 gram Encore Sampler	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-06D1	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-06D2	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-06E	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),FE-TI(180),HG-T(28),MN-TI(180),MG-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2335669-06E1	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),FE-TI(180),HG-T(28),MN-TI(180),MG-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-06E2	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),FE-TI(180),HG-T(28),MN-TI(180),MG-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2335669-06F	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-06F1	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-06F2	Plastic 8oz unpreserved	B	NA		2.1	Y	Absent		A2-1633-DRAFT(90)
L2335669-06G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-06G1	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-06G2	Glass 500ml/16oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-06X	Vial MeOH preserved split	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06X1	Vial MeOH preserved split	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06X2	Vial MeOH preserved split	B	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-06Y	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06Y1	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06Y2	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06Z	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06Z1	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-06Z2	Vial Water preserved split	B	NA		2.1	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-07A	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-07B	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),NI-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),V-TI(180),CO-TI(180),HG-T(28),MG-TI(180),MN-TI(180),FE-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2335669-07C	Glass 250ml/8oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-08A	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-08B	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),SE-TI(180),V-TI(180),CO-TI(180),HG-T(28),MG-TI(180),MN-TI(180),FE-TI(180),NA-TI(180),CD-TI(180),CA-TI(180),K-TI(180)
L2335669-08C	Glass 250ml/8oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-09A	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-09B	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),CR-TI(180),AL-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),MG-TI(180),FE-TI(180),HG-T(28),MN-TI(180),K-TI(180),CA-TI(180),CD-TI(180),NA-TI(180)
L2335669-09C	Glass 250ml/8oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-10A	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-10B	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),TL-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),HG-T(28),MG-TI(180),FE-TI(180),MN-TI(180),K-TI(180),NA-TI(180),CA-TI(180),CD-TI(180)
L2335669-10C	Glass 250ml/8oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-11A	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-11B	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),CU-TI(180),ZN-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),MN-TI(180),FE-TI(180),HG-T(28),CA-TI(180),K-TI(180),CD-TI(180),NA-TI(180)
L2335669-11C	Glass 250ml/8oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(365)
L2335669-12A	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)
L2335669-12B	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),MN-TI(180),HG-T(28),FE-TI(180),MG-TI(180),CD-TI(180),CA-TI(180),K-TI(180),NA-TI(180)
L2335669-12C	Plastic 8oz unpreserved	B	NA		2.1	Y	Absent		A2-1633-DRAFT(90)
L2335669-12D	Glass 500ml/16oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-13A	Plastic 2oz unpreserved for TS	B	NA		2.1	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001

Lab Number: L2335669
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335669-13B	Glass 60mL/2oz unpreserved	B	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),NA-TI(180),CD-TI(180),K-TI(180)
L2335669-13C	Plastic 8oz unpreserved	B	NA		2.1	Y	Absent		A2-1633-DRAFT(90)
L2335669-13D	Glass 500ml/16oz unpreserved	B	NA		2.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-14A	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-14B	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),MN-TI(180),FE-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2335669-14C	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-14D	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-15A	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-15B	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-15C	5 gram Encore Sampler	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-15D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2335669-15E	Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MN-TI(180),FE-TI(180),HG-T(28),MG-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2335669-15F	Plastic 8oz unpreserved	A	NA		2.0	Y	Absent		A2-1633-DRAFT(90)
L2335669-15G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2335669-15X	Vial MeOH preserved split	A	NA		2.0	Y	Absent		NYTCL-8260HLW-R2(14)
L2335669-15Y	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)
L2335669-15Z	Vial Water preserved split	A	NA		2.0	Y	Absent	22-JUN-23 11:31	NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
Lab Number: L2335669
Report Date: 07/26/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
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

Project Name: 389 MANHATTAN
Project Number: 0595-021-001
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Report Date: 07/26/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

Project Name:	389 MANHATTAN	**Lab Number:**	L2335669
Project Number:	0595-021-001	**Report Date:**	07/26/23

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers

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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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Data Qualifiers

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Project Name:	389 MANHATTAN	**Lab Number:**	L2335669
Project Number:	0595-021-001	**Report Date:**	07/26/23

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 6/22/23

ALPHA Job #: L2335669

Client Information

Client: BENCHMARK
Address: 2558 HAMBURG TRPK
BUFFALO, NY 14218
Phone: 716 856 0599
Fax:
Email: cbarron@bm-llc.com

Project Information

Project Name: 389 MANHATTAN
Project Location: BUFFALO, NY 14218
Project # 0595-021-001
(Use Project name as Project #) ☐
Project Manager: CHRIS BORON
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

CAT B

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL METALS	PCBs	PEST	HERBS	1,4 DIOXANE	PFAS 1633	Total Bottle
35669-01	TP-15	6/21/23	1215	SOIL	CS		X	X	X					
02	TP-16		1202			X	X	X	X	X	X	X	X	
03	TP-17		1230			X	X	X	X	X	X	X	X	
04	TP-18		1240			X	X	X	X	X	X	X	X	
05	TP-19		1250			X	X	X	X	X	X	X	X	
06	TP-20 (MS/MSD)		1300			X	X	X	X	X	X	X	X	
07	TP-21 [redacted]		1310				X	X	X					
08	MW-1 TP		1320				X	X	X					
09	MW-2		1330				X	X	X					
10	MW-3		1340				X	X	X					

Container Type: E A A A A A A P
Preservative: A A A A A A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/21/23 1637	[signature]	6/21/23 1637
[signature]	6/21/23 1705	[signature]	6/22/23 01:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 6/22/23

ALPHA Job #: L2335669

Client Information
Client: BENCHMARK
Address: 2558 HAMBURG TPKE
BUFFALO, NY 14218
Phone: 716 856 0599
Fax:
Email: cboron@bm-tk.com

Project Information
Project Name: 389 MANHATTAN
Project Location: BUFFALO, NY
Project # 0595-021-001
(Use Project name as Project #) ☐
Project Manager: CHRIS BORON
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

CRT B

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL METALS	PCBs	PEST	HERBS	1,4-DIOXANE	PFAS	Sample Specific Comments	Total Bottle
35669-11	MW-4	6/21/23	1350	Soil	CS		X	X	X						
12	SS-1	↓	1400	↓			X	X	X	X	X	X	X		
13	SS-2		1410				X	X	X	X	X	X	X		
14	SS-3		1420				X	X	X	X	X	X	X		
15	BLIND DUP														

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E	A	A	A	A	A	A	P	
Preservative	A	A	A	A	A	A	F	A	

Relinquished By:	Date/Time	Received By:	Date/Time
	6/21/23 1639	RMC	6/21/23 1639
RMC	6/21/23 1635		6/22/23 01:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2340590
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	389 MANHATTAN AVE
Project Number:	B0595-021-001-003-00
Report Date:	08/16/23

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2340590-01	MW-1	WATER	BUFFALO, NY	07/14/23 08:24	07/14/23
L2340590-02	MW-2	WATER	BUFFALO, NY	07/13/23 09:33	07/14/23
L2340590-03	MW-3	WATER	BUFFALO, NY	07/13/23 10:42	07/14/23
L2340590-04	BLIND DUP	WATER	BUFFALO, NY	07/13/23 12:00	07/14/23
L2340590-05	MW-4	WATER	BUFFALO, NY	07/13/23 15:49	07/14/23
L2340590-06	EQUIPMENT BLANK	WATER	BUFFALO, NY	07/13/23 07:15	07/14/23
L2340590-07	FIELD BLANK	WATER	BUFFALO, NY	07/13/23 07:30	07/14/23
L2340590-08	TRIP BLANK	WATER	BUFFALO, NY	07/13/23 00:00	07/14/23

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

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

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

Soil/sediments, 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.

HOLD POLICY - For samples submitted on hold, Alpha'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 Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

Case Narrative (continued)

Report Submission

August 16, 2023: This final report includes the results of all requested analyses.

August 09, 2023: This is a preliminary report.

August 02, 2023: This is a preliminary report.

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

Semivolatile Organics

The WG1805231-4/-5 MS/MSD recoveries, performed on L2340590-02, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

Perfluorinated Alkyl Acids by 1633

L2340590-02, -03, and WG1812013-4/-5: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1812013-4/-5 MS/MSD recoveries, performed on L2340590-02, are outside the acceptance criteria for 3-perfluoroheptyl propanoic acid (7:3ftca) (206%/204%).

Total Metals

The WG1804225-4 MSD recovery, performed on L2340590-02, is outside the acceptance criteria for calcium (130%). A post digestion spike was performed and was within acceptance criteria.

The WG1804225-3 MS recoveries for magnesium (71%) and sodium (0%), performed on L2340590-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

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

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative Date: 08/16/23

ORGANICS

VOLATILES

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 19:24
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.39	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.1		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	12		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/l			1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 18:58
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	34		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.78		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.0	J	ug/l	2.5	0.70	1
Trichloroethene	13		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	100		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/l			1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

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

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 18:32
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.54	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	26		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	11		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/l			1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 18:06
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.54	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	26		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	11		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds			
No Tentatively Identified Compounds	ND	ug/l	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 17:39
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	1.7	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	30		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.17	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.84		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.5	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	22		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	2.0	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	3.8		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	9.9		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds				
Total TIC Compounds	2.98	J	ug/l	1
Unknown Benzene	2.98	J	ug/l	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	100		70-130

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 17:13
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-08
Client ID: TRIP BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 00:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/22/23 16:46
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-08
Client ID: TRIP BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 00:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/l			1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-08
Client ID: TRIP BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 00:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

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

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/22/23 11:56
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1807036-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/22/23 11:56
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1807036-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/22/23 11:56
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1807036-5					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

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

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1807036-3 WG1807036-4								
Methylene chloride	94		100		70-130	6		20
1,1-Dichloroethane	95		100		70-130	5		20
Chloroform	94		110		70-130	16		20
Carbon tetrachloride	84		94		63-132	11		20
1,2-Dichloropropane	98		110		70-130	12		20
Dibromochloromethane	95		100		63-130	5		20
1,1,2-Trichloroethane	97		110		70-130	13		20
Tetrachloroethene	88		97		70-130	10		20
Chlorobenzene	96		100		75-130	4		20
Trichlorofluoromethane	74		86		62-150	15		20
1,2-Dichloroethane	94		100		70-130	6		20
1,1,1-Trichloroethane	87		97		67-130	11		20
Bromodichloromethane	98		110		67-130	12		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
Bromoform	93		100		54-136	7		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	97		110		70-130	13		20
Toluene	96		100		70-130	4		20
Ethylbenzene	95		100		70-130	5		20
Chloromethane	100		120		64-130	18		20
Bromomethane	**160**	Q	**160**	Q	39-139	0		20
Vinyl chloride	82		95		55-140	15		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1807036-3 WG1807036-4								
Chloroethane	86		99		55-138	14		20
1,1-Dichloroethene	82		93		61-145	13		20
trans-1,2-Dichloroethene	91		100		70-130	9		20
Trichloroethene	91		99		70-130	8		20
1,2-Dichlorobenzene	96		100		70-130	4		20
1,3-Dichlorobenzene	97		100		70-130	3		20
1,4-Dichlorobenzene	95		100		70-130	5		20
Methyl tert butyl ether	92		110		63-130	18		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	97		110		70-130	13		20
Styrene	100		110		70-130	10		20
Dichlorodifluoromethane	76		87		36-147	13		20
Acetone	**150**	Q	120		58-148	**22**	Q	20
Carbon disulfide	94		98		51-130	4		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	95		110		59-130	15		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	100		110		70-130	10		20
1,2-Dibromoethane	93		110		70-130	17		20
n-Butylbenzene	97		100		53-136	3		20
sec-Butylbenzene	93		99		70-130	6		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1807036-3 WG1807036-4								
Isopropylbenzene	93		100		70-130	7		20
p-Isopropyltoluene	95		100		70-130	5		20
n-Propylbenzene	95		100		69-130	5		20
1,2,3-Trichlorobenzene	94		100		70-130	6		20
1,2,4-Trichlorobenzene	94		100		70-130	6		20
1,3,5-Trimethylbenzene	95		100		64-130	5		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
Methyl Acetate	95		110		70-130	15		20
Cyclohexane	81		87		70-130	7		20
1,4-Dioxane	**176**	Q	**192**	Q	56-162	9		20
Freon-113	73		84		70-130	14		20
Methyl cyclohexane	83		88		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	101		98		70-130
Dibromofluoromethane	98		98		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1807036-6 WG1807036-7 QC Sample: L2340590-02 Client ID: MW-2												
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
1,1-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
Chloroform	ND	10	11	110		11	110		70-130	0		20
Carbon tetrachloride	ND	10	12	120		12	120		63-132	0		20
1,2-Dichloropropane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	10	100		11	110		63-130	10		20
1,1,2-Trichloroethane	ND	10	11	110		11	110		70-130	0		20
Tetrachloroethene	ND	10	11	110		11	110		70-130	0		20
Chlorobenzene	ND	10	11	110		10	100		75-130	10		20
Trichlorofluoromethane	ND	10	12	120		12	120		62-150	0		20
1,2-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
1,1,1-Trichloroethane	ND	10	11	110		11	110		67-130	0		20
Bromodichloromethane	ND	10	11	110		11	110		67-130	0		20
trans-1,3-Dichloropropene	ND	10	10	100		10	100		70-130	0		20
cis-1,3-Dichloropropene	ND	10	10	100		10	100		70-130	0		20
Bromoform	ND	10	10	100		10	100		54-136	0		20
1,1,2,2-Tetrachloroethane	ND	10	12	120		12	120		67-130	0		20
Benzene	ND	10	11	110		11	110		70-130	0		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Ethylbenzene	ND	10	11	110		11	110		70-130	0		20
Chloromethane	ND	10	12	120		13	130		64-130	8		20
Bromomethane	ND	10	12	120		15	**150**	Q	39-139	**22**	Q	20
Vinyl chloride	34	10	45	110		46	120		55-140	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1807036-6 WG1807036-7 QC Sample: L2340590-02 Client ID: MW-2												
Chloroethane	ND	10	11	110		11	110		55-138	0		20
1,1-Dichloroethene	0.78	10	12	112		12	112		61-145	0		20
trans-1,2-Dichloroethene	1.0J	10	12	120		12	120		70-130	0		20
Trichloroethene	13	10	24	110		24	110		70-130	0		20
1,2-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,3-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,4-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
Methyl tert butyl ether	ND	10	11	110		11	110		63-130	0		20
p/m-Xylene	ND	20	23	115		22	110		70-130	4		20
o-Xylene	ND	20	22	110		22	110		70-130	0		20
cis-1,2-Dichloroethene	100	10	120	**200**	Q	120	**200**	Q	70-130	0		20
Styrene	ND	20	22	110		22	110		70-130	0		20
Dichlorodifluoromethane	ND	10	12	120		13	130		36-147	8		20
Acetone	ND	10	11	110		11	110		58-148	0		20
Carbon disulfide	ND	10	11	110		12	120		51-130	9		20
2-Butanone	ND	10	12	120		12	120		63-138	0		20
4-Methyl-2-pentanone	ND	10	11	110		11	110		59-130	0		20
2-Hexanone	ND	10	12	120		10	100		57-130	18		20
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromoethane	ND	10	11	110		11	110		70-130	0		20
n-Butylbenzene	ND	10	11	110		11	110		53-136	0		20
sec-Butylbenzene	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	10	100		10	100		41-144	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1807036-6 WG1807036-7 QC Sample: L2340590-02 Client ID: MW-2												
Isopropylbenzene	ND	10	10	100		11	110		70-130	10		20
p-Isopropyltoluene	ND	10	11	110		11	110		70-130	0		20
n-Propylbenzene	ND	10	10	100		11	110		69-130	10		20
1,2,3-Trichlorobenzene	ND	10	10	100		11	110		70-130	10		20
1,2,4-Trichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,3,5-Trimethylbenzene	ND	10	10	100		10	100		64-130	0		20
1,2,4-Trimethylbenzene	ND	10	10	100		10	100		70-130	0		20
Methyl Acetate	ND	10	11	110		11	110		70-130	0		20
Cyclohexane	ND	10	12	120		12	120		70-130	0		20
1,4-Dioxane	ND	500	920	**184**	Q	870	**174**	Q	56-162	6		20
Freon-113	ND	10	12	120		12	120		70-130	0		20
Methyl cyclohexane	ND	10	12	120		12	120		70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		104		70-130
4-Bromofluorobenzene	96		98		70-130
Dibromofluoromethane	101		101		70-130
Toluene-d8	96		98		70-130

SEMIVOLATILES

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/21/23 02:07
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds						
Total TIC Compounds	20.7	J	ug/l			1
Unknown	5.78	J	ug/l			1
Unknown Organic Acid	8.80	J	ug/l			1
Unknown	6.14	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	71		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 16:20
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	**156**	Q	10-120
4-Terphenyl-d14	77		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/20/23 12:38
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Tentatively Identified Compounds						
Total TIC Compounds	15.4	J	ug/l			1
Unknown	5.96	J	ug/l			1
Unknown	3.64	J	ug/l			1
Unknown Organic Acid	5.78	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	54		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 13:33
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	**125**	Q	10-120
4-Terphenyl-d14	67		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/21/23 14:29
Analyst: TPR

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 09:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	134	30.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 08/12/23 17:35
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	16.4		ng/l	5.81	0.929	1
Perfluoropentanoic Acid (PFPeA)	23.4		ng/l	2.90	0.777	1
Perfluorobutanesulfonic Acid (PFBS)	17.4		ng/l	1.45	0.486	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.81	1.52	1
Perfluorohexanoic Acid (PFHxA)	16.6		ng/l	1.45	0.428	1
Perfluoropentanesulfonic Acid (PFPeS)	0.508	J	ng/l	1.45	0.254	1
Perfluoroheptanoic Acid (PFHpA)	6.53		ng/l	1.45	0.290	1
Perfluorohexanesulfonic Acid (PFHxS)	1.02	J	ng/l	1.45	0.348	1
Perfluorooctanoic Acid (PFOA)	14.4		ng/l	1.45	0.632	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.81	1.96	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.45	0.392	1
Perfluorononanoic Acid (PFNA)	0.581	J	ng/l	1.45	0.457	1
Perfluorooctanesulfonic Acid (PFOS)	2.40		ng/l	1.45	0.661	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.45	0.588	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.81	2.26	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.45	0.450	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.45	0.791	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.45	0.632	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.45	0.334	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.45	0.392	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.45	0.784	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.45	0.668	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.45	0.544	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.45	0.385	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.81	0.813	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.81	0.915	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.45	0.552	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.81	1.20	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.81	1.20	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.45	0.632	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.45	0.668	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.5	3.41	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.5	1.78	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.90	0.414	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.90	0.385	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.90	0.319	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.90	1.71	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.26	2.40	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	36.3	8.49	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	36.3	5.73	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	84		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	62		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	**158**	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	72		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	104		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	74		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	80		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	**192**	Q	20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	70		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	77		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	70		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	**160**	Q	20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	89		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	66		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	68		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	94		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	65		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	54		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	96		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	54		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	51		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	46		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	54		20-150

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/21/23 02:30
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Tentatively Identified Compounds						
Total TIC Compounds	14.0	J	ug/l			1
Unknown	5.05	J	ug/l			1
Unknown Organic Acid	3.27	J	ug/l			1
Unknown	5.67	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	71		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 16:37
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.10	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	0.01	J	ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	**151**	Q	10-120
4-Terphenyl-d14	75		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/21/23 15:49
Analyst: TPR

