

# **REMEDIAL INVESTIGATION REPORT**

## **Brownfield Cleanup Program**

June 22, 2023

**46-70 McLean Avenue Auto Repair Laundry**

**46-70 McLean Avenue**

**Yonkers, New York**

**Westchester County Tax Map Designation: *Section 1, Block 203, Lot 51.61***

**NYSDEC BCP Site Number: C360211**

### ***Prepared for:***

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### ***Submitted to:***

New York State Department of Environmental Conservation

Chief, Site Control Section

Region 3, Division of Environmental Remediation

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### ***IE Project Number:***

15514



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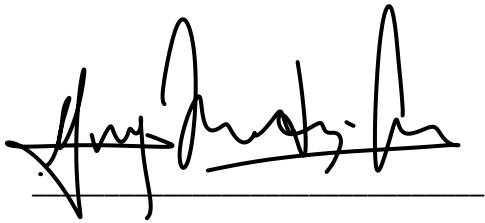
## LIST OF ACRONYMS

Acronym	Definition
AGV	Air Guidance Value
amsl	above mean sea level
AOC	Area of Concern
ASTM	American Society for Testing and Materials
AST	Aboveground Storage Tank
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
fbg	feet below grade
bgs	below grade surface
CAMP	Community Air Monitoring Program
COC	Contaminant of Concern
CVOC	Chlorinated Volatile Organic Compound
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DUSR	Data Usability Summary Report
EDD	Electronic data deliverable
EDR	Environmental Data Resources
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
FINDS	Facility Index System/Facility Registry System
FWRIA	Fish and Wildlife Resources Impact Analysis
GPR	Ground Penetrating Radar
GSF	Gross Square Foot
HASP	Health and Safety Plan
IDW	Investigation Derived Waste
LNAPL	Light Non-Aqueous Phase Liquid
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	New York Codes, Rules, and Regulations
NYSDOH	New York State Department of Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	Department of Transportation
NYCOER	New York City Office of Environmental Remediation
NTU	Nephelometric Turbidity Units
ORP	Oxidation-Reduction Potential
PAH	Polycyclic Aromatic Hydrocarbon

<b>Acronym</b>	<b>Definition</b>
PBS	Petroleum Bulk Storage
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PID	Photoionization Detector
PPE	Personal Protective Equipment
ppm	Parts per million
ppm <sub>v</sub>	Parts per million by volume
PVC	Polyvinyl Chloride
PGW	Protection of Groundwater
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
RR	Restricted Residential
SCOs	Soil Cleanup Objectives
sf	square feet
SSDS	Sub Slab Depressurization System
SMP	Site Management Plan
SQG	Small Quantity Generator
SVOC	Semi Volatile Organic Compound
TAL	Target Analyte List
TCA	Trichloroethane
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
USGS	United States Geological Survey
UST	Underground Storage Tank
VE	Vapor Extraction
VMP	Vapor Monitoring Point
VOC	Volatile Organic Compound

### **CERTIFICATION**

I, Greg Mendez-Chicas, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation 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) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

A handwritten signature in black ink, appearing to read 'Greg Mendez-Chicas', is written over a horizontal line.

Greg Mendez-Chicas,  
*Senior Project Manager*

June 22, 2023

Date

## **1 INTRODUCTION**

Impact Environmental Engineering and Geology, PLLC (IEEG) prepared this Remedial Investigation Report (RIR) on behalf of SNL Yonkers, LLC (the “Volunteer”) for the property located at 46-70 McLean Avenue, Yonkers (Block 203, Lot 51.61) Yonkers, New York (the “Site”). A Site Location Map is provided as **Figure 1**. The Volunteer was accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) pursuant to a NYSDEC Brownfield Cleanup Agreement (BCA), dated May 11, 2021 (BCP Site No. C360211).

### **1.1 Purpose and Scope**

This RIR presents environmental data and findings from the May 2022 Remedial Investigation (RI) performed by IEEG under the auspices of New York State Department of Environmental Conservation (NYSDEC) and in substantial accordance with the Remedial Investigation Work Plan (RIWP) approved by NYSDEC on August 26<sup>th</sup>, 2021. The objective of the investigation was to determine, to the extent possible, the nature and extent of contamination in soil, soil vapor, and groundwater. Information presented in this RIR will be used to evaluate appropriate remedial action alternatives.