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 09:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	31.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 08/12/23 18:13
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	13.7		ng/l	5.73	0.917	1
Perfluoropentanoic Acid (PFPeA)	19.8		ng/l	2.87	0.767	1
Perfluorobutanesulfonic Acid (PFBS)	2.58		ng/l	1.43	0.480	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.73	1.50	1
Perfluorohexanoic Acid (PFHxA)	10.6		ng/l	1.43	0.423	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.43	0.251	1
Perfluoroheptanoic Acid (PFHpA)	3.80		ng/l	1.43	0.287	1
Perfluorohexanesulfonic Acid (PFHxS)	1.00	J	ng/l	1.43	0.344	1
Perfluorooctanoic Acid (PFOA)	4.80		ng/l	1.43	0.624	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.73	1.94	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.43	0.387	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.43	0.452	1
Perfluorooctanesulfonic Acid (PFOS)	2.01		ng/l	1.43	0.652	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.43	0.580	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.73	2.23	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.43	0.444	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.43	0.781	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.43	0.624	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.43	0.330	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.43	0.387	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.43	0.774	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.43	0.659	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.43	0.538	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.43	0.380	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.73	0.803	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.73	0.903	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.43	0.545	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.73	1.18	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.73	1.18	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.43	0.624	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.43	0.659	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.3	3.37	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.3	1.76	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.87	0.408	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.87	0.380	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.87	0.315	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.87	1.69	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.17	2.36	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	35.8	8.38	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	35.8	5.66	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	74		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	63		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	67		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	**151**	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	74		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	84		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	68		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	83		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	66		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	69		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	66		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	84		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	64		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	64		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	67		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	69		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	55		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	51		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	69		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	53		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	58		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	48		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	53		20-150

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/21/23 02:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	32.		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	4.1		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.4	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	13.		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	1180	J	ug/l			1
Unknown	14.4	J	ug/l			1
Unknown Benzene	265	J	ug/l			1
Unknown Naphthalene	16.6	J	ug/l			1
Unknown PAH	49.4	J	ug/l			1
Unknown Naphthalene	19.7	J	ug/l			1
Unknown	15.1	J	ug/l			1
Unknown	38.4	J	ug/l			1
Unknown Benzene	22.4	J	ug/l			1
Unknown Benzene	58.6	J	ug/l			1
Unknown Benzene	99.3	J	ug/l			1
Unknown	15.8	J	ug/l			1
Unknown Naphthalene	33.7	J	ug/l			1
Indane	453	NJ	ug/l			1
Unknown Benzene	33.9	J	ug/l			1
Unknown Benzene	45.4	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	78		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/21/23 16:15
Analyst: TPR

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 09:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	31.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/31/23 11:57
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	56		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 08/12/23 18:26
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	14.0		ng/l	5.74	0.918	1
Perfluoropentanoic Acid (PFPeA)	19.7		ng/l	2.87	0.767	1
Perfluorobutanesulfonic Acid (PFBS)	2.72		ng/l	1.43	0.480	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.74	1.50	1
Perfluorohexanoic Acid (PFHxA)	10.2		ng/l	1.43	0.423	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.43	0.251	1
Perfluoroheptanoic Acid (PFHpA)	3.80		ng/l	1.43	0.287	1
Perfluorohexanesulfonic Acid (PFHxS)	1.08	J	ng/l	1.43	0.344	1
Perfluorooctanoic Acid (PFOA)	5.23		ng/l	1.43	0.624	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.74	1.94	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.43	0.387	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.43	0.452	1
Perfluorooctanesulfonic Acid (PFOS)	2.22		ng/l	1.43	0.652	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.43	0.581	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.74	2.23	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.43	0.444	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.43	0.782	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.43	0.624	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.43	0.330	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.43	0.387	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.43	0.774	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.43	0.660	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.43	0.538	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.43	0.380	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.74	0.803	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.74	0.903	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.43	0.545	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.74	1.18	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.74	1.18	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.43	0.624	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.43	0.660	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.3	3.37	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.3	1.76	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.87	0.409	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.87	0.380	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.87	0.315	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.87	1.69	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.17	2.37	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	35.8	8.39	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	35.8	5.66	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	75		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	62		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	67		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	149		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	70		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	79		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	67		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	77		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	82		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	64		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	63		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	56		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	74		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	53		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	54		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	61		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	63		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	48		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	41		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	64		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	55		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	54		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	42		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	51		20-150

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/21/23 03:15
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds						
Total TIC Compounds	26.4	J	ug/l			1
Unknown	1.67	J	ug/l			1
Unknown Benzene	4.69	J	ug/l			1
Unknown	6.54	J	ug/l			1
Unknown Organic Acid	8.22	J	ug/l			1
Unknown Organic Acid	5.31	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	73		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 17:10
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.01	J	ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	**168**	Q	10-120
4-Terphenyl-d14	78		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/21/23 03:37
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	0.97	J	ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Tentatively Identified Compounds						
Total TIC Compounds	9.93	J	ug/l			1
Unknown Organic Acid	3.64	J	ug/l			1
Unknown	6.29	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	57		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 18:00
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	0.02	J	ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	**124**	Q	10-120
4-Terphenyl-d14	64		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/21/23 16:43
Analyst: TPR

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 09:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	134	30.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 08/12/23 18:39
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	7.31	1.17	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.65	0.977	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.83	0.612	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	7.31	1.91	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.83	0.539	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.83	0.320	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.83	0.365	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.438	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.83	0.795	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	7.31	2.47	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.493	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.575	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.83	0.831	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.740	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	7.31	2.84	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.83	0.566	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.996	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.795	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.420	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.83	0.493	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.986	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.840	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.685	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.83	0.484	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	7.31	1.02	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	7.31	1.15	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.83	0.694	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	7.31	1.51	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	7.31	1.51	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.83	0.795	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.83	0.840	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	18.3	4.29	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	18.3	2.24	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.65	0.521	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.65	0.484	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.65	0.402	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.65	2.16	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	9.13	3.01	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	45.7	10.7	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	45.7	7.21	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	96		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	95		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	75		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	82		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	96		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	96		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	84		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	92		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	84		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	83		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	80		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	84		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	103		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	98		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	104		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	99		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	102		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	93		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	73		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	76		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	84		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	74		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	87		20-150

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-07
Client ID: FIELD BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:30
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 08/12/23 18:51
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.06	0.969	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.03	0.810	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.51	0.507	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.06	1.58	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.51	0.447	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.51	0.265	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.51	0.303	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.51	0.364	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.51	0.659	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.06	2.04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.51	0.409	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.51	0.477	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.51	0.689	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.51	0.613	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.06	2.36	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.51	0.470	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.51	0.825	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.51	0.659	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.51	0.348	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.51	0.409	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.51	0.818	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.51	0.697	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.51	0.568	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.51	0.401	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.06	0.848	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.06	0.954	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.51	0.576	1

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-07
Client ID: FIELD BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:30
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.06	1.25	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.06	1.25	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.51	0.659	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.51	0.697	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.1	3.56	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.1	1.86	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.03	0.432	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.03	0.401	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.03	0.333	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.03	1.79	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.57	2.50	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.9	8.86	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.9	5.98	1

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-07
Client ID: FIELD BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:30
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	93		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	98		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	84		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	76		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	83		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	99		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	83		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	92		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	74		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	92		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	79		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	71		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	64		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	62		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	72		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	70		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	58		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	47		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	86		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	53		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	54		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	55		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	61		20-150

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 11:53
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-06 Batch: WG1805230-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.02	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	0.02	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/20/23 11:53
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-06 Batch: WG1805230-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	**158**	Q	10-120
4-Terphenyl-d14	83		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/20/23 10:22
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1805231-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/20/23 10:22
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1805231-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Tentatively Identified Compounds

Total TIC Compounds	20.0	J	ug/l
Unknown	2.14	J	ug/l
Unknown Organic Acid	4.76	J	ug/l
Unknown	6.47	J	ug/l
Unknown Organic Acid	4.00	J	ug/l
Unknown	2.58	J	ug/l

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/20/23 10:22
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 17:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1805231-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	72		41-149

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/21/23 06:21
Analyst: TPR

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 09:48

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270E-SIM - Mansfield Lab for sample(s): 02-04,06 Batch: WG1805421-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	39		15-110

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 08/12/23 16:57
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-04,06-07 Batch: WG1812013-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 08/12/23 16:57
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-04,06-07 Batch: WG1812013-1					
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 08/12/23 16:57
Analyst: SL

Extraction Method: EPA 1633
Extraction Date: 08/05/23 07:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 02-04,06-07 Batch: WG1812013-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	88		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	97		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	106		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	79		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	86		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	86		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	83		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	85		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	79		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	85		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	81		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	72		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	72		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	72		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	76		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	70		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	63		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	58		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	77		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	46		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	48		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	53		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	63		20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 Batch: WG1805230-2 WG1805230-3								
Acenaphthene	77		86		40-140	11		40
2-Chloronaphthalene	84		94		40-140	11		40
Fluoranthene	96		103		40-140	7		40
Hexachlorobutadiene	91		103		40-140	12		40
Naphthalene	72		82		40-140	13		40
Benzo(a)anthracene	95		104		40-140	9		40
Benzo(a)pyrene	98		106		40-140	8		40
Benzo(b)fluoranthene	92		97		40-140	5		40
Benzo(k)fluoranthene	94		103		40-140	9		40
Chrysene	86		95		40-140	10		40
Acenaphthylene	91		102		40-140	11		40
Anthracene	87		95		40-140	9		40
Benzo(ghi)perylene	92		96		40-140	4		40
Fluorene	86		95		40-140	10		40
Phenanthrene	78		85		40-140	9		40
Dibenzo(a,h)anthracene	91		95		40-140	4		40
Indeno(1,2,3-cd)pyrene	92		95		40-140	3		40
Pyrene	94		101		40-140	7		40
2-Methylnaphthalene	80		90		40-140	12		40
Pentachlorophenol	110		124		40-140	12		40
Hexachlorobenzene	94		103		40-140	9		40
Hexachloroethane	72		83		40-140	14		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 Batch: WG1805230-2 WG1805230-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		75		21-120
Phenol-d6	57		67		10-120
Nitrobenzene-d5	88		104		23-120
2-Fluorobiphenyl	79		89		15-120
2,4,6-Tribromophenol	**149**	Q	**170**	Q	10-120
4-Terphenyl-d14	79		86		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1805231-2 WG1805231-3								
Bis(2-chloroethyl)ether	73		76		40-140	4		30
3,3'-Dichlorobenzidine	71		72		40-140	1		30
2,4-Dinitrotoluene	82		77		48-143	6		30
2,6-Dinitrotoluene	76		83		40-140	9		30
4-Chlorophenyl phenyl ether	72		72		40-140	0		30
4-Bromophenyl phenyl ether	74		72		40-140	3		30
Bis(2-chloroisopropyl)ether	64		70		40-140	9		30
Bis(2-chloroethoxy)methane	78		84		40-140	7		30
Hexachlorocyclopentadiene	49		56		40-140	13		30
Isophorone	73		77		40-140	5		30
Nitrobenzene	80		83		40-140	4		30
NDPA/DPA	72		74		40-140	3		30
n-Nitrosodi-n-propylamine	80		82		29-132	2		30
Bis(2-ethylhexyl)phthalate	105		105		40-140	0		30
Butyl benzyl phthalate	97		90		40-140	7		30
Di-n-butylphthalate	86		87		40-140	1		30
Di-n-octylphthalate	99		96		40-140	3		30
Diethyl phthalate	83		82		40-140	1		30
Dimethyl phthalate	79		79		40-140	0		30
Biphenyl	64		73		40-140	13		30
4-Chloroaniline	84		83		40-140	1		30
2-Nitroaniline	83		86		52-143	4		30
3-Nitroaniline	75		80		25-145	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1805231-2 WG1805231-3								
4-Nitroaniline	85		77		51-143	10		30
Dibenzofuran	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	62		61		2-134	2		30
Acetophenone	67		68		39-129	1		30
2,4,6-Trichlorophenol	79		84		30-130	6		30
p-Chloro-m-cresol	88		91		23-97	3		30
2-Chlorophenol	75		80		27-123	6		30
2,4-Dichlorophenol	85		85		30-130	0		30
2,4-Dimethylphenol	80		91		30-130	13		30
2-Nitrophenol	75		85		30-130	13		30
4-Nitrophenol	**84**	Q	**85**	Q	10-80	1		30
2,4-Dinitrophenol	80		78		20-130	3		30
4,6-Dinitro-o-cresol	92		83		20-164	10		30
Phenol	54		56		12-110	4		30
2-Methylphenol	78		78		30-130	0		30
3-Methylphenol/4-Methylphenol	84		87		30-130	4		30
2,4,5-Trichlorophenol	94		90		30-130	4		30
Carbazole	83		80		55-144	4		30
Atrazine	92		85		40-140	8		30
Benzaldehyde	74		70		40-140	6		30
Caprolactam	37		35		10-130	6		30
2,3,4,6-Tetrachlorophenol	87		83		40-140	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1805231-2 WG1805231-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		65		21-120
Phenol-d6	53		53		10-120
Nitrobenzene-d5	72		78		23-120
2-Fluorobiphenyl	67		67		15-120
2,4,6-Tribromophenol	88		93		10-120
4-Terphenyl-d14	67		68		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270E-SIM - Mansfield Lab	Associated sample(s): 02-04,06		Batch: WG1805421-2 WG1805421-3					
1,4-Dioxane	130		128		40-140	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		34		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	108		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	114		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	104		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	90		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	92		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	112		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	110		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	112		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	92		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	105		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	115		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	95		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	105		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	98		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	126		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	101		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	110		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	105		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	96		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	105		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	115		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	98		-		40-150	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTrDA)	100		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	112		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	98		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	107		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	88		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	123		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	94		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	92		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	88		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	100		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	99		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	104		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	118		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	88		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	70		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	100		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	81		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	50		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-2 LOW LEVEL								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	89				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	74				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	82				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	81				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	84				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	74				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	80				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	98				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	83				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	76				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	76				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	71				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	62				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	70				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	70				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	64				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	66				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	57				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	64				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	48				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	52				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	51				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	60				20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-3								
Perfluorobutanoic Acid (PFBA)	101		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	114		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	107		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	125		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	108		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	99		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	105		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	86		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	96		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	98		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	103		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	100		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	93		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	108		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	114		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	101		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	101		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	106		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	104		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	103		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	115		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	106		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-3								
Perfluorotridecanoic Acid (PFTrDA)	109		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	117		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	101		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	115		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	95		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	122		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	116		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	113		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	101		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	107		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	100		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	97		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	93		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	106		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	72		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	92		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	94		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	84		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 Batch: WG1812013-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	72				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	76				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	61				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	64				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	76				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	75				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	67				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	70				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	62				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	62				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	63				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	64				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	60				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	53				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	63				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	64				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	53				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	56				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	46				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	62				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	45				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	50				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	45				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	51				20-150

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1805230-4 WG1805230-5 QC Sample: L2340590-02 Client ID: MW-2												
Acenaphthene	ND	18.2	13	72		14	77		40-140	7		40
2-Chloronaphthalene	ND	18.2	16	88		16	88		40-140	0		40
Fluoranthene	ND	18.2	14	77		16	88		40-140	13		40
Hexachlorobutadiene	ND	18.2	14	77		15	83		40-140	7		40
Naphthalene	0.06J	18.2	12	66		14	77		40-140	15		40
Benzo(a)anthracene	ND	18.2	13	72		14	77		40-140	7		40
Benzo(a)pyrene	ND	18.2	14	77		15	83		40-140	7		40
Benzo(b)fluoranthene	ND	18.2	14	77		15	83		40-140	7		40
Benzo(k)fluoranthene	ND	18.2	15	83		15	83		40-140	0		40
Chrysene	ND	18.2	13	72		14	77		40-140	7		40
Acenaphthylene	ND	18.2	14	77		16	88		40-140	13		40
Anthracene	0.02J	18.2	13	72		15	83		40-140	14		40
Benzo(ghi)perylene	ND	18.2	13	72		14	77		40-140	7		40
Fluorene	ND	18.2	14	77		15	83		40-140	7		40
Phenanthrene	0.02J	18.2	12	66		14	77		40-140	15		40
Dibenzo(a,h)anthracene	ND	18.2	13	72		14	77		40-140	7		40
Indeno(1,2,3-cd)pyrene	ND	18.2	14	77		13	72		40-140	7		40
Pyrene	0.03J	18.2	14	77		16	88		40-140	13		40
2-Methylnaphthalene	ND	18.2	14	77		15	83		40-140	7		40
Pentachlorophenol	ND	18.2	18	99		20	110		40-140	11		40
Hexachlorobenzene	ND	18.2	14	77		16	88		40-140	13		40
Hexachloroethane	ND	18.2	11	61		18	99		40-140	**48**	Q	40

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1805230-4 WG1805230-5 QC Sample: L2340590-02 Client ID: MW-2												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	95		97		10-120
2-Fluorobiphenyl	72		79		15-120
2-Fluorophenol	53		82		21-120
4-Terphenyl-d14	75		80		41-149
Nitrobenzene-d5	67		108		23-120
Phenol-d6	46		71		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1805231-4 WG1805231-5 QC Sample: L2340590-02 Client ID: MW-2												
Bis(2-chloroethyl)ether	ND	18.2	13	72		16	88		40-140	21		30
3,3'-Dichlorobenzidine	ND	18.2	ND	**0**	Q	ND	**0**	Q	40-140	NC		30
2,4-Dinitrotoluene	ND	18.2	14	77		17	94		48-143	19		30
2,6-Dinitrotoluene	ND	18.2	13	72		16	88		40-140	21		30
4-Chlorophenyl phenyl ether	ND	18.2	13	72		14	77		40-140	7		30
4-Bromophenyl phenyl ether	ND	18.2	13	72		16	88		40-140	21		30
Bis(2-chloroisopropyl)ether	ND	18.2	12	66		14	77		40-140	15		30
Bis(2-chloroethoxy)methane	ND	18.2	13	72		17	94		40-140	27		30
Hexachlorocyclopentadiene	ND	18.2	10.J	55		12.J	66		40-140	18		30
Isophorone	ND	18.2	14	77		18	99		40-140	25		30
Nitrobenzene	ND	18.2	15	83		19	100		40-140	24		30
NDPA/DPA	ND	18.2	13	72		16	88		40-140	21		30
n-Nitrosodi-n-propylamine	ND	18.2	15	83		18	99		29-132	18		30
Bis(2-ethylhexyl)phthalate	ND	18.2	18	99		22	120		40-140	20		30
Butyl benzyl phthalate	ND	18.2	16	88		20	110		40-140	22		30
Di-n-butylphthalate	ND	18.2	15	83		18	99		40-140	18		30
Di-n-octylphthalate	ND	18.2	18	99		22	120		40-140	20		30
Diethyl phthalate	ND	18.2	14	77		17	94		40-140	19		30
Dimethyl phthalate	ND	18.2	14	77		16	88		40-140	13		30
Biphenyl	ND	18.2	12	66		14	77		40-140	15		30
4-Chloroaniline	ND	18.2	7.2	40		14	77		40-140	**64**	Q	30
2-Nitroaniline	ND	18.2	15	83		18	99		52-143	18		30
3-Nitroaniline	ND	18.2	12	66		14	77		25-145	15		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1805231-4 WG1805231-5 QC Sample: L2340590-02 Client ID: MW-2												
4-Nitroaniline	ND	18.2	13	72		15	83		51-143	14		30
Dibenzofuran	ND	18.2	14	77		16	88		40-140	13		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	11	61		13	72		2-134	17		30
Acetophenone	ND	18.2	13	72		15	83		39-129	14		30
2,4,6-Trichlorophenol	ND	18.2	15	83		17	94		30-130	13		30
p-Chloro-m-cresol	ND	18.2	16	88		18	**99**	Q	23-97	12		30
2-Chlorophenol	ND	18.2	14	77		18	99		27-123	25		30
2,4-Dichlorophenol	ND	18.2	16	88		19	100		30-130	17		30
2,4-Dimethylphenol	ND	18.2	15	83		19	100		30-130	24		30
2-Nitrophenol	ND	18.2	15	83		18	99		30-130	18		30
4-Nitrophenol	ND	18.2	16	**88**	Q	19	**100**	Q	10-80	17		30
2,4-Dinitrophenol	ND	18.2	17.J	94		20	110		20-130	16		30
4,6-Dinitro-o-cresol	ND	18.2	16	88		18	99		20-164	12		30
Phenol	ND	18.2	10	55		13	72		12-110	26		30
2-Methylphenol	ND	18.2	14	77		19	100		30-130	30		30
3-Methylphenol/4-Methylphenol	ND	18.2	15	83		18	99		30-130	18		30
2,4,5-Trichlorophenol	ND	18.2	16	88		18	99		30-130	12		30
Carbazole	ND	18.2	14	77		17	94		55-144	19		30
Atrazine	ND	18.2	16	88		20	110		40-140	22		30
Benzaldehyde	ND	18.2	13	72		16	88		40-140	21		30
Caprolactam	ND	18.2	7.3J	40		8.7J	48		10-130	18		30
2,3,4,6-Tetrachlorophenol	ND	18.2	16	88		18	99		40-140	12		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1805231-4 WG1805231-5 QC Sample: L2340590-02 Client ID: MW-2												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	87		104		10-120
2-Fluorobiphenyl	65		77		15-120
2-Fluorophenol	67		77		21-120
4-Terphenyl-d14	60		75		41-149
Nitrobenzene-d5	73		91		23-120
Phenol-d6	57		67		10-120