The combined scope of work implemented during the referenced investigations included the following: 1) performance of a geophysical investigation of the sample collection locations and to define the extent of an underground storage tank (UST); 2) installation of nine (9) soil vapor sampling points and collection of nine (9) soil vapor samples, along with four (4) indoor air samples, and two (2) ambient outdoor air samples for laboratory analysis; 3) the advancement of 21 remedial investigation soil borings to a maximum depth of 10-feet below grade surface (bgs) for collection of soil samples for field screening and laboratory analyses; 4) installation of three (3) permanent groundwater monitoring wells for collection of representative groundwater samples for laboratory analysis, and 5) the collection of representative groundwater samples from five (5) existing monitoring wells for laboratory analysis.

The investigative protocols used for this assessment were based, in part, upon the following documents: 1) NYSDEC, Division of Environmental Remediation (DER), DER-10 Technical Guidance For Site Investigation and Remediation, dated May 3, 2010; 2) the New York Codes, Rules and Regulations (NYCRR) Part 375 Environmental Remediation Programs Effective December 14, 2006; 3) the NYSDEC Commissioners Policy CP-51 Soil Cleanup Guidance issued October 21, 2010; 4) the NYSDEC Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitations; and 5) the New York State Department of

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Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates.

Presented herein are the results of the investigations conducted by IEEG on the Site.

## **2 SITE CHARACTERISTICS**

### **2.1 Site Description**

The Site consists of a single parcel of land approximately 0.87-acres in size which is located about 0.55 miles west of the Saw Mill River Parkway North (refer to **Plate 1**), and situated on the northwest corner of McLean Avenue and Van Cortlandt Park Avenue. The Site consists of a single parcel of land assigned City of Yonkers Tax Map Designation: Section 1, Block 203, and Lot 51.61 (formerly Lots 51, 57, 59, and 61), and is in an area composed of commercial and residential development along collector and local roadways, respectively, along with two adjacent Public Parks (Sutherland Park to the north and Pelton Park to the east) within a historically commercial and residential area (refer to **Plate 2**). The Site has a CM zoning designation for Commercial, Storage, and Light Manufacturing uses.

#### **2.1.1 Site Conditions**

Currently, the Site is unoccupied and contains a single two-story building with a partial sub-grade boiler room located in the northeast section of the building. The portion of the building that fronts along McLean Avenue is composed of six (6) commercial units: 46 McLean Avenue (formerly occupied by JS Garage); 48 McLean Avenue (formerly occupied by Simax Transmissions); 50 McLean Avenue (formerly occupied by Claudio Transmissions); 60 McLean Avenue Suite 1 (formerly occupied by Victor and Rene); 60 McLean Avenue Suite 2 (formerly occupied by VP Tires); and 70 McLean Avenue (formerly occupied by Pizza Barn). The second story of the building that extends into northern segment of the Site is accessible via ramp or stairwell from McLean Avenue and is addressed 60 McLean Avenue Suite 200. This area was predominantly inactive storage space for former occupant, including dolls and stuffed toys, frames, leather goods, office supplies, antiquated printing machines or vacant space. A small portion of the 2<sup>nd</sup> floor was, until recently, still operable and utilized for heating sealing to customize jerseys, sweatshirts and performance wear. The building encompasses the entire Lot and has a footprint approximately 37,897 square feet (SF). (See **Figure 2** for Existing Site Plan).

The building currently receives electrical service from Con Edison, potable water from the City of Yonkers Water Bureau, while sanitary waste is reportedly handled by the City of Yonkers Sewer Department. The property does not reportedly receive natural gas service. Storm water runoff for the Site is handled via the municipal storm water drainage system located along both McLean Avenue and Van Cortlandt Park Avenue.



### **2.1.2 Description of Surrounding Properties**

The surrounding land parcels have a combination of residential, commercial, and municipal uses. Commercial uses are predominantly along collector roadways. The Site is bordered to the north by Sutherland Park, to the east by Van Cortland Park Avenue followed by Pelton Park, to the south by McLean Avenue followed by an active gasoline station and auto repair shop (Global Automotive), a food distribution center and several single-family residential dwellings, and to the west by McLean Avenue and several commercial properties (including Advance Auto Parts, Chase Bank, Hollywood Florist, and Malecon Restaurant).