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270E-SIM - Mansfield Lab Associated sample(s): 02-04,06 QC Batch ID: WG1805421-4 WG1805421-5 QC Sample: L2340590-02 Client ID: MW-2												
1,4-Dioxane	ND	4630	5800	125		5970	124		40-140	3		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		35		15-110

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 QC Batch ID: WG1812013-4 WG1812013-5 QC Sample: L2340590-02 Client ID: MW-2												
Perfluorobutanoic Acid (PFBA)	16.4	71.5	94.4	109		100	105		40-150	6		30
Perfluoropentanoic Acid (PFPeA)	23.4	35.8	55.6	90		56.9	84		40-150	2		30
Perfluorobutanesulfonic Acid (PFBS)	17.4	15.8	35.1	112		35.3	102		40-150	1		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	67	64.0	95		76.1	102		40-150	17		30
Perfluorohexanoic Acid (PFHxA)	16.6	17.9	33.8	96		37.5	105		40-150	10		30
Perfluoropentanesulfonic Acid (PFPeS)	0.508J	16.8	17.6	102		19.4	101		40-150	10		30
Perfluoroheptanoic Acid (PFHpA)	6.53	17.9	22.7	90		24.0	88		40-150	6		30
Perfluorohexanesulfonic Acid (PFHxS)	1.02J	16.3	18.7	108		20.0	105		40-150	7		30
Perfluorooctanoic Acid (PFOA)	14.4	17.9	32.2	100		33.3	95		40-150	3		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	67.9	68.2	100		75.1	100		40-150	10		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	17	22.5	132		26.4	140		40-150	16		30
Perfluorononanoic Acid (PFNA)	0.581J	17.9	23.4	128		22.5	111		40-150	4		30
Perfluorooctanesulfonic Acid (PFOS)	2.40	16.6	19.2	101		20.1	96		40-150	5		30
Perfluorodecanoic Acid (PFDA)	ND	17.9	19.6	110		24.2	122		40-150	21		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	68.7	92.5	135		101	133		40-150	9		30
Perfluorononanesulfonic Acid (PFNS)	ND	17.2	14.7	86		16.8	88		40-150	13		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	17.9	25.0	140		28.4	143		40-150	13		30
Perfluoroundecanoic Acid (PFUnA)	ND	17.9	20.3	114		22.8	115		40-150	12		30
Perfluorodecanesulfonic Acid (PFDS)	ND	17.2	16.9	98		19.2	100		40-150	13		30
Perfluorooctanesulfonamide (PFOSA)	ND	17.9	20.7	116		23.4	118		40-150	12		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	17.9	21.0	117		24.9	126		40-150	17		30
Perfluorododecanoic Acid (PFDoA)	ND	17.9	19.2	107		22.3	113		40-150	15		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 QC Batch ID: WG1812013-4 WG1812013-5 QC Sample: L2340590-02 Client ID: MW-2												
Perfluorotridecanoic Acid (PFTrDA)	ND	17.9	18.8	105		21.7	110		40-150	14		30
Perfluorotetradecanoic Acid (PFTeDA)	ND	17.9	21.7	121		27.6	139		40-150	24		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	71.5	80.0	112		91.0	115		40-150	13		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	67.6	87.1	129		100	134		40-150	14		30
Perfluorododecanesulfonic Acid (PFDoS)	ND	17.3	15.7	90		18.5	96		40-150	16		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	66.9	66.6	100		76.3	103		40-150	14		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	67.6	57.0	84		64.6	86		40-150	13		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND	17.9	18.6	104		24.6	124		40-150	28		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND	17.9	19.2	107		22.9	116		40-150	18		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND	179	192	107		231	117		40-150	18		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND	179	173	97		223	113		40-150	25		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	35.8	35.3	99		39.1	99		40-150	10		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	35.8	36.4	102		39.6	100		40-150	8		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	31.8	41.8	131		46.0	130		40-150	10		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	35.8	21.1	59		24.5	62		40-150	15		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND	89.4	95.6	107		103	104		40-150	7		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND	447	586	131		669	135		40-150	13		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND	447	920	**206**	Q	1010	**204**	Q	40-150	9		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 QC Batch ID: WG1812013-4 WG1812013-5 QC Sample: L2340590-02 Client ID: MW-2

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	**156**	Q	**160**	Q	20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	**160**	Q	**165**	Q	20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	**186**	Q	**206**	Q	20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	51		52		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	91		95		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	54		57		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	56		52		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	89		97		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	49		49		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	74		78		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	66		69		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	73		76		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	63		73		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	59		61		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	68		70		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	72		76		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	102		110		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	61		66		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	50		46		20-150
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	81		85		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	60		65		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	77		84		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	63		70		20-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 02-04,06-07 QC Batch ID: WG1812013-4 WG1812013-5 QC Sample: L2340590-02 Client ID: MW-2												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	94		97		20-150

PCBS

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/26/23 18:06
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 04:54
Cleanup Method: EPA 3665A
Cleanup Date: 07/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/26/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/27/23 17:50
Analyst: AD

Extraction Method: EPA 3510C
Extraction Date: 07/27/23 01:57
Cleanup Method: EPA 3665A
Cleanup Date: 07/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/27/23 18:17
Analyst: AD

Extraction Method: EPA 3510C
Extraction Date: 07/27/23 01:57
Cleanup Method: EPA 3665A
Cleanup Date: 07/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/27/23 18:26
Analyst: AD

Extraction Method: EPA 3510C
Extraction Date: 07/27/23 01:57
Cleanup Method: EPA 3665A
Cleanup Date: 07/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/27/23 18:35
Analyst: AD

Extraction Method: EPA 3510C
Extraction Date: 07/27/23 01:57
Cleanup Method: EPA 3665A
Cleanup Date: 07/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/27/23 18:43
Analyst: AD

Extraction Method: EPA 3510C
Extraction Date: 07/27/23 01:57
Cleanup Method: EPA 3665A
Cleanup Date: 07/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/26/23 17:23
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 04:54
Cleanup Method: EPA 3665A
Cleanup Date: 07/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 07/26/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-06 Batch: WG1807726-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	76		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG1807726-2 WG1807726-3									
Aroclor 1016	51		54		40-140	5		50	A
Aroclor 1260	48		53		40-140	9		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		56		30-150	A
Decachlorobiphenyl	59		60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		54		30-150	B
Decachlorobiphenyl	65		68		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1807726-4 WG1807726-5 QC Sample: L2340590-02 Client ID: MW-2													
Aroclor 1016	ND	1.78	1.56	87		1.51	85		40-140	3		50	A
Aroclor 1260	ND	1.78	1.31	73		1.29	72		40-140	2		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		84		30-150	A
Decachlorobiphenyl	88		86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		74		30-150	B
Decachlorobiphenyl	80		80		30-150	B

PESTICIDES

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/22/23 18:23
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 20:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 19:29
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	94		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/20/23 19:54
Analyst: JAG

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 09:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 19:47
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	109		30-150	A
DCAA	100		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/20/23 20:28
Analyst: JAG

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 05:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 20:42
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	102		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/20/23 20:39
Analyst: JAG

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 09:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 21:01
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	90		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/20/23 20:51
Analyst: JAG

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 09:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 21:19
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	93		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/20/23 21:02
Analyst: JAG

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 09:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 389 MANHATTAN AVE
Lab Number: L2340590
Project Number: B0595-021-001-003-00
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY

Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 07/18/23 21:37
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	92		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/18/23 18:15
Analyst: AKM

Extraction Method: EPA 8151A
Extraction Date: 07/16/23 18:28

Methylation Date: 07/18/23 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-06 Batch: WG1803859-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	98		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/20/23 18:45
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 05:20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-06 Batch: WG1804850-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/20/23 18:45
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 07/19/23 05:20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-06 Batch: WG1804850-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/22/23 17:50
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 20:01

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1805755-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/22/23 17:50
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 20:01

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1805755-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	67		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG1803859-2 WG1803859-3									
2,4-D	99		112		30-150	12		25	A
2,4,5-T	98		110		30-150	12		25	A
2,4,5-TP (Silvex)	96		108		30-150	12		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	102		112		30-150	A
DCAA	106		114		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06 Batch: WG1804850-2 WG1804850-3									
Delta-BHC	80		76		30-150	6		20	A
Lindane	72		68		30-150	6		20	A
Alpha-BHC	73		70		30-150	5		20	A
Beta-BHC	81		77		30-150	5		20	A
Heptachlor	71		69		30-150	4		20	A
Aldrin	71		68		30-150	5		20	A
Heptachlor epoxide	71		67		30-150	5		20	A
Endrin	73		69		30-150	6		20	A
Endrin aldehyde	68		65		30-150	5		20	A
Endrin ketone	81		76		30-150	7		20	A
Dieldrin	77		73		30-150	5		20	A
4,4'-DDE	72		68		30-150	6		20	A
4,4'-DDD	81		77		30-150	5		20	A
4,4'-DDT	83		80		30-150	4		20	A
Endosulfan I	71		67		30-150	6		20	A
Endosulfan II	76		72		30-150	5		20	A
Endosulfan sulfate	75		71		30-150	5		20	A
Methoxychlor	80		76		30-150	5		20	A
cis-Chlordane	77		70		30-150	10		20	A
trans-Chlordane	78		73		30-150	6		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06 Batch: WG1804850-2 WG1804850-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		65		30-150	A
Decachlorobiphenyl	93		85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		64		30-150	B
Decachlorobiphenyl	89		81		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1805755-2 WG1805755-3									
Delta-BHC	69		67		30-150	3		20	A
Lindane	73		66		30-150	10		20	A
Alpha-BHC	70		64		30-150	8		20	A
Beta-BHC	78		71		30-150	9		20	A
Heptachlor	69		68		30-150	2		20	A
Aldrin	61		59		30-150	2		20	A
Heptachlor epoxide	64		64		30-150	0		20	A
Endrin	66		65		30-150	0		20	A
Endrin aldehyde	57		63		30-150	9		20	A
Endrin ketone	59		72		30-150	20		20	A
Dieldrin	71		69		30-150	4		20	A
4,4'-DDE	60		61		30-150	2		20	A
4,4'-DDD	69		70		30-150	0		20	A
4,4'-DDT	78		73		30-150	6		20	A
Endosulfan I	74		64		30-150	15		20	A
Endosulfan II	65		69		30-150	6		20	A
Endosulfan sulfate	64		64		30-150	0		20	A
Methoxychlor	95		88		30-150	7		20	A
cis-Chlordane	63		63		30-150	0		20	A
trans-Chlordane	83		83		30-150	1		20	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1805755-2 WG1805755-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		62		30-150	A
Decachlorobiphenyl	72		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		58		30-150	B
Decachlorobiphenyl	59		69		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1803859-4 WG1803859-5 QC Sample: L2340590-02 Client ID: MW-2													
2,4-D	ND	5	5.61J	112		5.66J	113		30-150	1		25	A
2,4,5-T	ND	5	4.85	97		4.82	96		30-150	1		25	A
2,4,5-TP (Silvex)	ND	5	4.80	96		4.83	97		30-150	1		25	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	107		108		30-150	A
DCAA	120		119		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06 QC Batch ID: WG1804850-4 WG1804850-5 QC Sample: L2340590-02 Client ID: MW-2													
Delta-BHC	ND	0.357	0.246	69		0.260	73		30-150	6		30	A
Lindane	ND	0.357	0.217	61		0.232	65		30-150	7		30	A
Alpha-BHC	ND	0.357	0.232	65		0.250	70		30-150	7		30	A
Beta-BHC	ND	0.357	0.242	68		0.258	72		30-150	6		30	A
Heptachlor	ND	0.357	0.218	61		0.233	65		30-150	7		30	A
Aldrin	ND	0.357	0.211	59		0.228	64		30-150	8		30	A
Heptachlor epoxide	ND	0.357	0.207	58		0.225	63		30-150	8		30	A
Endrin	ND	0.357	0.213	60		0.232	65		30-150	9		30	A
Endrin aldehyde	ND	0.357	0.192	54		0.208	58		30-150	8		30	A
Endrin ketone	ND	0.357	0.221	62		0.244	68		30-150	10		30	A
Dieldrin	ND	0.357	0.228	64		0.245	69		30-150	7		30	A
4,4'-DDE	ND	0.357	0.205	57		0.226	63		30-150	10		30	A
4,4'-DDD	ND	0.357	0.226	63		0.249	70		30-150	10		30	A
4,4'-DDT	ND	0.357	0.234	66		0.260	73		30-150	11		30	A
Endosulfan I	ND	0.357	0.207	58		0.225	63		30-150	8		30	A
Endosulfan II	ND	0.357	0.217	61		0.237	66		30-150	9		30	A
Endosulfan sulfate	ND	0.357	0.206	58		0.228	64		30-150	10		30	A
Methoxychlor	ND	0.357	0.216	60		0.241	68		30-150	11		30	A
cis-Chlordane	ND	0.357	0.213	60		0.233	65		30-150	9		30	A
trans-Chlordane	ND	0.357	0.233	65		0.252	71		30-150	8		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-06 QC Batch ID: WG1804850-4 WG1804850-5 QC Sample: L2340590-02 Client ID: MW-2												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		63		30-150	A
Decachlorobiphenyl	65		72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		59		30-150	B
Decachlorobiphenyl	62		68		30-150	B

METALS

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water

Date Collected: 07/14/23 08:24
Date Received: 07/14/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00492	J	mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00071		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Barium, Total	0.5433		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Calcium, Total	212.		mg/l	0.100	0.0394	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00038	J	mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Magnesium, Total	38.9		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Manganese, Total	0.03283		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/08/23 23:58	EPA 7470A	1,7470A	MJR
Nickel, Total	0.00101	J	mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Potassium, Total	3.36		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Sodium, Total	354.		mg/l	0.100	0.0293	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 22:17	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water

Date Collected: 07/13/23 09:33
Date Received: 07/14/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00380	J	mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00056		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Barium, Total	0.05607		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Cadmium, Total	0.00034		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Calcium, Total	500.		mg/l	1.00	0.394	10	07/19/23 14:06	07/31/23 21:43	EPA 3005A	1,6020B	WKP
Chromium, Total	0.00034	J	mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00520		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Copper, Total	0.00448		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Iron, Total	0.0362	J	mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Magnesium, Total	54.0		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Manganese, Total	1.205		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/08/23 12:30	EPA 7470A	1,7470A	MJR
Nickel, Total	0.02790		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Potassium, Total	10.1		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Sodium, Total	268.		mg/l	0.100	0.0293	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Thallium, Total	0.00033	J	mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP
Zinc, Total	0.2610		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 20:42	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-03
Client ID: MW-3
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water

Date Collected: 07/13/23 10:42
Date Received: 07/14/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00566	J	mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Antimony, Total	0.00045	J	mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00036	J	mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Barium, Total	0.1053		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Calcium, Total	188.		mg/l	0.100	0.0394	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00056		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Copper, Total	0.00113		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Magnesium, Total	33.1		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Manganese, Total	0.00952		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/09/23 00:01	EPA 7470A	1,7470A	MJR
Nickel, Total	0.00540		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Potassium, Total	5.26		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Sodium, Total	594.		mg/l	1.00	0.293	10	07/19/23 14:06	08/01/23 13:30	EPA 3005A	1,6020B	WKP
Thallium, Total	0.00018	J	mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 22:22	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-04
Client ID: BLIND DUP
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water

Date Collected: 07/13/23 12:00
Date Received: 07/14/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00596	J	mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Antimony, Total	0.00045	J	mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00036	J	mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Barium, Total	0.1046		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Calcium, Total	196.		mg/l	0.100	0.0394	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00053		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Copper, Total	0.00125		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Magnesium, Total	34.7		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Manganese, Total	0.00968		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/09/23 00:04	EPA 7470A	1,7470A	MJR
Nickel, Total	0.00610		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Potassium, Total	5.64		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Sodium, Total	605.		mg/l	1.00	0.293	10	07/19/23 14:06	08/01/23 13:35	EPA 3005A	1,6020B	WKP
Thallium, Total	0.00019	J	mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 22:26	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-05
Client ID: MW-4
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water

Date Collected: 07/13/23 15:49
Date Received: 07/14/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0169		mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00199		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Barium, Total	0.03469		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Calcium, Total	477.		mg/l	1.00	0.394	10	07/19/23 14:06	08/01/23 13:39	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.01670		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Iron, Total	14.0		mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Magnesium, Total	47.8		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Manganese, Total	1.280		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/09/23 00:08	EPA 7470A	1,7470A	MJR
Nickel, Total	0.01179		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Potassium, Total	10.1		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Sodium, Total	586.		mg/l	1.00	0.293	10	07/19/23 14:06	08/01/23 13:39	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP
Zinc, Total	0.00356	J	mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 22:31	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

SAMPLE RESULTS

Lab ID: L2340590-06
Client ID: EQUIPMENT BLANK
Sample Location: BUFFALO, NY
Date Collected: 07/13/23 07:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Barium, Total	ND		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Calcium, Total	0.102		mg/l	0.100	0.0394	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Iron, Total	0.0218	J	mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Manganese, Total	ND		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/09/23 00:18	EPA 7470A	1,7470A	MJR
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Sodium, Total	0.0768	J	mg/l	0.100	0.0293	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 22:35	EPA 3005A	1,6020B	WKP