While the property will be redeveloped into a self-storage facility, the redevelopment will retain the exterior façade of the current commercial building to maintain the current aesthetic of the neighborhood.

Based on a review of available databases, IEEG has identified the following sensitive receptors, such as hospitals, day care facilities, or schools, in the vicinity of the Site. No sensitive receptors were identified within a 500-foot radius of the Site:

#### Day Care Facilities

- Cookies-n-Apple Juice - 37 Cornell Avenue #2468 – 676 feet ESE
- New Beginnings Group Daycare - 112 McLean Avenue – 656 feet ESE
- Elizabeth's' Group Family Day Care - 23 Bruce Avenue – 737 feet SW
- Annabelle's Group Family Day Care - 57 Radford Street – 617 feet SW
- Mamaena Daycare Inc - 12 Randolph Street – 700 feet SW
- Nana Carmen Family Group Daycare - 34 Cliff Avenue – 1,320 feet W
- Crayola Kid LLC - 20 Wolffe Street – 1,242 feet SSE
- Ericka's Group Day Care - 57 Radford Street #2R – 617 feet SW
- Lala's Daycare - 19 Bruce Avenue – 800 feet SW
- Blessed Kiddies Daycare – 51 Cliff Avenue – 1,500 feet WSW
- Watch and Learn Group Family Weecare – 200 Valentine Lane #1I – 2,000 feet SW

#### Schools

- Eugino Maria De Hostos Microsociety school – 75 Morris Street, Yonkers – 2,175 feet NW
- Pearls Hawthorne school - 350 Hawthorne Ave – 2,540 feet W

- St Peters School - 204 Hawthorne Avenue – 3,460 feet NW
- PS 13 Annex – 195 McLean Ave – 2,000 feet SSE
- Scholastic Academy for Academic Excellence - 77 Park Hill Ave #4822 – 3,200 feet N
- Yonkers Middle High School – 150 Rockland Avenue – 3,425 feet NE
- Montessori School 27 – 132 Valentine Lane – 2,920 feet SW
- Cedar Place Elementary School - 20 Cedar Place -2,735 feet NNW

#### Hospitals

- St Joseph's Medical Center - 127 South Broadway - 0.80 miles

#### Private Water Wells

In addition, a search of publicly available information was conducted to determine the presence, if any, of private groundwater drinking wells in the vicinity of the Site. Utilizing the USEPA Private Domestic Well Map, the nearest property actively using private wells was located approximately 2,140-feet northwest of the Subject Property (see **Figure 3**). Based on the distance and hydraulically down gradient location of this property, it is not expected to be impacted by any soil, groundwater, or soil vapor contamination detected at the Subject Property.

## **2.2 Physical Setting of the Site**

### **2.2.1 Topography**

The Site is located within the Atlantic Coastal Plain Physiographic Province. The elevation of the Site, as presented on the United States Geologic Survey (USGS), Yonkers Quadrangle Map, is approximately 80 feet above mean sea level (amsl) on the southern portion of the Site and 90 feet amsl on the northern portion of the Site. The **Site Topographic Map** is included as **Plate 3** and indicates the Site area has an approximately 10-foot elevation change from the north to south portions of the property. The nearest major surface water body to the Site is Hudson River, located approximately 0.82 miles (or 4,350 feet) to the west.

Westchester County is divided into 26 general soil units, or groups of soils geographically associated in a characteristic repeating pattern, according to the Soil Survey of Westchester County, New York (U.S. Department of Agriculture, U.S. Soil Conservation Service). The general soil component of the Site, as defined by this publication, is Urban Land. This soil type consists of urbanized areas where the majority of the surface

is covered with buildings, roads, driveways, parking lots, and other manmade structures. Further classification of the soils in these areas is impractical.

### **2.2.2 Regional and Site Geology and Hydrogeology**

Groundwater flow is typically topographically influenced, as shallow groundwater tends to originate in areas of topographic highs and flows toward areas of topographic lows, such as rivers, stream valleys, ponds, and wetlands. A broader, interconnected hydrogeological network often governs groundwater flow at depth or in the bedrock aquifer. Groundwater depth and flow direction are also subject to hydrogeologic and anthropogenic variables such as precipitation, evaporation, extent of vegetation cover, and coverage by impervious surfaces. Other factors influencing groundwater include depth to bedrock, the presence of artificial fill, and variability in local geology and groundwater sources or sinks.