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-06 Batch: WG1804225-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Barium, Total	ND		mg/l	0.00050	0.00017	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Manganese, Total	ND		mg/l	0.00100	0.00044	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/19/23 14:06	07/31/23 20:10	1,6020B	WKP

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-06 Batch: WG1804226-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/19/23 12:39	08/08/23 12:24	1,7470A	MJR

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00
Lab Number: L2340590
Report Date: 08/16/23

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG1804225-2								
Aluminum, Total	106		-		80-120	-		
Antimony, Total	96		-		80-120	-		
Arsenic, Total	108		-		80-120	-		
Barium, Total	107		-		80-120	-		
Beryllium, Total	104		-		80-120	-		
Cadmium, Total	107		-		80-120	-		
Calcium, Total	101		-		80-120	-		
Chromium, Total	102		-		80-120	-		
Cobalt, Total	104		-		80-120	-		
Copper, Total	105		-		80-120	-		
Iron, Total	107		-		80-120	-		
Lead, Total	105		-		80-120	-		
Magnesium, Total	107		-		80-120	-		
Manganese, Total	103		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Potassium, Total	106		-		80-120	-		
Selenium, Total	101		-		80-120	-		
Silver, Total	106		-		80-120	-		
Sodium, Total	107		-		80-120	-		
Thallium, Total	108		-		80-120	-		
Vanadium, Total	101		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: B0595-021-001-003-00

Lab Number: L2340590

Report Date: 08/16/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG1804225-2					
Zinc, Total	104	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG1804226-2					
Mercury, Total	103	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1804225-3 WG1804225-4 QC Sample: L2340590-02 Client ID: MW-2												
Aluminum, Total	0.00380J	2	1.95	98		2.06	103		75-125	5		20
Antimony, Total	ND	0.5	0.5228	104		0.5043	101		75-125	4		20
Arsenic, Total	0.00056	0.12	0.1281	106		0.1313	109		75-125	2		20
Barium, Total	0.05607	2	2.126	103		2.114	103		75-125	1		20
Beryllium, Total	ND	0.05	0.05071	101		0.05155	103		75-125	2		20
Cadmium, Total	0.00034	0.053	0.05607	105		0.05530	104		75-125	1		20
Calcium, Total	500.	10	510	100		513	**130**	Q	75-125	1		20
Chromium, Total	0.00034J	0.2	0.2016	101		0.2062	103		75-125	2		20
Cobalt, Total	0.00520	0.5	0.4949	98		0.5167	102		75-125	4		20
Copper, Total	0.00448	0.25	0.2471	97		0.2584	102		75-125	4		20
Iron, Total	0.0362J	1	1.04	104		1.07	107		75-125	3		20
Lead, Total	ND	0.53	0.5584	105		0.5774	109		75-125	3		20
Magnesium, Total	54.0	10	61.1	**71**	Q	63.6	96		75-125	4		20
Manganese, Total	1.205	0.5	1.601	79		1.673	94		75-125	4		20
Nickel, Total	0.02790	0.5	0.5203	98		0.5358	102		75-125	3		20
Potassium, Total	10.1	10	18.4	83		18.8	87		75-125	2		20
Selenium, Total	ND	0.12	0.124	103		0.116	97		75-125	7		20
Silver, Total	ND	0.05	0.05141	103		0.05318	106		75-125	3		20
Sodium, Total	268.	10	266	**0**	Q	276	80		75-125	4		20
Thallium, Total	0.00033J	0.12	0.1295	108		0.1342	112		75-125	4		20
Vanadium, Total	ND	0.5	0.4924	98		0.5190	104		75-125	5		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1804225-3 WG1804225-4 QC Sample: L2340590-02 Client ID: MW-2									
Zinc, Total	0.2610	0.5	0.7785	104	0.7858	105	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1804226-3 WG1804226-4 QC Sample: L2340590-02 Client ID: MW-2									
Mercury, Total	ND	0.005	0.00509	102	0.00496	99	75-125	3	20

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-00

Lab Serial Dilution Analysis
Batch Quality Control

Lab Number: L2340590
Report Date: 08/16/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1804225-6 QC Sample: L2340590-02 Client ID: MW-2						
Barium, Total	0.05607	0.05598	mg/l	0		20
Magnesium, Total	54.0	50.2	mg/l	7		20
Manganese, Total	1.205	1.115	mg/l	7		20
Potassium, Total	10.1	8.50	mg/l	16		20
Sodium, Total	268.	247.	mg/l	8		20
Zinc, Total	0.2610	0.2854	mg/l	9		20
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1804225-6 QC Sample: L2340590-02 Client ID: MW-2						
Calcium, Total	500.	505.	mg/l	1		20

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent
D	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-01A	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-01B	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-01C	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-01D	Plastic 250ml HNO3 preserved	C	<2	<2	5.8	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2340590-01E	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8081(7)
L2340590-01F	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8081(7)
L2340590-01G	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8082-LVI(365)
L2340590-01H	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8082-LVI(365)
L2340590-01K	Amber 250ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-01L	Amber 250ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-01M	Amber 1000ml unpreserved	C	7	7	5.8	Y	Absent		HERB-APA(7)
L2340590-01N	Amber 1000ml unpreserved	C	7	7	5.8	Y	Absent		HERB-APA(7)
L2340590-02A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-02A1	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)
L2340590-02A2	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-02B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-02B1	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)
L2340590-02B2	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)
L2340590-02C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-02C1	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)
L2340590-02C2	Vial HCl preserved	B	NA		5.4	Y	Absent		NYTCL-8260-R2(14)
L2340590-02D	Plastic 250ml HNO3 preserved	A	<2	<2	4.3	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2340590-02D1	Plastic 250ml HNO3 preserved	B	<2	<2	5.4	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2340590-02D2	Plastic 250ml HNO3 preserved	B	<2	<2	5.4	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2340590-02E	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2340590-02E1	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2340590-02E2	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2340590-02F	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2340590-02F1	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2340590-02F2	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2340590-02G	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-02G1	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2340590-02G2	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2340590-02H	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)
L2340590-02H1	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2340590-02H2	Amber 120ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2340590-02I	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02I1	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02I2	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02J	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02J1	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02J2	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-02K	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02K1	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02K2	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02L	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02L1	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02L2	Amber 250ml unpreserved	B	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-02M	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		HERB-APA(7)
L2340590-02M1	Amber 1000ml unpreserved	B	7	7	5.4	Y	Absent		HERB-APA(7)
L2340590-02M2	Amber 1000ml unpreserved	B	7	7	5.4	Y	Absent		HERB-APA(7)
L2340590-02N	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		HERB-APA(7)
L2340590-02N1	Amber 1000ml unpreserved	B	7	7	5.4	Y	Absent		HERB-APA(7)
L2340590-02N2	Amber 1000ml unpreserved	B	7	7	5.4	Y	Absent		HERB-APA(7)
L2340590-02O	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-02O1	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)
L2340590-02O2	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)
L2340590-02P	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-02P1	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-02P2	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)
L2340590-02Q	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-02Q1	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)
L2340590-02Q2	Plastic 500ml unpreserved	B	NA		5.4	Y	Absent		A2-1633-DRAFT(28)
L2340590-03A	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)
L2340590-03B	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)
L2340590-03C	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)
L2340590-03D	Plastic 250ml HNO3 preserved	D	<2	<2	5.2	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2340590-03E	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2340590-03F	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2340590-03G	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2340590-03H	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2340590-03I	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-03J	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-03K	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-03L	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-03M	Amber 1000ml unpreserved	D	7	7	5.2	Y	Absent		HERB-APA(7)
L2340590-03N	Amber 1000ml unpreserved	D	7	7	5.2	Y	Absent		HERB-APA(7)
L2340590-03O	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-03P	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-03Q	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-04A	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)
L2340590-04B	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)
L2340590-04C	Vial HCl preserved	D	NA		5.2	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-04D	Plastic 250ml HNO3 preserved	D	<2	<2	5.2	Y	Absent		FE-6020T(180),TL-6020T(180),BA-6020T(180),SE-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),CO-6020T(180)
L2340590-04E	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2340590-04F	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2340590-04G	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2340590-04H	Amber 120ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2340590-04I	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-04J	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-04K	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-04L	Amber 250ml unpreserved	D	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-04M	Amber 1000ml unpreserved	D	7	7	5.2	Y	Absent		HERB-APA(7)
L2340590-04N	Amber 1000ml unpreserved	D	7	7	5.2	Y	Absent		HERB-APA(7)
L2340590-04O	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-04P	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-04Q	Plastic 500ml unpreserved	D	NA		5.2	Y	Absent		A2-1633-DRAFT(28)
L2340590-05A	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-05B	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-05C	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-05D	Plastic 250ml HNO3 preserved	C	<2	<2	5.8	Y	Absent		BA-6020T(180),TL-6020T(180),SE-6020T(180),FE-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),HG-T(28),AL-6020T(180),AG-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2340590-05E	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8081(7)
L2340590-05F	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8081(7)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-05G	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8082-LVI(365)
L2340590-05H	Amber 120ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8082-LVI(365)
L2340590-05K	Amber 250ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-05L	Amber 250ml unpreserved	C	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-05M	Amber 1000ml unpreserved	C	7	7	5.8	Y	Absent		HERB-APA(7)
L2340590-05N	Amber 1000ml unpreserved	C	7	7	5.8	Y	Absent		HERB-APA(7)
L2340590-06A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-06B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-06C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2340590-06D	Plastic 250ml HNO3 preserved	A	<2	<2	4.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),K-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L2340590-06E	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2340590-06F	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2340590-06G	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)
L2340590-06H	Amber 120ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)
L2340590-06I	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-06J	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2340590-06K	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-06L	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2340590-06M	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		HERB-APA(7)
L2340590-06N	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		HERB-APA(7)
L2340590-06O	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-06P	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-06Q	Plastic 500ml unpreserved	A	NA		4.3	Y	Absent		A2-1633-DRAFT(28)
L2340590-07A	Plastic 500ml unpreserved	C	NA		5.8	Y	Absent		A2-1633-DRAFT(28)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340590-07B	Plastic 500ml unpreserved	C	NA		5.8	Y	Absent		A2-1633-DRAFT(28)
L2340590-07C	Plastic 500ml unpreserved	C	NA		5.8	Y	Absent		A2-1633-DRAFT(28)
L2340590-08A	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)
L2340590-08B	Vial HCl preserved	C	NA		5.8	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: B0595-021-001-003-00

Lab Number: L2340590
Report Date: 08/16/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
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

Project Name: 389 MANHATTAN AVE
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PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

Data Qualifiers

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

REFERENCES

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

144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193
Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 7/15/23

ALPHA Job #: L2340590

Client Information
Client: Benchmark Env
Address: 2558 Hamburg Turnpike
Lackawanna NY 14218
Phone: (716) 828-8358
Fax:
Email: TBehrendt@BMTK.com

Project Information
Project Name: 389 Manhattan Ave
Project Location: Buffalo NY
Project #: B[illegible] 0595-021-001-003-003
(Use Project name as Project #)
Project Manager: Chris Boron
ALPHAQuote #:

Turn-Around Time
Standard: X — Due Date:
Rush (only if pre approved): — # of Days:

Deliverables
ASP-A — ASP-B: X
EQuIS (1 File) — EQuIS (4 File): X
Other

Billing Information
Same as Client Info
PO #

Regulatory Requirement
NY TOGS — NY Part 375
AWQ Standards — NY CP-51
NY Restricted Use — Other
NY Unrestricted Use
NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
NJ — NY
Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

CAT B

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP-51 ETICS & 326D	TCL+ TICS SVOC	TAL METALS	PCBs	Rest / Herb	1,4 Dioxane SIM	PFAS 1633		Sample Specific Comments	Total Bottle
40590-01	MW-1	7/14/23	824	Water	TAB	X	X	X	X	X					12
02	MW-2 (MS/MSD)	7/13/23	933			X	X	X	X	X	X	X			51
03	MW-3		1042			X	X	X	X	X	X	X			17
04	Blind Dup		1200			X	X	X	X	X	X	X			17
05	MW-4		1549			X	X	X	X	X					12
06	Equipment Blank		715			X	X	X	X	X	X	X			17
07	Field Blank		730									X			3
08	Trip Blank					X									2

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V	A	P	A	A	A	P	
Preservative	B	A	C	A	A	A	A	

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7/14/23 1029	[signature] AAL	7/14 1520
[signature] AAL	7/14 1514	[signature]	7/15/23 0040

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2347875
Client:	Roux Env. Eng. & Geology, DPC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	389 MANHATTAN AVE.
Project Number:	B0595-021-001-003
Report Date:	08/25/23

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

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110) , NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2347875-01	SV-1	SOIL_VAPOR	BUFFALO, NY	08/17/23 14:03	08/17/23
L2347875-02	SV-2	SOIL_VAPOR	BUFFALO, NY	08/17/23 15:16	08/17/23
L2347875-03	SV-3	SOIL_VAPOR	BUFFALO, NY	08/17/23 14:38	08/17/23
L2347875-04	OA-1	AIR	BUFFALO, NY	08/17/23 14:33	08/17/23

Project Name:	389 MANHATTAN AVE.	**Lab Number:**	L2347875
Project Number:	B0595-021-001-003	**Report Date:**	08/25/23

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

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

Soil/sediments, 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.

HOLD POLICY - For samples submitted on hold, Alpha'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 Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	389 MANHATTAN AVE.	**Lab Number:**	L2347875
Project Number:	B0595-021-001-003	**Report Date:**	08/25/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on August 11, 2023. The canister certification results are provided as an addendum.

L2347875-01: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2347875-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2347875-02D2: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2347875-02D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2347875-02D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2347875-03: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

Case Narrative (continued)

L2347875-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 08/25/23

AIR

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-01
Client ID: SV-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:03
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 01:22
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.451	0.200	--	2.23	0.989	--		1
Chloromethane	0.281	0.200	--	0.580	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.839	0.200	--	1.86	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	32.9	5.00	--	62.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	366	1.00	--	869	2.38	--		1
Trichlorofluoromethane	0.239	0.200	--	1.34	1.12	--		1
Isopropanol	3.44	0.500	--	8.46	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	42.5	0.500	--	129	1.52	--		1
Methylene chloride	0.656	0.500	--	2.28	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	31.2	0.200	--	97.2	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	30.2	0.500	--	89.1	1.47	--		1
cis-1,2-Dichloroethene	0.295	0.200	--	1.17	0.793	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-01
Client ID: SV-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:03
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.677	0.200	--	3.31	0.977	--		1
Tetrahydrofuran	0.831	0.500	--	2.45	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	66.8	0.200	--	235	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	22.0	0.200	--	70.3	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	111	0.200	--	382	0.688	--	E	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.304	0.200	--	1.63	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	118	0.200	--	484	0.820	--	E	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.803	0.500	--	3.29	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	38.8	0.200	--	146	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.208	0.200	--	1.41	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.75	0.200	--	16.3	0.869	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-01
Client ID: SV-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:03
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.6	0.400	--	46.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.204	0.200	--	0.869	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.28	0.200	--	14.2	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.218	0.200	--	1.07	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	82		60-140
Bromochloromethane	73		60-140
chlorobenzene-d5	85		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-01 D
Client ID: SV-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:03
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 07:28
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Cyclohexane	106	0.500	--	365	1.72	--		2.5
Heptane	139	0.500	--	570	2.05	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	78		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	71		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-02 D
Client ID: SV-2
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 15:16
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 01:59
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.909	--	ND	4.49	--		4.545
Chloromethane	ND	0.909	--	ND	1.88	--		4.545
Freon-114	ND	0.909	--	ND	6.35	--		4.545
Vinyl chloride	ND	0.909	--	ND	2.32	--		4.545
1,3-Butadiene	34.7	0.909	--	76.8	2.01	--		4.545
Bromomethane	ND	0.909	--	ND	3.53	--		4.545
Chloroethane	ND	0.909	--	ND	2.40	--		4.545
Ethanol	71.7	22.7	--	135	42.8	--		4.545
Vinyl bromide	ND	0.909	--	ND	3.97	--		4.545
Acetone	703	4.54	--	1670	10.8	--		4.545
Trichlorofluoromethane	ND	0.909	--	ND	5.11	--		4.545
Isopropanol	9.57	2.27	--	23.5	5.58	--		4.545
1,1-Dichloroethene	ND	0.909	--	ND	3.60	--		4.545
Tertiary butyl Alcohol	75.8	2.27	--	230	6.88	--		4.545
Methylene chloride	ND	2.27	--	ND	7.89	--		4.545
3-Chloropropene	ND	0.909	--	ND	2.85	--		4.545
Carbon disulfide	237	0.909	--	738	2.83	--		4.545
Freon-113	ND	0.909	--	ND	6.97	--		4.545
trans-1,2-Dichloroethene	ND	0.909	--	ND	3.60	--		4.545
1,1-Dichloroethane	ND	0.909	--	ND	3.68	--		4.545
Methyl tert butyl ether	ND	0.909	--	ND	3.28	--		4.545
2-Butanone	66.0	2.27	--	195	6.69	--		4.545
cis-1,2-Dichloroethene	ND	0.909	--	ND	3.60	--		4.545

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-02 D
Client ID: SV-2
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 15:16
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.27	--	ND	8.18	--		4.545
Chloroform	10.6	0.909	--	51.8	4.44	--		4.545
Tetrahydrofuran	3.73	2.27	--	11.0	6.69	--		4.545
1,2-Dichloroethane	ND	0.909	--	ND	3.68	--		4.545
n-Hexane	678	0.909	--	2390	3.20	--	E	4.545
1,1,1-Trichloroethane	ND	0.909	--	ND	4.96	--		4.545
Benzene	208	0.909	--	664	2.90	--		4.545
Carbon tetrachloride	ND	0.909	--	ND	5.72	--		4.545
Cyclohexane	954	0.909	--	3280	3.13	--	E	4.545
1,2-Dichloropropane	ND	0.909	--	ND	4.20	--		4.545
Bromodichloromethane	ND	0.909	--	ND	6.09	--		4.545
1,4-Dioxane	ND	0.909	--	ND	3.28	--		4.545
Trichloroethene	2.84	0.909	--	15.3	4.89	--		4.545
2,2,4-Trimethylpentane	ND	0.909	--	ND	4.25	--		4.545
Heptane	478	0.909	--	1960	3.73	--	E	4.545
cis-1,3-Dichloropropene	ND	0.909	--	ND	4.13	--		4.545
4-Methyl-2-pentanone	3.01	2.27	--	12.3	9.30	--		4.545
trans-1,3-Dichloropropene	ND	0.909	--	ND	4.13	--		4.545
1,1,2-Trichloroethane	ND	0.909	--	ND	4.96	--		4.545
Toluene	104	0.909	--	392	3.43	--		4.545
2-Hexanone	ND	0.909	--	ND	3.73	--		4.545
Dibromochloromethane	ND	0.909	--	ND	7.74	--		4.545
1,2-Dibromoethane	ND	0.909	--	ND	6.99	--		4.545
Tetrachloroethene	ND	0.909	--	ND	6.16	--		4.545
Chlorobenzene	ND	0.909	--	ND	4.19	--		4.545
Ethylbenzene	9.85	0.909	--	42.8	3.95	--		4.545

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-02 D
Client ID: SV-2
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 15:16
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	25.3	1.82	--	110	7.91	--		4.545
Bromoform	ND	0.909	--	ND	9.40	--		4.545
Styrene	ND	0.909	--	ND	3.87	--		4.545
1,1,2,2-Tetrachloroethane	2.73	0.909	--	18.7	6.24	--		4.545
o-Xylene	9.25	0.909	--	40.2	3.95	--		4.545
4-Ethyltoluene	ND	0.909	--	ND	4.47	--		4.545
1,3,5-Trimethylbenzene	ND	0.909	--	ND	4.47	--		4.545
1,2,4-Trimethylbenzene	ND	0.909	--	ND	4.47	--		4.545
Benzyl chloride	ND	0.909	--	ND	4.71	--		4.545
1,3-Dichlorobenzene	ND	0.909	--	ND	5.47	--		4.545
1,4-Dichlorobenzene	ND	0.909	--	ND	5.47	--		4.545
1,2-Dichlorobenzene	ND	0.909	--	ND	5.47	--		4.545
1,2,4-Trichlorobenzene	ND	0.909	--	ND	6.75	--		4.545
Hexachlorobutadiene	ND	0.909	--	ND	9.70	--		4.545

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	73		60-140
chlorobenzene-d5	76		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-02 D2
Client ID: SV-2
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 15:16
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 08:05
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	609	3.33	--	2150	11.7	--		16.67
Cyclohexane	897	3.33	--	3090	11.5	--		16.67
Heptane	468	3.33	--	1920	13.6	--		16.67

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	78		60-140
Bromochloromethane	74		60-140
chlorobenzene-d5	67		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-03
Client ID: SV-3
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:38
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 02:39
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.411	0.200	--	2.03	0.989	--		1
Chloromethane	0.378	0.200	--	0.781	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	25.6	5.00	--	48.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	396	1.00	--	941	2.38	--		1
Trichlorofluoromethane	0.289	0.200	--	1.62	1.12	--		1
Isopropanol	2.95	0.500	--	7.25	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	39.4	0.500	--	119	1.52	--		1
Methylene chloride	0.538	0.500	--	1.87	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	284	0.200	--	884	0.623	--	E	1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	50.2	0.500	--	148	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-03
Client ID: SV-3
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:38
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.94	0.200	--	9.47	0.977	--		1
Tetrahydrofuran	2.20	0.500	--	6.49	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	66.9	0.200	--	236	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	19.6	0.200	--	62.6	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	103	0.200	--	355	0.688	--	E	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.459	0.200	--	2.47	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	98.6	0.200	--	404	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.86	0.500	--	7.62	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	40.4	0.200	--	152	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.386	0.200	--	2.62	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	5.50	0.200	--	23.9	0.869	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-03
Client ID: SV-3
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:38
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	18.3	0.400	--	79.5	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	6.21	0.200	--	27.0	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.551	0.200	--	2.71	0.983	--		1
1,2,4-Trimethylbenzene	0.783	0.200	--	3.85	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	84		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	81		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-03 D
Client ID: SV-3
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:38
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/25/23 08:42
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Carbon disulfide	326	1.25	--	1020	3.89	--		6.25
Cyclohexane	98.6	1.25	--	339	4.30	--		6.25

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	82		60-140
Bromochloromethane	77		60-140
chlorobenzene-d5	72		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-04
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:33
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/24/23 20:10
Analyst: JMB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.461	0.200	--	2.28	0.989	--		1
Chloromethane	0.410	0.200	--	0.847	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	5.90	5.00	--	11.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.97	1.00	--	7.06	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.528	0.500	--	1.83	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.416	0.200	--	1.30	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-04
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:33
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.619	0.200	--	2.18	0.705	--		1
Benzene	0.225	0.200	--	0.719	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.353	0.200	--	1.33	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-04
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:33
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	99		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

SAMPLE RESULTS

Lab ID: L2347875-04
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 08/17/23 14:33
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/24/23 20:10
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	102		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/24/23 16:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1819882-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/24/23 16:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1819882-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/24/23 16:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1819882-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003
Lab Number: L2347875
Report Date: 08/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 08/24/23 16:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04 Batch: WG1819883-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE.

Project Number: B0595-021-001-003

Lab Number: L2347875

Report Date: 08/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1819882-3								
Dichlorodifluoromethane	91		-		70-130	-		
Chloromethane	79		-		70-130	-		
Freon-114	100		-		70-130	-		
Vinyl chloride	102		-		70-130	-		
1,3-Butadiene	92		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	99		-		70-130	-		
Ethanol	93		-		40-160	-		
Vinyl bromide	79		-		70-130	-		
Acetone	90		-		40-160	-		
Trichlorofluoromethane	101		-		70-130	-		
Isopropanol	80		-		40-160	-		
1,1-Dichloroethene	94		-		70-130	-		
Tertiary butyl Alcohol	92		-		70-130	-		
Methylene chloride	97		-		70-130	-		
3-Chloropropene	87		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
Freon-113	93		-		70-130	-		
trans-1,2-Dichloroethene	90		-		70-130	-		
1,1-Dichloroethane	89		-		70-130	-		
Methyl tert butyl ether	81		-		70-130	-		
2-Butanone	80		-		70-130	-		
cis-1,2-Dichloroethene	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE.

Project Number: B0595-021-001-003

Lab Number: L2347875

Report Date: 08/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1819882-3								
Ethyl Acetate	105		-		70-130	-		
Chloroform	97		-		70-130	-		
Tetrahydrofuran	78		-		70-130	-		
1,2-Dichloroethane	79		-		70-130	-		
n-Hexane	104		-		70-130	-		
1,1,1-Trichloroethane	80		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	92		-		70-130	-		
Cyclohexane	107		-		70-130	-		
1,2-Dichloropropane	92		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	95		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Heptane	81		-		70-130	-		
cis-1,3-Dichloropropene	97		-		70-130	-		
4-Methyl-2-pentanone	84		-		70-130	-		
trans-1,3-Dichloropropene	92		-		70-130	-		
1,1,2-Trichloroethane	95		-		70-130	-		
Toluene	88		-		70-130	-		
2-Hexanone	80		-		70-130	-		
Dibromochloromethane	101		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1819882-3								
Tetrachloroethene	91		-		70-130	-		
Chlorobenzene	96		-		70-130	-		
Ethylbenzene	87		-		70-130	-		
p/m-Xylene	88		-		70-130	-		
Bromoform	104		-		70-130	-		
Styrene	95		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	92		-		70-130	-		
4-Ethyltoluene	91		-		70-130	-		
1,3,5-Trimethylbenzene	93		-		70-130	-		
1,2,4-Trimethylbenzene	95		-		70-130	-		
Benzyl chloride	100		-		70-130	-		
1,3-Dichlorobenzene	97		-		70-130	-		
1,4-Dichlorobenzene	95		-		70-130	-		
1,2-Dichlorobenzene	94		-		70-130	-		
1,2,4-Trichlorobenzene	87		-		70-130	-		
Hexachlorobutadiene	82		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE.

Project Number: B0595-021-001-003

Lab Number: L2347875

Report Date: 08/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04 Batch: WG1819883-3								
Vinyl chloride	99		-		70-130	-		25
1,1-Dichloroethene	95		-		70-130	-		25
cis-1,2-Dichloroethene	99		-		70-130	-		25
1,1,1-Trichloroethane	83		-		70-130	-		25
Carbon tetrachloride	90		-		70-130	-		25
Trichloroethene	98		-		70-130	-		25
Tetrachloroethene	92		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1819882-5 QC Sample: L2347875-04 Client ID: OA-1						
Dichlorodifluoromethane	0.461	0.464	ppbV	1		25
Chloromethane	0.410	0.407	ppbV	1		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	5.90	5.94	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	2.97	2.55	ppbV	15		25
Trichlorofluoromethane	ND	0.206	ppbV	NC		25
Isopropanol	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	0.528	0.521	ppbV	1		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.416	0.418	ppbV	0		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1819882-5 QC Sample: L2347875-04 Client ID: OA-1						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.619	0.634	ppbV	2		25
Benzene	0.225	0.225	ppbV	0		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.353	0.361	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1819882-5 QC Sample: L2347875-04 Client ID: OA-1						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1819883-5 QC Sample: L2347875-04 Client ID: OA-1						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.072	0.066	ppbV	9		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25

Project Name: 389 MANHATTAN AVE.

Lab Number: L2347875

Project Number: B0595-021-001-003

Report Date: 08/25/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2347875-01	SV-1	02088	Flow 4	08/11/23	433302		-	-	-	Pass	9.2	9.0	2
L2347875-01	SV-1	407	2.7L Can	08/11/23	433302	L2335714-01	Pass	-29.0	-6.1	-	-	-	-
L2347875-02	SV-2	01948	Flow 4	08/11/23	433302		-	-	-	Pass	9.2	9.1	1
L2347875-02	SV-2	143	2.7L Can	08/11/23	433302	L2345053-03	Pass	-29.0	-8.1	-	-	-	-
L2347875-03	SV-3	01994	Flow 4	08/11/23	433302		-	-	-	Pass	9.0	9.4	4
L2347875-03	SV-3	379	2.7L Can	08/11/23	433302	L2345053-03	Pass	-29.2	-4.9	-	-	-	-
L2347875-04	OA-1	01447	Flow 4	08/11/23	433302		-	-	-	Pass	9.0	8.5	6
L2347875-04	OA-1	2859	2.7L Can	08/11/23	433302	L2338040-01	Pass	-29.1	-5.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 06/22/23 19:58
Analyst: APR

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2335714

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 06/22/23 19:58
Analyst: APR

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2335714
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2335714

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2335714-01
Client ID: CAN 407 SHELF 0
Sample Location:

Date Collected: 06/21/23 18:00
Date Received: 06/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 07/13/23 19:55
Analyst: RAY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2338040
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 07/13/23 19:55
Analyst: RAY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2338040

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2338040

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2338040-01
Client ID: CAN 2859 SHELF 7
Sample Location:

Date Collected: 07/03/23 14:00
Date Received: 07/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	97		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/07/23 18:16
Analyst: RAY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2345053

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/07/23 18:16
Analyst: RAY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2345053
Report Date: 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2345053

Project Number: CANISTER QC BAT **Report Date:** 08/25/23

Air Canister Certification Results

Lab ID: L2345053-03
Client ID: CAN 3756 SHELF 15
Sample Location:

Date Collected: 08/03/23 18:00
Date Received: 08/04/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2347875-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2347875-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2347875-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2347875-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	389 MANHATTAN AVE.	**Lab Number:**	L2347875
Project Number:	B0595-021-001-003	**Report Date:**	08/25/23

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: Data Usability Report

Project Name:	389 MANHATTAN AVE.	**Lab Number:**	L2347875
Project Number:	B0595-021-001-003	**Report Date:**	08/25/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

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

Report Format: Data Usability Report

Project Name:	389 MANHATTAN AVE.	**Lab Number:**	L2347875
Project Number:	B0595-021-001-003	**Report Date:**	08/25/23

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

AIR ANALYSIS

PAGE ____ OF ____

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 8/18/23

ALPHA Job #: L2347875

Client Information

Client: Roux
Address: 2558 HAMBURG TPKE
BUFFALO, NY 14218
Phone: 716-856-0599
Fax:
Email: cburen@rouxinc.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 359 MANHATTAN AVE
Project Location: BUFFALO, NY
Project #: B0595-021-001-003
Project Manager: CHRIS BOREN
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: CAT B

Project-Specific Target Compound List: ☐

ANALYSIS

TO-15 | TO-15 SIM | APH Subtract Non-petroleum HCs ☐ | Fixed Gases | Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	Sample Comments (i.e. PID)
47875-01	SV-1	8/17/23	1020	1403	-29.89	-4.53	AIR	CS	2.7L	407	02088	X	
02	SV-2	↓	1024	1516	-29.05	-7.38	↓	↓	↓	143	01948	X	
03	SV-3	↓	1019	1438	-31.24	-5.46	↓	↓	↓	379	01994	X	
04	OA-1	↓	1025	~~1534~~ 1433	~~-28.8~~ -28.92	-4.48	↓	↓	↓	~~349~~ 2359	01447	X	

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: SV / AA

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

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	8/17/23 1533	[signature] (AAL)	8/17 15:33
[signature] (AAL) 8/18/23 500	8/17/23 15:33	[signature] Erin Woods AAL	8/18/23 0100
			8/18/23 0635

Form No: 101-02 Rev (25-Sep-15)

ANALYTICAL REPORT

Lab Number:	L2355657
Client:	Roux 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	389 MANHATTAN AVE SITE
Project Number:	0595-021-001
Report Date:	10/02/23

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2355657-01	B-6 0-2 FT	SOIL	BUFFALO,NY	09/21/23 09:00	09/21/23
L2355657-02	B-9 0-2 FT	SOIL	BUFFALO,NY	09/21/23 09:30	09/21/23
L2355657-03	B-10 0-2 FT	SOIL	BUFFALO,NY	09/21/23 10:00	09/21/23

Project Name:	389 MANHATTAN AVE SITE	**Lab Number:**	L2355657
Project Number:	0595-021-001	**Report Date:**	10/02/23

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

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

Soil/sediments, 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.

HOLD POLICY - For samples submitted on hold, Alpha'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 Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	389 MANHATTAN AVE SITE	**Lab Number:**	L2355657
Project Number:	0595-021-001	**Report Date:**	10/02/23

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2355657-01, -02, and -03: The container for the Total Solids analysis was not initially received. The containers were later received at the laboratory on September 22, 2023.

Volatile Organics

L2355657-02 and -03: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

L2355657-03: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (161%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 10/02/23

ORGANICS

VOLATILES

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-01
Client ID: B-6 0-2 FT
Sample Location: BUFFALO,NY
Date Collected: 09/21/23 09:00
Date Received: 09/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 09/29/23 02:21
Analyst: JIC
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.7	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.93	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.93	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.93	0.12	1
Dibromochloromethane	ND		ug/kg	0.93	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.93	0.25	1
Tetrachloroethene	ND		ug/kg	0.47	0.18	1
Chlorobenzene	ND		ug/kg	0.47	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.47	0.16	1
Bromodichloromethane	ND		ug/kg	0.47	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.47	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.47	0.15	1
Benzene	ND		ug/kg	0.47	0.15	1
Toluene	ND		ug/kg	0.93	0.51	1
Ethylbenzene	0.23	J	ug/kg	0.93	0.13	1
Chloromethane	ND		ug/kg	3.7	0.87	1
Bromomethane	ND		ug/kg	1.9	0.54	1
Vinyl chloride	ND		ug/kg	0.93	0.31	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.47	0.13	1
1,2-Dichlorobenzene	0.18	J	ug/kg	1.9	0.13	1

Project Name: 389 MANHATTAN AVE SITE **Lab Number:** L2355657

Project Number: 0595-021-001 **Report Date:** 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-01 Date Collected: 09/21/23 09:00

Client ID: B-6 0-2 FT Date Received: 09/21/23

Sample Location: BUFFALO,NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	1.9		ug/kg	1.9	0.52	1
o-Xylene	1.4		ug/kg	0.93	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.16	1
Styrene	ND		ug/kg	0.93	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.85	1
Acetone	ND		ug/kg	9.3	4.5	1
Carbon disulfide	ND		ug/kg	9.3	4.2	1
2-Butanone	ND		ug/kg	9.3	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	1.2	1
2-Hexanone	ND		ug/kg	9.3	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.93	0.26	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.93	1
Isopropylbenzene	0.53	J	ug/kg	0.93	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.25	1
Methyl Acetate	ND		ug/kg	3.7	0.88	1
Cyclohexane	ND		ug/kg	9.3	0.51	1
1,4-Dioxane	ND		ug/kg	74	33.	1
Freon-113	ND		ug/kg	3.7	0.65	1
Methyl cyclohexane	ND		ug/kg	3.7	0.56	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	93		70-130

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-02
Client ID: B-9 0-2 FT
Sample Location: BUFFALO,NY

Date Collected: 09/21/23 09:30
Date Received: 09/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 09/28/23 13:06
Analyst: LAC
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	290	130	1
1,1-Dichloroethane	ND		ug/kg	58	8.4	1
Chloroform	ND		ug/kg	87	8.1	1
Carbon tetrachloride	ND		ug/kg	58	13.	1
1,2-Dichloropropane	ND		ug/kg	58	7.2	1
Dibromochloromethane	ND		ug/kg	58	8.1	1
1,1,2-Trichloroethane	ND		ug/kg	58	15.	1
Tetrachloroethene	ND		ug/kg	29	11.	1
Chlorobenzene	ND		ug/kg	29	7.4	1
Trichlorofluoromethane	ND		ug/kg	230	40.	1
1,2-Dichloroethane	ND		ug/kg	58	15.	1
1,1,1-Trichloroethane	ND		ug/kg	29	9.7	1
Bromodichloromethane	ND		ug/kg	29	6.3	1
trans-1,3-Dichloropropene	ND		ug/kg	58	16.	1
cis-1,3-Dichloropropene	ND		ug/kg	29	9.2	1
Bromoform	ND		ug/kg	230	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	29	9.6	1
Benzene	13	J	ug/kg	29	9.6	1
Toluene	ND		ug/kg	58	31.	1
Ethylbenzene	26	J	ug/kg	58	8.2	1
Chloromethane	ND		ug/kg	230	54.	1
Bromomethane	ND		ug/kg	120	34.	1
Vinyl chloride	ND		ug/kg	58	19.	1
Chloroethane	ND		ug/kg	120	26.	1
1,1-Dichloroethene	ND		ug/kg	58	14.	1
trans-1,2-Dichloroethene	ND		ug/kg	87	7.9	1
Trichloroethene	ND		ug/kg	29	7.9	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.3	1

Project Name: 389 MANHATTAN AVE SITE
Lab Number: L2355657
Project Number: 0595-021-001
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-02
Client ID: B-9 0-2 FT
Sample Location: BUFFALO,NY
Date Collected: 09/21/23 09:30
Date Received: 09/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	120	8.6	1
1,4-Dichlorobenzene	ND		ug/kg	120	9.9	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	86	J	ug/kg	120	32.	1
o-Xylene	56	J	ug/kg	58	17.	1
cis-1,2-Dichloroethene	ND		ug/kg	58	10.	1
Styrene	21	J	ug/kg	58	11.	1
Dichlorodifluoromethane	ND		ug/kg	580	53.	1
Acetone	ND		ug/kg	580	280	1
Carbon disulfide	ND		ug/kg	580	260	1
2-Butanone	ND		ug/kg	580	130	1
4-Methyl-2-pentanone	ND		ug/kg	580	74.	1
2-Hexanone	ND		ug/kg	580	68.	1
Bromochloromethane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	58	16.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	170	58.	1
Isopropylbenzene	24	J	ug/kg	58	6.3	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	16.	1
Methyl Acetate	160	J	ug/kg	230	55.	1
Cyclohexane	48	J	ug/kg	580	32.	1
1,4-Dioxane	ND		ug/kg	4600	2000	1
Freon-113	ND		ug/kg	230	40.	1
Methyl cyclohexane	150	J	ug/kg	230	35.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	92		70-130