Westchester County is underlain by multiple aquifers, the Galpermin aquifer which is located under the Site is an unconfined aquifer and not a primary source of water. Potable water is drawn from surface water reservoir systems that are sourced from New York state. Based upon the topographic map (USGS – Yonkers Quadrangle) and proximity to the Hudson River, regional groundwater flow direction is presumed to be west to southwest. It should be noted that there may be localized variations in subsurface hydrology created by sewers, wells and other anthropogenic structures. Hydrologic conditions in the vicinity of the Site may be subject to variations in seasonal precipitation and geological conditions not evident during review of publicly available records.

Based on corporate records, obtained by IEC, a Phase II and Supplemental Phase II Environmental Site Assessment (ESA) conducted in April and July 2020 at the Site identified bedrock directly beneath the building slab on the western portion of the Site. Furthermore, sub-grade materials in areas where bedrock was not present, consisted of fine to medium grained brown sand, with no signs of non-native fill material identified. During the Supplemental Phase II ESA, six (6) groundwater monitoring wells were installed on the southeast portion of the Site, and groundwater was encountered between 9.7 and 10.06 feet bgs. Finally, a survey of the installed monitoring wells was performed by Control Point on May 24, 2022 and it was determined that localized groundwater flow is towards the southwest.

During the RI, three (3) groundwater monitoring wells were installed at predetermined locations across the site and depth to groundwater was measured, an additional five wells previously installed by others, were also gauged for depth to groundwater readings. Groundwater ranged from approximately 1.29 feet below the site (MW-5A), perched on top of bedrock, to 10.57 feet in MW-9A on the southeastern portion of the site.

### **3 SITE BACKGROUND**

The following sections describe the historical Site use, the proposed Site redevelopment plan, the findings from previous environmental investigations completed by others for the Site and a summary of the identified areas of concern (AOCs).

#### **3.1 Historical Site Use**

Through review of historical records, New York City records, NYC databases and environmental databases for the Site, the following is a summary of the information identified:

- Sanborn Historical Fire Insurance Maps which indicate the Site was developed with a two-story warehouse type building as early as **1942**, at which point the property was reportedly occupied by “Park Hill Garage”. Prior Sanborn Maps from 1898 and 1917 show the Site as undeveloped
- In **1951**, Sanborn maps depict the same two-story commercial building, however, the southern portion of the building is occupied by “Sportswear Manufacturing”, and the northern portion is utilized for “Printing”.
- In **1956**, Sanborn Maps depict the southern portion of the building as separated into eight (8) “stores” the specific use of which are not given. The northern portion of the Site is still being utilized for “printing”.
- Between **1957** and **1978**, Sanborn Maps no longer present the usage of the building.
- City Directory Listings from **1982** list the buildings occupants as VP Tires (60 McLean Avenue), and Almor Corp. (50 McLean Avenue)
- City Directory Listings from **1987** list the buildings occupants as Admiration Toy, Co., Admiration Trading, Brookstyle Co. Inc, Epic Plastics, Newman & Newman, Star Desk Pad Co., US Toy MFG LTD, VP Tires (60 McLean), M&M Auto Service, Stahl Surgical (48 McLean).
- In **1989**, Sanborn Maps depict the building as being utilized for “auto repair”.