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-03
Client ID: B-10 0-2 FT
Sample Location: BUFFALO,NY
Date Collected: 09/21/23 10:00
Date Received: 09/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 09/29/23 01:55
Analyst: JIC
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	270	120	1
1,1-Dichloroethane	ND		ug/kg	54	7.8	1
Chloroform	ND		ug/kg	81	7.6	1
Carbon tetrachloride	ND		ug/kg	54	12.	1
1,2-Dichloropropane	ND		ug/kg	54	6.7	1
Dibromochloromethane	ND		ug/kg	54	7.6	1
1,1,2-Trichloroethane	ND		ug/kg	54	14.	1
Tetrachloroethene	14	J	ug/kg	27	10.	1
Chlorobenzene	ND		ug/kg	27	6.8	1
Trichlorofluoromethane	ND		ug/kg	220	37.	1
1,2-Dichloroethane	ND		ug/kg	54	14.	1
1,1,1-Trichloroethane	ND		ug/kg	27	9.0	1
Bromodichloromethane	ND		ug/kg	27	5.9	1
trans-1,3-Dichloropropene	ND		ug/kg	54	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	27	8.5	1
Bromoform	ND		ug/kg	220	13.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	27	9.0	1
Benzene	ND		ug/kg	27	9.0	1
Toluene	37	J	ug/kg	54	29.	1
Ethylbenzene	45	J	ug/kg	54	7.6	1
Chloromethane	ND		ug/kg	220	50.	1
Bromomethane	ND		ug/kg	110	31.	1
Vinyl chloride	ND		ug/kg	54	18.	1
Chloroethane	ND		ug/kg	110	24.	1
1,1-Dichloroethene	ND		ug/kg	54	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	81	7.4	1
Trichloroethene	ND		ug/kg	27	7.4	1
1,2-Dichlorobenzene	25	J	ug/kg	110	7.8	1

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-03
Client ID: B-10 0-2 FT
Sample Location: BUFFALO,NY
Date Collected: 09/21/23 10:00
Date Received: 09/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	110	8.0	1
1,4-Dichlorobenzene	ND		ug/kg	110	9.2	1
Methyl tert butyl ether	ND		ug/kg	110	11.	1
p/m-Xylene	390		ug/kg	110	30.	1
o-Xylene	240		ug/kg	54	16.	1
cis-1,2-Dichloroethene	ND		ug/kg	54	9.4	1
Styrene	ND		ug/kg	54	10.	1
Dichlorodifluoromethane	ND		ug/kg	540	49.	1
Acetone	ND		ug/kg	540	260	1
Carbon disulfide	ND		ug/kg	540	240	1
2-Butanone	ND		ug/kg	540	120	1
4-Methyl-2-pentanone	ND		ug/kg	540	69.	1
2-Hexanone	ND		ug/kg	540	64.	1
Bromochloromethane	ND		ug/kg	110	11.	1
1,2-Dibromoethane	ND		ug/kg	54	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	54.	1
Isopropylbenzene	120		ug/kg	54	5.9	1
1,2,3-Trichlorobenzene	ND		ug/kg	110	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	110	15.	1
Methyl Acetate	200	J	ug/kg	220	51.	1
Cyclohexane	40	J	ug/kg	540	29.	1
1,4-Dioxane	ND		ug/kg	4300	1900	1
Freon-113	ND		ug/kg	220	37.	1
Methyl cyclohexane	67	J	ug/kg	220	32.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	**161**	Q	70-130
Dibromofluoromethane	89		70-130

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 08:51
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1833223-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	44	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 08:51
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1833223-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 08:51
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1833223-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	93		70-130

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1833676-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: 389 MANHATTAN AVE SITE
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Lab Number: L2355657
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1833676-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1833676-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	92		70-130

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1833685-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1833685-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/23 17:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1833685-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1833223-3 WG1833223-4								
Methylene chloride	88		88		70-130	0		30
1,1-Dichloroethane	114		109		70-130	4		30
Chloroform	105		103		70-130	2		30
Carbon tetrachloride	99		92		70-130	7		30
1,2-Dichloropropane	108		106		70-130	2		30
Dibromochloromethane	87		86		70-130	1		30
1,1,2-Trichloroethane	90		89		70-130	1		30
Tetrachloroethene	114		106		70-130	7		30
Chlorobenzene	102		98		70-130	4		30
Trichlorofluoromethane	104		96		70-139	8		30
1,2-Dichloroethane	98		99		70-130	1		30
1,1,1-Trichloroethane	108		103		70-130	5		30
Bromodichloromethane	100		100		70-130	0		30
trans-1,3-Dichloropropene	99		99		70-130	0		30
cis-1,3-Dichloropropene	101		101		70-130	0		30
Bromoform	79		80		70-130	1		30
1,1,2,2-Tetrachloroethane	82		84		70-130	2		30
Benzene	105		101		70-130	4		30
Toluene	104		100		70-130	4		30
Ethylbenzene	108		102		70-130	6		30
Chloromethane	129		122		52-130	6		30
Bromomethane	113		110		57-147	3		30
Vinyl chloride	108		101		67-130	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1833223-3 WG1833223-4								
Chloroethane	107		101		50-151	6		30
1,1-Dichloroethene	103		96		65-135	7		30
trans-1,2-Dichloroethene	101		95		70-130	6		30
Trichloroethene	104		100		70-130	4		30
1,2-Dichlorobenzene	96		96		70-130	0		30
1,3-Dichlorobenzene	102		101		70-130	1		30
1,4-Dichlorobenzene	101		98		70-130	3		30
Methyl tert butyl ether	80		81		66-130	1		30
p/m-Xylene	104		98		70-130	6		30
o-Xylene	103		99		70-130	4		30
cis-1,2-Dichloroethene	98		96		70-130	2		30
Styrene	98		95		70-130	3		30
Dichlorodifluoromethane	117		107		30-146	9		30
Acetone	79		75		54-140	5		30
Carbon disulfide	101		95		59-130	6		30
2-Butanone	72		73		70-130	1		30
4-Methyl-2-pentanone	**66**	Q	**69**	Q	70-130	4		30
2-Hexanone	**67**	Q	**64**	Q	70-130	5		30
Bromochloromethane	87		85		70-130	2		30
1,2-Dibromoethane	84		85		70-130	1		30
1,2-Dibromo-3-chloropropane	**60**	Q	**63**	Q	68-130	5		30
Isopropylbenzene	109		103		70-130	6		30
1,2,3-Trichlorobenzene	104		104		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE

Project Number: 0595-021-001

Lab Number: L2355657

Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1833223-3 WG1833223-4								
1,2,4-Trichlorobenzene	107		105		70-130	2		30
Methyl Acetate	75		80		51-146	6		30
Cyclohexane	124		113		59-142	9		30
1,4-Dioxane	**59**	Q	**64**	Q	65-136	8		30
Freon-113	109		103		50-139	6		30
Methyl cyclohexane	102		95		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		95		70-130
Toluene-d8	106		104		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	92		94		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1833676-3 WG1833676-4								
Methylene chloride	85		77		70-130	10		30
1,1-Dichloroethane	84		82		70-130	2		30
Chloroform	84		82		70-130	2		30
Carbon tetrachloride	96		93		70-130	3		30
1,2-Dichloropropane	87		85		70-130	2		30
Dibromochloromethane	96		91		70-130	5		30
1,1,2-Trichloroethane	81		78		70-130	4		30
Tetrachloroethene	102		98		70-130	4		30
Chlorobenzene	94		91		70-130	3		30
Trichlorofluoromethane	79		79		70-139	0		30
1,2-Dichloroethane	87		85		70-130	2		30
1,1,1-Trichloroethane	90		88		70-130	2		30
Bromodichloromethane	86		84		70-130	2		30
trans-1,3-Dichloropropene	85		82		70-130	4		30
cis-1,3-Dichloropropene	89		86		70-130	3		30
Bromoform	84		84		70-130	0		30
1,1,2,2-Tetrachloroethane	77		75		70-130	3		30
Benzene	89		86		70-130	3		30
Toluene	86		83		70-130	4		30
Ethylbenzene	88		86		70-130	2		30
Chloromethane	75		73		52-130	3		30
Bromomethane	70		69		57-147	1		30
Vinyl chloride	77		74		67-130	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1833676-3 WG1833676-4								
Chloroethane	76		73		50-151	4		30
1,1-Dichloroethene	90		82		65-135	9		30
trans-1,2-Dichloroethene	94		84		70-130	11		30
Trichloroethene	94		92		70-130	2		30
1,2-Dichlorobenzene	96		95		70-130	1		30
1,3-Dichlorobenzene	95		95		70-130	0		30
1,4-Dichlorobenzene	94		94		70-130	0		30
Methyl tert butyl ether	97		88		66-130	10		30
p/m-Xylene	94		92		70-130	2		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	88		86		70-130	2		30
Styrene	91		88		70-130	3		30
Dichlorodifluoromethane	65		63		30-146	3		30
Acetone	79		72		54-140	9		30
Carbon disulfide	85		76		59-130	11		30
2-Butanone	87		79		70-130	10		30
4-Methyl-2-pentanone	77		72		70-130	7		30
2-Hexanone	81		75		70-130	8		30
Bromochloromethane	98		95		70-130	3		30
1,2-Dibromoethane	93		90		70-130	3		30
1,2-Dibromo-3-chloropropane	81		77		68-130	5		30
Isopropylbenzene	89		89		70-130	0		30
1,2,3-Trichlorobenzene	93		93		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1833676-3 WG1833676-4								
1,2,4-Trichlorobenzene	95		96		70-130	1		30
Methyl Acetate	95		80		51-146	17		30
Cyclohexane	89		86		59-142	3		30
1,4-Dioxane	90		79		65-136	13		30
Freon-113	94		88		50-139	7		30
Methyl cyclohexane	92		91		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		87		70-130
Toluene-d8	93		94		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	95		95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1833685-3 WG1833685-4								
Methylene chloride	85		77		70-130	10		30
1,1-Dichloroethane	84		82		70-130	2		30
Chloroform	84		82		70-130	2		30
Carbon tetrachloride	96		93		70-130	3		30
1,2-Dichloropropane	87		85		70-130	2		30
Dibromochloromethane	96		91		70-130	5		30
1,1,2-Trichloroethane	81		78		70-130	4		30
Tetrachloroethene	102		98		70-130	4		30
Chlorobenzene	94		91		70-130	3		30
Trichlorofluoromethane	79		79		70-139	0		30
1,2-Dichloroethane	87		85		70-130	2		30
1,1,1-Trichloroethane	90		88		70-130	2		30
Bromodichloromethane	86		84		70-130	2		30
trans-1,3-Dichloropropene	85		82		70-130	4		30
cis-1,3-Dichloropropene	89		86		70-130	3		30
Bromoform	84		84		70-130	0		30
1,1,2,2-Tetrachloroethane	77		75		70-130	3		30
Benzene	89		86		70-130	3		30
Toluene	86		83		70-130	4		30
Ethylbenzene	88		86		70-130	2		30
Chloromethane	75		73		52-130	3		30
Bromomethane	70		69		57-147	1		30
Vinyl chloride	77		74		67-130	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1833685-3 WG1833685-4								
Chloroethane	76		73		50-151	4		30
1,1-Dichloroethene	90		82		65-135	9		30
trans-1,2-Dichloroethene	94		84		70-130	11		30
Trichloroethene	94		92		70-130	2		30
1,2-Dichlorobenzene	96		95		70-130	1		30
1,3-Dichlorobenzene	95		95		70-130	0		30
1,4-Dichlorobenzene	94		94		70-130	0		30
Methyl tert butyl ether	97		88		66-130	10		30
p/m-Xylene	94		92		70-130	2		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	88		86		70-130	2		30
Styrene	91		88		70-130	3		30
Dichlorodifluoromethane	65		63		30-146	3		30
Acetone	79		72		54-140	9		30
Carbon disulfide	85		76		59-130	11		30
2-Butanone	87		79		70-130	10		30
4-Methyl-2-pentanone	77		72		70-130	7		30
2-Hexanone	81		75		70-130	8		30
Bromochloromethane	98		95		70-130	3		30
1,2-Dibromoethane	93		90		70-130	3		30
1,2-Dibromo-3-chloropropane	81		77		68-130	5		30
Isopropylbenzene	89		89		70-130	0		30
1,2,3-Trichlorobenzene	93		93		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1833685-3 WG1833685-4								
1,2,4-Trichlorobenzene	95		96		70-130	1		30
Methyl Acetate	95		80		51-146	17		30
Cyclohexane	89		86		59-142	3		30
1,4-Dioxane	90		79		65-136	13		30
Freon-113	94		88		50-139	7		30
Methyl cyclohexane	92		91		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		87		70-130
Toluene-d8	93		94		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	95		95		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-01
Client ID: B-6 0-2 FT
Sample Location: BUFFALO,NY
Sample Depth:
Matrix: Soil

Date Collected: 09/21/23 09:00
Date Received: 09/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.5		%	0.100	NA	1	-	09/23/23 11:37	121,2540G	ROI

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-02
Client ID: B-9 0-2 FT
Sample Location: BUFFALO,NY
Sample Depth:
Matrix: Soil

Date Collected: 09/21/23 09:30
Date Received: 09/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	09/23/23 11:37	121,2540G	ROI

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001
Lab Number: L2355657
Report Date: 10/02/23

SAMPLE RESULTS

Lab ID: L2355657-03
Client ID: B-10 0-2 FT
Sample Location: BUFFALO,NY
Sample Depth:
Matrix: Soil

Date Collected: 09/21/23 10:00
Date Received: 09/21/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.9		%	0.100	NA	1	-	09/23/23 11:37	121,2540G	ROI

Lab Duplicate Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE SITE

Project Number: 0595-021-001

Lab Number: L2355657

Report Date: 10/02/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1831065-1 QC Sample: L2356129-24 Client ID: DUP Sample						
Solids, Total	85.5	83.3	%	3		20

Project Name: 389 MANHATTAN AVE SITE
Project Number: 0595-021-001

Lab Number: L2355657
Report Date: 10/02/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2355657-01A	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-01B	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-01C	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-01D	Plastic 2oz unpreserved for TS	B	NA		5.1	Y	Absent		TS(7)
L2355657-01X	Vial MeOH preserved split	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-01Y	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)
L2355657-01Z	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)
L2355657-02A	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-02B	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-02C	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-02D	Plastic 2oz unpreserved for TS	B	NA		5.1	Y	Absent		TS(7)
L2355657-02X	Vial MeOH preserved split	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-02Y	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)
L2355657-02Z	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)
L2355657-03A	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-03B	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-03C	5 gram Encore Sampler	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-03D	Plastic 2oz unpreserved for TS	B	NA		5.1	Y	Absent		TS(7)
L2355657-03X	Vial MeOH preserved split	A	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2355657-03Y	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)
L2355657-03Z	Vial Water preserved split	A	NA		2.3	Y	Absent	22-SEP-23 17:26	NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	389 MANHATTAN AVE SITE	**Lab Number:**	L2355657
Project Number:	0595-021-001	**Report Date:**	10/02/23

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE SITE	**Lab Number:**	L2355657
Project Number:	0595-021-001	**Report Date:**	10/02/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE SITE	**Lab Number:**	L2355657
Project Number:	0595-021-001	**Report Date:**	10/02/23

Data Qualifiers

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 9/22/23

ALPHA Job #: L2355657

Client Information

Client: Roux

Address: 2558 Hamburg Turpk
Buffalo, NY 14218

Phone: 716-856-0599

Fax:

Email: cboron@rouxinc.com

Project Information

Project Name: 389 MANHATTAN AVE SITE

Project Location: BUFFALO, NY

Project # 0595-021-001

(Use Project name as Project #) ☐

Project Manager: CHRIS BORON

ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:

Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B

☐ EQuIS (1 File) ☐ EQuIS (4 File)

☐ Other

Billing Information

☒ Same as Client Info

PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375

☐ AWQ Standards ☐ NY CP-51

☐ NY Restricted Use ☐ Other

☐ NY Unrestricted Use

☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:

☐ NJ ☒ NY

☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

CAT B

Please specify Metals or TAL.

ANALYSIS

TCL VOCs

Sample Filtration

☐ Done
☐ Lab to do

Preservation

☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	Sample Specific Comments	Total Bottle
55657-01	B-6 0-2 ft	9/21/23	900	SOIL	CS	X		3
-02	B-9 0-2 ft	↓	930	↓	↓	X		3
-03	B-10 0-2 ft	↓	1000	↓	↓	X		3

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E													
Preservative	A													

Relinquished By:	Date/Time	Received By:	Date/Time
	9/21/23 1502		9/21/23 1502
	9/4/23 1502		9/22/23 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL

Westborough, MA 01581
6 Walkup Dr.
TEL 508-898-9220
FAX 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL 508-822-9300
FAX 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 9/23/23

ALPHA Job #: L2355657

Client Information
Client: Roux
Address: 2558 Hamburg Turnpike
Buffalo, NY 14218
Phone: 716-856-0599
Fax:
Email: cboren@rouxinc.com

Project Information
Project Name: 389 MANHATTAN AVE SITE
Project Location: BUFFALO, NY
Project # 0595-021-001
(Use Project name as Project #)
Project Manager: CHRIS BOREN
ALPHAQuote #:

Turn-Around Time
Standard: X
Rush (only if pre approved):
Due Date:
# of Days:

Deliverables
ASP-A / ASP-B
EQuIS (1 File) / EQuIS (4 File)
Other

Billing Information
X Same as Client Info
PO #

Regulatory Requirement
NY TOGS / NY Part 375
AWQ Standards / NY CP-51
NY Restricted Use / Other
NY Unrestricted Use
NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
NJ / X NY
Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:
CAT B
*TOTAL SOLIDS ADDED TO ANALYSIS DUE TO INSUFFICIENT VOLUME PREVIOSLY SUBMITTED

Please specify Metals or TAL.

ANALYSIS
TCL VOCs
*TOTAL SOLIDS

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	*TOTAL SOLIDS	Sample Specific Comments	Total Bottle
55657-01	B-6 0-2 ft	9/21/23	700	Soil	CB	X	X		4
-02	B-9 0-2ft		930			X	X		4
-03	B-10 0-2 ft		1000			X	X		4

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
I = Zn Ac/NaOH
J = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E
Preservative	A

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

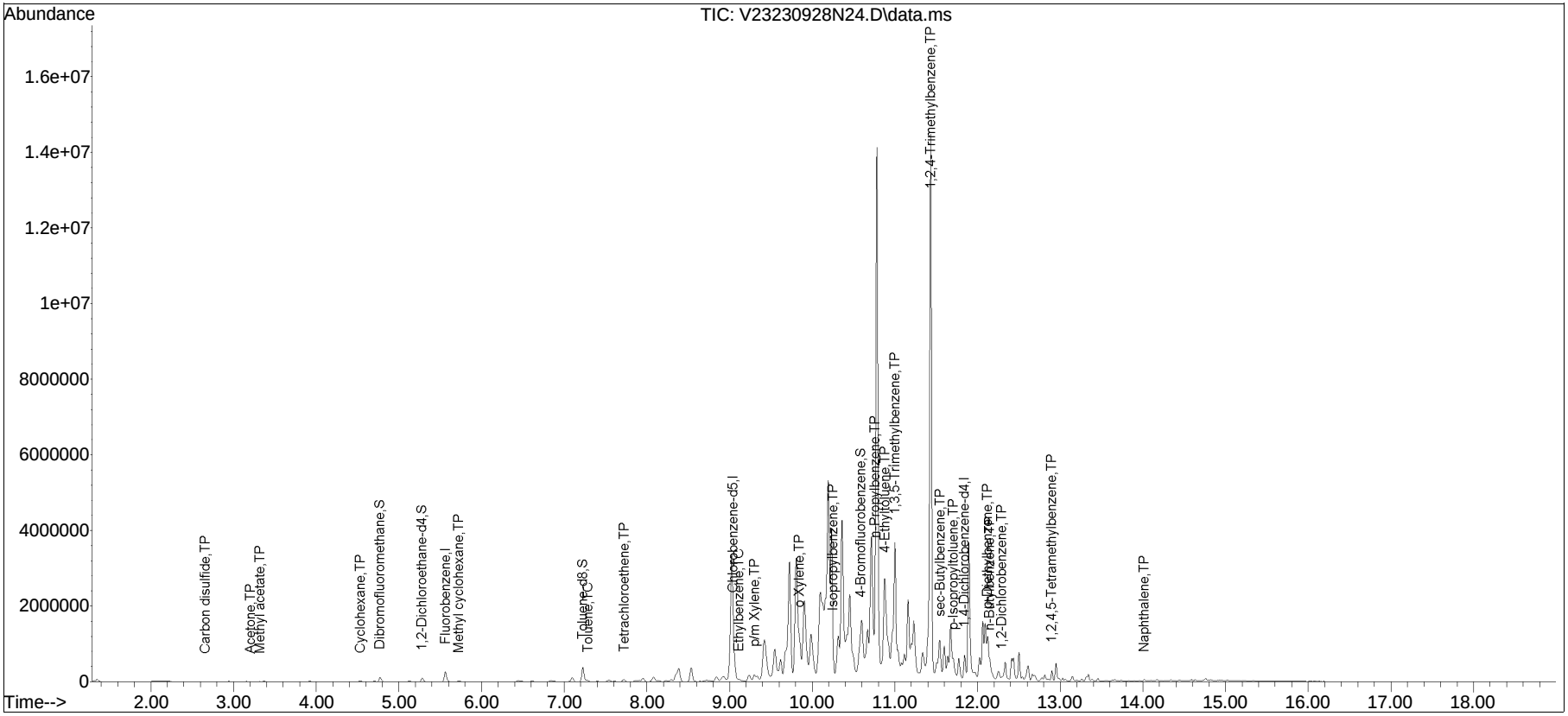
Relinquished By:	Date/Time	Received By:	Date/Time
Chad M Schutt	9/21/23 1502		9/21/23 1502
	9/4/23 1502		9/22/23 0130
Chad M Schutt	9/22/23 1247	Jocelyn Foley (AAL)	9/22/23 12:47
Jocelyn Foley (AAL)	9/22/23 12:47		9/23/23 0030

Quantitation Report (QT Reviewed)

Data Path : K:\VOA123\2023\230928N\
Data File : V23230928N24.D
Acq On : 29 Sep 2023 01:55 am
Operator : VOA123:JIC
Sample : L2355657-03,31H,5.14,5,0.100,,X
Misc : WG1833685,ICAL20310
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 29 08:59:45 2023
Quant Method : K:\VOA123\2023\230928N\V123_230825N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 28 13:28:17 2023
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox28N01.D•



APPENDIX G

Data Usability Summary Reports

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

November 4, 2023

Christopher Boron
Roux Environmental Engineering and Geology, D. P. C.
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: 389 Manhattan Avenue
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Alpha Analytical SDG Nos. L2335669, l2340590, and L2347875

Dear Mr. Boron:

Review has been completed for the data packages generated by Alpha Analytical pertain to samples collected between o6/21/23 and 08/17/23 at the 389 Manhattan Avenue site. Eight soil samples, four aqueous samples, and field duplicates of each matrix were processed for TCL and 6 NYCRR Part 375 CP-51 volatile analytes, TCL semivolatiles, TCL pesticides, TCL Aroclor PCBs, TCL herbicides, and TAL metals. The soil samples, two of the aqueous samples, and the field duplicates were also processed for 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). Six soil samples were processed for TCL semivolatiles, TCL Aroclor PCBs, and TAL metals. Four 2.7 L canisters were processed for volatiles. The analytical methodologies are those of the USEPA SW846, EPA TO-15, and modified EPA method 537.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Surrogate, Isotopic Dilution, and Internal Standard Recoveries
* Method Blanks
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable either as reported or with minor qualification, with the exception of the following results that have been rejected, and are not usable:

- 1,4-Dioxane results determined from the volatile fraction are rejected due to processing
- Three semivolatile results in one sample and one semivolatile result in a second sample due to apparent matrix effects

Data completeness, accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable, with the following exceptions:

Validation data qualifier definitions and client sample identifications are attached to this text. Also included in this report are the client EDDs with recommended qualifiers/edits applied in red.

Blind Field Duplicates

The blind field duplicates were performed on TP-20 and MW-3.

The semivolatile aqueous duplicate of MW-3 shows anomalous responses of target analytes and particularly Tentatively Identified Compounds (TICs) not shown in any of the project samples. The source of these variances is not evident. Target analytes biphenyl and carbazole show large variances to a degree that indicate rejection of the results of those compounds in both the parent sample and the field duplicate, and the results for dibenzofuran in those samples are qualified as estimated in value. Correlations for the other analytical fractions in the aqueous evaluation were acceptable.

The correlations for the soil TP-20 were within validation guidelines, with the following exceptions, results for which are qualified as estimated in that parent sample and its duplicate:

- calcium, chromium, copper, magnesium, manganese, sodium, and zinc
- all except nine of the detected PAHs – the field duplicate concentrations are three to six times higher than those of the parent sample – the results should be used with that consideration

Volatile Analyses by EPA 8260D

Matrix spikes of MW-2 show recoveries and correlations within validation guidelines, with the exception of those for cis-1,2-dichloroethene (both 200%), the result for which is qualified as estimated in that parent sample.

The matrix spikes of TP-20show outlying recoveries (19% to 64%) in both spikes for the following analytes, results for which are qualified as estimated in the parent sample: 1,2-dichlorobenzene, 1,3-dichloro-benzene, 1,4-dichlorobenzene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 2-butanone, 2-hexanone, n-butylbenzene, sec-butylbenzene, 1,2-dibromo-3-chloropropane, p-isopropyltoluene, and methylcyclohexane.

Results for 1,4-dioxane in the samples are rejected due to low responses (RRFs<0.010) in the calibration standards. Other calibration standards show responses within validation guidelines, with the exception of that for 1,1,2-trichloro-1,2,2-trifluoroethane (26%D) in the calibration associated with the aqueous samples. The result for that analyte has been qualified as estimated in those samples.

Due to presence in the associated method blanks, the detections of acetone in the soil samples are considered external contamination. Those with concentrations below the reporting limit have been edited to non-detection at the reporting limit, and those with concentrations above the reporting limit have been qualified as estimated, with a high bias.

Surrogate and internal standard recoveries are compliant. LCS recoveries are within validation guidelines.

TCL Semivolatile and 1,4-Dioxane Analyses by EPA8270E

Matrix spikes show recoveries below 10% of the following analytes, and results for those compounds in the associated parent samples are therefore rejected and not usable:

- Hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4,6-dinitro-2-methylphenol in TP-20
- 3,3-Dichlorobenzidine in MW-2

Additionally, the result for 3,3-dichlorobenzidine in TP-20 is qualified as estimated in TP-20 due to low recoveries (24% and 35%) in those matrix spikes

The result for phenol in the aqueous BLIND DUP is edited to non-detection due to poor signal to noise ratio of the mass fragments.

The equipment blank shows low level detections of a large majority of the PAH analytes, and the associated method blank shows low level detections of three PAHs. Therefore, the detections of all of those analytes in the aqueous samples except acenaphthalene and naphthalene in MW-3 are edited to reflect non-detection.

Surrogate and internal standard recoveries are compliant. Calibration standards show responses within validation guidelines.

TICs present in associated blanks are considered external contamination and removed from consideration as external contamination.

Pesticides, Herbicides, and Aroclor PCB Analyses by USEPA 8081B, 8151, and 8082A

Some of the detected pesticide results exhibit elevated dual column quantitative correlations, and are qualified to reflect the uncertainty in identification and/or quantitation. The values have been either qualified as estimated (“J”), qualified as tentative in identification and estimated in value (“NJ”), or edited to non-detection (“U”), depending on the degree of variance.

The matrix spike evaluations were performed for pesticides, herbicides, and Aroclors 1016 and 1260 on TP-20 and MW-2, and show recoveries and correlations within validation guidelines.

Surrogate and internal standard recoveries are compliant. Calibration standards show responses within validation guidelines. LCS recoveries are within required ranges.

PFAS by Modified EPA Metho d537

The result for PFHxA in TP-17 is qualified as being Estimated Maximum Possible Concentration (EMPC) due to an outlying ion ratio.

Matrix spikes of TP-20 and MW-2 show recoveries and correlations within validation guidelines.

Isotopic dilution and internal standards within validation guidelines. Calibration standard responses are compliant. Blanks show no contamination.

TAL Metals by EPA 6010D and 7471B

The mercury analyses of the soil samples were performed 2 days beyond the allowable 28 days from collection. Those results are therefore qualified as estimated, with a low bias.

Matrix spikes and/or duplicate evaluations were performed for metals on TP-20 and MW-2. Recoveries and correlations are within validation guidelines, with the following exceptions, results for which are qualified as estimated in the indicated parent sample:

Parent Sample	Element	Outlying % Recoveries	Outlying % RPD's
TP-20	copper	131,136	
	lead	195	32
	zinc	131,140	

The detected result for iron in MW-2 is considered external contamination and edited to non-detection due to presence in the associated equipment blank.

The ICP serial dilution determinations of TP-20 and MW-2 show correlations within validation guidelines.

Calibration and low level standard responses are compliant. Blanks show no contamination affecting sample results.

Volatile Analyses by EPA TO-15

The detected results for 1,2,4-trimethylbenzene in the samples are qualified as tentative in identification due to poor mass spectral quality.

Holding times and instrument tunes meet requirements. Method and canister blanks show no contamination. The clean canister certifications were reviewed during validation. LCS recoveries are compliant.

The laboratory duplicate of OA-1 shows correlations within validation guidelines.

Initial and continuing calibration standard responses fall within validation guidelines.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Data Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Identification Summary

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2335669-01	TP-15	SOIL	BUFFALO, NY 14218	06/21/23 12:15	06/21/23
L2335669-02	TP-16	SOIL	BUFFALO, NY 14218	06/21/23 12:02	06/21/23
L2335669-03	TP-17	SOIL	BUFFALO, NY 14218	06/21/23 12:30	06/21/23
L2335669-04	TP-18	SOIL	BUFFALO, NY 14218	06/21/23 12:40	06/21/23
L2335669-05	TP-19	SOIL	BUFFALO, NY 14218	06/21/23 12:50	06/21/23
L2335669-06	TP-20	SOIL	BUFFALO, NY 14218	06/21/23 13:00	06/21/23
L2335669-07	TP-21	SOIL	BUFFALO, NY 14218	06/21/23 13:10	06/21/23
L2335669-08	MW-1 TP	SOIL	BUFFALO, NY 14218	06/21/23 13:20	06/21/23
L2335669-09	MW-2	SOIL	BUFFALO, NY 14218	06/21/23 13:30	06/21/23
L2335669-10	MW-3	SOIL	BUFFALO, NY 14218	06/21/23 13:40	06/21/23
L2335669-11	MW-4	SOIL	BUFFALO, NY 14218	06/21/23 13:50	06/21/23
L2335669-12	SS-1	SOIL	BUFFALO, NY 14218	06/21/23 14:00	06/21/23
L2335669-13	SS-2	SOIL	BUFFALO, NY 14218	06/21/23 14:10	06/21/23
L2335669-14	SS-3	SOIL	BUFFALO, NY 14218	06/21/23 14:20	06/21/23
L2335669-15	BLIND DUP	SOIL	BUFFALO, NY 14218	06/21/23 12:00	06/21/23

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2340590
Project Number:	B0595-021-001-003-00	**Report Date:**	08/16/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2340590-01	MW-1	WATER	BUFFALO, NY	07/14/23 08:24	07/14/23
L2340590-02	MW-2	WATER	BUFFALO, NY	07/13/23 09:33	07/14/23
L2340590-03	MW-3	WATER	BUFFALO, NY	07/13/23 10:42	07/14/23
L2340590-04	BLIND DUP	WATER	BUFFALO, NY	07/13/23 12:00	07/14/23
L2340590-05	MW-4	WATER	BUFFALO, NY	07/13/23 15:49	07/14/23
L2340590-06	EQUIPMENT BLANK	WATER	BUFFALO, NY	07/13/23 07:15	07/14/23
L2340590-07	FIELD BLANK	WATER	BUFFALO, NY	07/13/23 07:30	07/14/23
L2340590-08	TRIP BLANK	WATER	BUFFALO, NY	07/13/23 00:00	07/14/23

Project Name: 389 MANHATTAN AVE.
Project Number: B0595-021-001-003

Lab Number: L2347875
Report Date: 08/25/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2347875-01	SV-1	SOIL_VAPOR	BUFFALO, NY	08/17/23 14:03	08/17/23
L2347875-02	SV-2	SOIL_VAPOR	BUFFALO, NY	08/17/23 15:16	08/17/23
L2347875-03	SV-3	SOIL_VAPOR	BUFFALO, NY	08/17/23 14:38	08/17/23
L2347875-04	OA-1	AIR	BUFFALO, NY	08/17/23 14:33	08/17/23

APPENDIX H

Fish and Wildlife Resource Impact Analysis

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key		If YES Go to:	If NO Go to:
1.	Is the site or area of concern a discharge or spill event?	13	2
2.	Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3.	Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4.	Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5.	Has the contamination gone off-site?	6	14
6.	Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7.	Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8.	Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9.	Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10.	Is the lack of resources due to the contamination?	3.10.1	14
11.	Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12.	Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13.	Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14.	No Fish and Wildlife Resources Impact Analysis needed.		

APPENDIX I

Waste Characterization Analytical Data Package

ANALYTICAL REPORT

Lab Number:	L2336178
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	389 MANHATTAN AVE
Project Number:	0595-021-001
Report Date:	07/18/23

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2336178-01	WC-1	SOIL	BUFFALO, NY	06/23/23 09:30	06/23/23
L2336178-02	WC-2	SOIL	BUFFALO, NY	06/23/23 09:35	06/23/23
L2336178-03	WC-3	SOIL	BUFFALO, NY	06/23/23 09:40	06/23/23
L2336178-04	WC-4	SOIL	BUFFALO, NY	06/23/23 09:45	06/23/23
L2336178-05	WC-5	SOIL	BUFFALO, NY	06/23/23 09:50	06/23/23
L2336178-06	WC-6	SOIL	BUFFALO, NY	06/23/23 09:55	06/23/23
L2336178-07	WC-7	SOIL	BUFFALO, NY	06/23/23 10:00	06/23/23
L2336178-08	WC-8	SOIL	BUFFALO, NY	06/23/23 10:05	06/23/23
L2336178-09	WC-9	SOIL	BUFFALO, NY	06/23/23 10:10	06/23/23
L2336178-10	WC-10	SOIL	BUFFALO, NY	06/23/23 10:15	06/23/23

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2336178
Project Number:	0595-021-001	**Report Date:**	07/18/23

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

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

Soil/sediments, 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.

HOLD POLICY - For samples submitted on hold, Alpha'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 Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2336178
Project Number:	0595-021-001	**Report Date:**	07/18/23

Case Narrative (continued)

Report Submission

July 18, 2023: This final report includes the results of all requested analyses.

July 10, 2023: This is a preliminary report.

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

TCLP Semivolatiles

The WG1797353-2/-3 LCS/LCSD RPD(s), associated with L2336178-08 through -10, are above the acceptance criteria for pyridine (53%).

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

Authorized Signature:  Cristin Walker

Title: Technical Director/Representative Date: 07/18/23

ORGANICS

VOLATILES

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 09:44
Analyst: MCM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
dibromofluoromethane	109		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 10:08
Analyst: MCM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
dibromofluoromethane	110		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 10:31
Analyst: MCM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	91		70-130
dibromofluoromethane	111		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 10:54
Analyst: MCM
Percent Solids: 91%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	111		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 11:17
Analyst: MCM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	111		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 11:41
Analyst: MCM
Percent Solids: 94%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	91		70-130
dibromofluoromethane	111		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 12:04
Analyst: MCM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	112		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 12:27
Analyst: MCM
Percent Solids: 86%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	112		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 12:50
Analyst: MCM
Percent Solids: 89%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	110		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 07/06/23 13:13
Analyst: MCM
Percent Solids: 94%
TCLP/SPLP Ext. Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	90		70-130
dibromofluoromethane	112		70-130

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/06/23 05:31
Analyst: MCM
TCLP/SPLP Extraction Date: 07/05/23 07:31

Extraction Date: 07/05/23 07:31

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01-10 Batch: WG1800063-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	95		70-130
dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-10 Batch: WG1800063-3 WG1800063-4								
Chloroform	91		94		70-130	3		20
Carbon tetrachloride	94		98		63-132	4		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	97		98		75-130	1		25
1,2-Dichloroethane	87		90		70-130	3		20
Benzene	95		95		70-130	0		25
Vinyl chloride	76		80		55-140	5		20
1,1-Dichloroethene	87		90		61-145	3		25
Trichloroethene	98		98		70-130	0		25
1,4-Dichlorobenzene	98		100		70-130	2		20
2-Butanone	72		84		63-138	15		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		92		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	90		91		70-130
dibromofluoromethane	98		100		70-130

SEMIVOLATILES

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 21:33
Analyst: SLR
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	48		10-120
4-Terphenyl-d14	52		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 21:50
Analyst: SLR
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	68		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 22:08
Analyst: SLR
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	49		15-120
2,4,6-Tribromophenol	46		10-120
4-Terphenyl-d14	53		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 22:26
Analyst: SLR
Percent Solids: 91%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	65		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 22:43
Analyst: SLR
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	56		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 23:01
Analyst: SLR
Percent Solids: 94%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	62		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 07/01/23 23:18
Analyst: SLR
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	71		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/29/23 19:40
Analyst: IM
Percent Solids: 86%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	82		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/29/23 20:04
Analyst: IM
Percent Solids: 89%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	82		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/29/23 20:28
Analyst: IM
Percent Solids: 94%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	73		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/01/23 13:41
Analyst: SLR
TCLP/SPLP Extraction Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:28

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01-07 Batch: WG1797352-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	50		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	60		33-120

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/29/23 13:11
Analyst: IM
TCLP/SPLP Extraction Date: 06/27/23 00:07

Extraction Method: EPA 3510C
Extraction Date: 06/28/23 14:31

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 08-10 Batch: WG1797353-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	74		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-07 Batch: WG1797352-2 WG1797352-3								
Hexachlorobenzene	51		57		40-140	11		30
2,4-Dinitrotoluene	67		73		40-132	9		30
Hexachlorobutadiene	48		53		28-111	10		30
Hexachloroethane	52		58		21-105	11		30
Nitrobenzene	63		72		40-140	13		30
2,4,6-Trichlorophenol	66		72		30-130	9		30
Pentachlorophenol	52		56		9-103	7		30
2-Methylphenol	55		62		30-130	12		30
3-Methylphenol/4-Methylphenol	62		69		30-130	11		30
2,4,5-Trichlorophenol	67		74		30-130	10		30
Pyridine	34		39		10-66	14		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		74		21-120
Phenol-d6	56		65		10-120
Nitrobenzene-d5	65		75		23-120
2-Fluorobiphenyl	59		67		15-120
2,4,6-Tribromophenol	55		62		10-120
4-Terphenyl-d14	58		63		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 08-10 Batch: WG1797353-2 WG1797353-3								
Hexachlorobenzene	72		67		40-140	7		30
2,4-Dinitrotoluene	74		70		40-132	6		30
Hexachlorobutadiene	57		51		28-111	11		30
Hexachloroethane	52		47		21-105	10		30
Nitrobenzene	65		58		40-140	11		30
2,4,6-Trichlorophenol	79		72		30-130	9		30
Pentachlorophenol	81		73		9-103	10		30
2-Methylphenol	64		59		30-130	8		30
3-Methylphenol/4-Methylphenol	71		64		30-130	10		30
2,4,5-Trichlorophenol	74		71		30-130	4		30
Pyridine	36		21		10-66	**53**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		54		21-120
Phenol-d6	59		53		10-120
Nitrobenzene-d5	67		61		23-120
2-Fluorobiphenyl	68		62		15-120
2,4,6-Tribromophenol	84		78		10-120
4-Terphenyl-d14	72		67		33-120

PCBS

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 16:43
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	49.6	4.40	1	A
Aroclor 1221	ND		ug/kg	49.6	4.97	1	A
Aroclor 1232	ND		ug/kg	49.6	10.5	1	A
Aroclor 1242	ND		ug/kg	49.6	6.68	1	A
Aroclor 1248	ND		ug/kg	49.6	7.44	1	A
Aroclor 1254	ND		ug/kg	49.6	5.42	1	A
Aroclor 1260	12.2	J	ug/kg	49.6	9.16	1	B
Aroclor 1262	ND		ug/kg	49.6	6.30	1	A
Aroclor 1268	ND		ug/kg	49.6	5.14	1	A
PCBs, Total	12.2	J	ug/kg	49.6	4.40	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 16:53
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.7	4.50	1	A
Aroclor 1221	ND		ug/kg	50.7	5.08	1	A
Aroclor 1232	ND		ug/kg	50.7	10.8	1	A
Aroclor 1242	ND		ug/kg	50.7	6.84	1	A
Aroclor 1248	ND		ug/kg	50.7	7.61	1	A
Aroclor 1254	10.5	J	ug/kg	50.7	5.55	1	B
Aroclor 1260	9.38	J	ug/kg	50.7	9.38	1	B
Aroclor 1262	ND		ug/kg	50.7	6.44	1	A
Aroclor 1268	ND		ug/kg	50.7	5.26	1	A
PCBs, Total	19.9	J	ug/kg	50.7	4.50	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:02
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	49.7	4.41	1	A
Aroclor 1221	ND		ug/kg	49.7	4.98	1	A
Aroclor 1232	ND		ug/kg	49.7	10.5	1	A
Aroclor 1242	ND		ug/kg	49.7	6.70	1	A
Aroclor 1248	ND		ug/kg	49.7	7.45	1	A
Aroclor 1254	ND		ug/kg	49.7	5.43	1	A
Aroclor 1260	ND		ug/kg	49.7	9.18	1	B
Aroclor 1262	ND		ug/kg	49.7	6.31	1	A
Aroclor 1268	ND		ug/kg	49.7	5.14	1	A
PCBs, Total	ND		ug/kg	49.7	4.41	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:12
Analyst: JM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.4	4.74	1	A
Aroclor 1221	ND		ug/kg	53.4	5.35	1	A
Aroclor 1232	ND		ug/kg	53.4	11.3	1	A
Aroclor 1242	ND		ug/kg	53.4	7.19	1	A
Aroclor 1248	ND		ug/kg	53.4	8.00	1	A
Aroclor 1254	6.69	J	ug/kg	53.4	5.84	1	B
Aroclor 1260	ND		ug/kg	53.4	9.86	1	A
Aroclor 1262	ND		ug/kg	53.4	6.78	1	A
Aroclor 1268	ND		ug/kg	53.4	5.53	1	A
PCBs, Total	6.69	J	ug/kg	53.4	4.74	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:22
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.8	4.51	1	A
Aroclor 1221	ND		ug/kg	50.8	5.09	1	A
Aroclor 1232	ND		ug/kg	50.8	10.8	1	A
Aroclor 1242	ND		ug/kg	50.8	6.85	1	A
Aroclor 1248	ND		ug/kg	50.8	7.62	1	A
Aroclor 1254	8.00	J	ug/kg	50.8	5.56	1	B
Aroclor 1260	ND		ug/kg	50.8	9.39	1	A
Aroclor 1262	ND		ug/kg	50.8	6.45	1	A
Aroclor 1268	ND		ug/kg	50.8	5.26	1	A
PCBs, Total	8.00	J	ug/kg	50.8	4.51	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:31
Analyst: JM
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.5	4.48	1	A
Aroclor 1221	ND		ug/kg	50.5	5.06	1	A
Aroclor 1232	ND		ug/kg	50.5	10.7	1	A
Aroclor 1242	ND		ug/kg	50.5	6.81	1	A
Aroclor 1248	ND		ug/kg	50.5	7.57	1	A
Aroclor 1254	ND		ug/kg	50.5	5.52	1	A
Aroclor 1260	ND		ug/kg	50.5	9.33	1	A
Aroclor 1262	ND		ug/kg	50.5	6.41	1	A
Aroclor 1268	ND		ug/kg	50.5	5.23	1	A
PCBs, Total	ND		ug/kg	50.5	4.48	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:41
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.1	4.72	1	A
Aroclor 1221	ND		ug/kg	53.1	5.32	1	A
Aroclor 1232	ND		ug/kg	53.1	11.2	1	A
Aroclor 1242	ND		ug/kg	53.1	7.16	1	A
Aroclor 1248	ND		ug/kg	53.1	7.97	1	A
Aroclor 1254	ND		ug/kg	53.1	5.81	1	A
Aroclor 1260	ND		ug/kg	53.1	9.81	1	A
Aroclor 1262	ND		ug/kg	53.1	6.74	1	A
Aroclor 1268	ND		ug/kg	53.1	5.50	1	A
PCBs, Total	ND		ug/kg	53.1	4.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 17:51
Analyst: JM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	56.4	5.01	1	A
Aroclor 1221	ND		ug/kg	56.4	5.66	1	A
Aroclor 1232	ND		ug/kg	56.4	12.0	1	A
Aroclor 1242	ND		ug/kg	56.4	7.61	1	A
Aroclor 1248	ND		ug/kg	56.4	8.47	1	A
Aroclor 1254	ND		ug/kg	56.4	6.18	1	A
Aroclor 1260	ND		ug/kg	56.4	10.4	1	B
Aroclor 1262	ND		ug/kg	56.4	7.17	1	A
Aroclor 1268	ND		ug/kg	56.4	5.85	1	A
PCBs, Total	ND		ug/kg	56.4	5.01	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 18:01
Analyst: JM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	51.5	4.57	1	A
Aroclor 1221	ND		ug/kg	51.5	5.16	1	A
Aroclor 1232	ND		ug/kg	51.5	10.9	1	A
Aroclor 1242	ND		ug/kg	51.5	6.94	1	A
Aroclor 1248	ND		ug/kg	51.5	7.72	1	A
Aroclor 1254	ND		ug/kg	51.5	5.63	1	A
Aroclor 1260	22.9	J	ug/kg	51.5	9.52	1	B
Aroclor 1262	ND		ug/kg	51.5	6.54	1	A
Aroclor 1268	ND		ug/kg	51.5	5.34	1	A
PCBs, Total	22.9	J	ug/kg	51.5	4.57	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/27/23 18:10
Analyst: JM
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.5	4.48	1	A
Aroclor 1221	ND		ug/kg	50.5	5.06	1	A
Aroclor 1232	ND		ug/kg	50.5	10.7	1	A
Aroclor 1242	ND		ug/kg	50.5	6.81	1	A
Aroclor 1248	ND		ug/kg	50.5	7.58	1	A
Aroclor 1254	ND		ug/kg	50.5	5.52	1	A
Aroclor 1260	ND		ug/kg	50.5	9.33	1	A
Aroclor 1262	ND		ug/kg	50.5	6.41	1	A
Aroclor 1268	ND		ug/kg	50.5	5.23	1	A
PCBs, Total	ND		ug/kg	50.5	4.48	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/27/23 16:14
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 06/27/23 01:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-10 Batch: WG1796394-1						
Aroclor 1016	ND		ug/kg	47.1	4.18	A
Aroclor 1221	ND		ug/kg	47.1	4.72	A
Aroclor 1232	ND		ug/kg	47.1	9.99	A
Aroclor 1242	ND		ug/kg	47.1	6.35	A
Aroclor 1248	ND		ug/kg	47.1	7.07	A
Aroclor 1254	ND		ug/kg	47.1	5.16	A
Aroclor 1260	ND		ug/kg	47.1	8.71	A
Aroclor 1262	ND		ug/kg	47.1	5.98	A
Aroclor 1268	ND		ug/kg	47.1	4.88	A
PCBs, Total	ND		ug/kg	47.1	4.18	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	78		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG1796394-2 WG1796394-3									
Aroclor 1016	77		77		40-140	0		50	A
Aroclor 1260	71		74		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		88		30-150	A
Decachlorobiphenyl	81		85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		85		30-150	B
Decachlorobiphenyl	77		80		30-150	B

METALS

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0387	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Barium, TCLP	0.601		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:20	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 18:27	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0340	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Barium, TCLP	0.559		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:44	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 18:13	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0236	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Barium, TCLP	0.404	J	mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:47	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 18:17	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 91%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0304	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Barium, TCLP	0.450	J	mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:51	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 18:22	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0216	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Barium, TCLP	0.504		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:54	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 19:37	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 94%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Barium, TCLP	0.976		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Cadmium, TCLP	0.0104	J	mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Lead, TCLP	0.251	J	mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:57	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 19:41	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0400	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Barium, TCLP	1.06		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Lead, TCLP	0.0448	J	mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 13:01	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 19:46	EPA 3015	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Barium, TCLP	0.465	J	mg/l	0.500	0.0210	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Cadmium, TCLP	0.0316	J	mg/l	0.100	0.0100	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Lead, TCLP	1.08		mg/l	0.500	0.0270	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/28/23 22:47	07/13/23 13:52	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/28/23 21:31	07/11/23 20:45	EPA 3015	1,6010D	AMW

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Barium, TCLP	0.202	J	mg/l	0.500	0.0210	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/28/23 22:47	07/13/23 13:56	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/28/23 21:31	07/11/23 20:51	EPA 3015	1,6010D	AMW

Project Name: 389 MANHATTAN AVE
Lab Number: L2336178
Project Number: 0595-021-001
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY
Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 94%
TCLP/SPLP Ext. Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Barium, TCLP	0.536		mg/l	0.500	0.0210	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/28/23 22:47	07/13/23 13:59	EPA 7470A	1,7470A	GMG
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/28/23 21:31	07/11/23 20:56	EPA 3015	1,6010D	AMW

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 08-10 Batch: WG1797277-1										
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Barium, TCLP	ND		mg/l	0.500	0.0210	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/28/23 21:31	07/11/23 20:26	1,6010D	AMW

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 06/26/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 08-10 Batch: WG1797282-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/28/23 22:47	07/13/23 13:18	1,7470A	GMG

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 06/26/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-07 Batch: WG1797285-1										
Arsenic, TCLP	0.0226	J	mg/l	1.00	0.0190	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Barium, TCLP	ND		mg/l	0.500	0.0210	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/29/23 04:41	07/17/23 18:04	1,6010D	TAA

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 06/27/23 00:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-07 Batch: WG1797286-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/29/23 04:20	07/13/23 12:13	1,7470A	GMG

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 06/27/23 00:07

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 Batch: WG1797277-2								
Arsenic, TCLP	107		-		75-125	-		20
Barium, TCLP	101		-		75-125	-		20
Cadmium, TCLP	103		-		75-125	-		20
Chromium, TCLP	104		-		75-125	-		20
Lead, TCLP	96		-		75-125	-		20
Selenium, TCLP	102		-		75-125	-		20
Silver, TCLP	105		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 Batch: WG1797282-2								
Mercury, TCLP	93		-		80-120	-		
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 Batch: WG1797285-2								
Arsenic, TCLP	99		-		75-125	-		20
Barium, TCLP	108		-		75-125	-		20
Cadmium, TCLP	102		-		75-125	-		20
Chromium, TCLP	106		-		75-125	-		20
Lead, TCLP	100		-		75-125	-		20
Selenium, TCLP	98		-		75-125	-		20
Silver, TCLP	105		-		75-125	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 Batch: WG1797286-2					
Mercury, TCLP	88	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 QC Batch ID: WG1797277-3 QC Sample: L2335810-01 Client ID: MS Sample												
Arsenic, TCLP	0.022J	1.2	1.33	111		-	-		75-125	-		20
Barium, TCLP	0.347J	20	21.0	105		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.560	106		-	-		75-125	-		20
Chromium, TCLP	ND	2	2.10	105		-	-		75-125	-		20
Lead, TCLP	0.117J	5.3	5.31	100		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.29	108		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.533	107		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 QC Batch ID: WG1797282-3 QC Sample: L2336295-02 Client ID: MS Sample												
Mercury, TCLP	ND	0.025	0.0251	100		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1797285-3 QC Sample: L2336178-01 Client ID: WC-1												
Arsenic, TCLP	0.0387J	1.2	1.22	102		-	-		75-125	-		20
Barium, TCLP	0.601	20	21.6	105		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.542	102		-	-		75-125	-		20
Chromium, TCLP	ND	2	2.05	102		-	-		75-125	-		20
Lead, TCLP	ND	5.3	5.15	97		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.22	102		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.518	104		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1797286-3 QC Sample: L2336178-01 Client ID: WC-1												
Mercury, TCLP	ND	0.025	0.0247	99		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 QC Batch ID: WG1797277-4 QC Sample: L2335810-01 Client ID: DUP Sample						
Lead, TCLP	0.117J	0.117J	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 08-10 QC Batch ID: WG1797282-4 QC Sample: L2336295-02 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1797285-4 QC Sample: L2336178-01 Client ID: WC-1						
Arsenic, TCLP	0.0387J	0.0442J	mg/l	NC		20
Barium, TCLP	0.601	0.594	mg/l	1		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1797286-4 QC Sample: L2336178-01 Client ID: WC-1						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:10	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:10	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:10	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:10	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:10	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:05	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:05	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:05	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:05	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	07/06/23 14:05	1,1030	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-01
Client ID: WC-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:30
Date Received: 06/23/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.5		%	0.100	NA	1	-	06/27/23 08:46	121,2540G	ROI
pH (H)	7.57		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:08	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:35	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-02
Client ID: WC-2
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:35
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.7		%	0.100	NA	1	-	06/27/23 08:46	121,2540G	ROI
pH (H)	7.95		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:09	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:36	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-03
Client ID: WC-3
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:40
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.3		%	0.100	NA	1	-	06/27/23 08:46	121,2540G	ROI
pH (H)	9.65		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:09	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:36	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-04
Client ID: WC-4
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:45
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.6		%	0.100	NA	1	-	06/27/23 08:46	121,2540G	ROI
pH (H)	9.41		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:09	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:36	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-05
Client ID: WC-5
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 09:50
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.1		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	8.76		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:10	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:37	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-06
Client ID: WC-6
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 09:55
Date Received: 06/23/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.6		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	7.82		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:10	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:37	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-07
Client ID: WC-7
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:00
Date Received: 06/23/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	7.87		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:10	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:38	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-08
Client ID: WC-8
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:05
Date Received: 06/23/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.5		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	7.44		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:11	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:39	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-09
Client ID: WC-9
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 06/23/23 10:10
Date Received: 06/23/23
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.4		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	7.44		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:12	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:40	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

SAMPLE RESULTS

Lab ID: L2336178-10
Client ID: WC-10
Sample Location: BUFFALO, NY

Date Collected: 06/23/23 10:15
Date Received: 06/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.2		%	0.100	NA	1	-	06/27/23 09:04	121,2540G	ROI
pH (H)	7.64		SU	-	NA	1	-	07/10/23 12:00	1,9045D	KEP
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:12	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:40	125,7.3	MMJ

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001
Lab Number: L2336178
Report Date: 07/18/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1800056-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 12:34	125,7.3	MMJ
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1800068-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	07/06/23 11:15	07/06/23 13:07	125,7.3	MMJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1800056-2								
Sulfide, Reactive	71		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1800068-2								
Cyanide, Reactive	87		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1801353-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: 389 MANHATTAN AVE

Project Number: 0595-021-001

Lab Number: L2336178

Report Date: 07/18/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1796469-1 QC Sample: L2336178-01 Client ID: WC-1						
Solids, Total	92.5	92.7	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 05-10 QC Batch ID: WG1796475-1 QC Sample: L2336262-01 Client ID: DUP Sample						
Solids, Total	93.7	95.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1800056-3 QC Sample: L2336178-01 Client ID: WC-1						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1800068-3 QC Sample: L2336178-01 Client ID: WC-1						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1801353-2 QC Sample: L2336178-01 Client ID: WC-1						
pH (H)	7.57	7.68	SU	1		5

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2336178-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-01B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-01C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2336178-01W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2336178-01X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-01Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-01Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-02A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-02B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-02C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2336178-02W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2336178-02X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-02Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-02Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-03A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-03B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-03C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-03W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2336178-03X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2336178-03X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-03Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-03Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-04A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-04B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-04C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2336178-04W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-04X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2336178-04X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-04Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-04Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-05A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-05B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-05C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-05W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-05X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2336178-05X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-05Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-05Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-06A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-06B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-06C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-06W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2336178-06X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2336178-06X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-06Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-06Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-07A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-07B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-07C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-07D	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-07W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-07X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2336178-07X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-07Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-07Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-08A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-08B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-08C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-08W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-08X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2336178-08X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-08Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-08Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-09A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-09B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-09C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)

*Values in parentheses indicate holding time in days

Project Name: 389 MANHATTAN AVE
Project Number: 0595-021-001

Lab Number: L2336178
Report Date: 07/18/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2336178-09W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-09X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2336178-09X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-09Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-09Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-10A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TCLP-EXT-ZHE(14)
L2336178-10B	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2336178-10C	Glass 500ml/16oz unpreserved	A	NA		3.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2336178-10W	Amber 1000ml unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-8270(14)
L2336178-10X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2336178-10X9	Tumble Vessel	A	NA		3.5	Y	Absent		-
L2336178-10Y	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)
L2336178-10Z	Vial unpreserved Extracts	A	NA		3.5	Y	Absent		TCLP-VOA(14)

*Values in parentheses indicate holding time in days

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2336178
Project Number:	0595-021-001	**Report Date:**	07/18/23

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2336178
Project Number:	0595-021-001	**Report Date:**	07/18/23

Data Qualifiers

Identified Compounds (TICs).

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	389 MANHATTAN AVE	**Lab Number:**	L2336178
Project Number:	0595-021-001	**Report Date:**	07/18/23

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 6/24/23

ALPHA Job #: L2336178

Client Information
Client: BENCHMARK
Address: 2558 HAMBURG TPKE
BUFFALO, NY 14218
Phone: 716-856-0599
Fax:
Email: cboron@bm-tk.com

Project Information
Project Name: 389 MANHATTAN AVE
Project Location: BUFFALO, NY
Project # 0595-021-001
(Use Project name as Project #) ☐
Project Manager: CHRIS BORON
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP VOCs	TCLP SVOCs	TCLP METALS	PCBs	1,C,R				Sample Specific Comments	Total Bottle
36178-01	WC-1	6/23/23	930	SOIL	CB	X	X	X	X	X					3
02	WC-2		935			X	X	X	X	X					3
03	WC-3		940			X	X	X	X	X					3
04	WC-4		945			X	X	X	X	X					3
05	WC-5		950			X	X	X	X	X					3
06	WC-6		955			X	X	X	X	X					3
07	WC-7		1000			X	X	X	X	X					3
08	WC-8		1005			X	X	X	X	X					3
09	WC-9		1010			X	X	X	X	X					3
10	WC-10		1015			X	X	X	X	X					3