- City Directory Listings from **1992** list the buildings occupants as Admiration Toy Company, Inc, AHR Associates, Inc., Metcor Manufacturing, Inc., Milan Schuster, Inc., Start Desk Pad, Co., Inc., US Toy MFG LTD, VP Tires (60 McLean), Allstate Paint & Wall Covering (48 McLean).
- City Directory Listings from **1995** list the buildings occupants as Admiration Toy Company, Inc, AHR Associates, Inc., Metcor Manufacturing, Inc., Milan Schuster, Inc., Start Desk Pad, Co., Inc., US Toy MFG LTD, VP Tires (60 McLean), Allstate Paint & Wall Covering, M & M Automotive Service Center (48 McLean).
- City Directory Listings from **2000** list the buildings occupants as Admiration Toy Company, Inc, AHR Associates, Inc., Metcor Manufacturing, Inc., Milan Schuster, Inc., Start Desk Pad, Co., Inc., US Toy MFG LTD, Universal School Products, VP Tires, Inc. (60 McLean), Allstate Paint & Wallcovering, CIN Motors (48 McLean)
- City Directory Listings from **2005** list the buildings occupants as AHR Associates, Inc., Metcor Manufacturing, Inc., Milan Schuster, Inc., Toy Admiration Co Inc, US Toy MFG LTD, Universal School Products, VP Tires Inc. (60 McLean), Raceway Motor Sales & Service (50 McLean), Allstate Paint and Wallcoverings (48 McLean).
- City Directory Listings from **2010** list the buildings occupants as Pizza Barn, Tip Top Management, Inc, Willow Laundry, Corp (70 McLean), Anic Enterprises, Inc., Elisa and Mike Auto Repair, AHR Associates, Inc., All Glass Systems, Inc., Shuai Jiao Research Inst. Inc., Star Desk Pad Co. Inc, US Toy MFG LTD, Viking Sporting Goods, Inc. VP Tire, Inc. (60 McLean), Castlemaine Autobody, Inc., Raceway Motor Sales & Service (50 McLean), Patino Paints, Inc. (48 McLean).
- City Directory Listings from **2014** list the buildings occupants as Pizza Barn (70 McLean), Shield Co, Inc, Shuai Jiao Research Inst. Inc., Start Desk Pad Co. Inc, VP Tires Inc (60 McLean), Claudio Transmissions (50 McLean), AJS Hand Carwash, JA Taxi & Limo Corp, Patino Paints, Inc (48 McLean) Inc., Raceway Motor Sales & Service (50 McLean), Patino Paints, Inc. (48 McLean).

### **3.2 Proposed Site Redevelopment Plan**

The development project consists of a commercial storage facility that will incorporate the existing façade of the current building. The proposed development will be approximately 88,830 gross-square-foot (GSF) and 46 feet 3-inches in height (3 stories) and upon completion will include 11 interior parking spaces, storage units and office space. The building will be constructed slab on grade, with final excavation depth ranging from 4-feet bgs beneath the building slab, and 6-feet bgs in areas of footings. The water table is expected at

between approximately 1.29 and 10.57-feet bgs and may impact the development. Development is slated to take 27 months to complete. Plans for the Site redevelopment are provided in **Appendix A**.

### **3.3 Previous Investigations**

#### Structural Engineering Technologies, P.C. (SET) Phase I ESA, October 2, 2018

Below is a summary of the findings of the SET Phase I ESA:

- The historic use of the Property as a printing company from 1951 to at least 1956, as Willow Laundry Company in 2010 and as various auto repair facilities from 1987 to the present time. Since the use and storage of hazardous chemicals and petroleum products used by these facilities is unknown their historic presence should be considered a REC.
- The presence of a Potential Vapor Encroachment Condition from the adjacent property to the south – The Unnamed Gasoline Station. This unnamed gasoline station is associated with four closed NYSDEC Spills. One of the spills is reported to have impacted the groundwater and the three other spills are reported to have impacted the soil. Since the unnamed gasoline station is located within 200 feet of the Property there is a potential for the closed NYSDEC spills to impact upon the soil vapor quality beneath the Property. Therefore, the presence of the adjacent gasoline station should be considered a potential vapor encroachment condition (PVEC).
- The presence of an active UST in the eastern portion of the Site. The UST may be impacting upon the environmental quality of the Property and its presence should therefore be considered a REC.
- The listing of closed NYSDEC Spill # 93-10281 for the Property. The spill is related to the release of petroleum during a fuel oil delivery to the underground fuel oil storage tank. The database indicates the spill was cleaned up immediately. The presence of a closed NYSDEC associated with the Property should be considered a HREC and no further action is required regarding this spill.

#### Structural Engineering Technologies, P.C. (SET) Phase II ESA, April 22, 2020

Below is a summary of the SET Phase II ESA:

- A Ground Penetrating Radar (GPR) survey was performed in accessible areas of the Site. One anomaly indicative of the 5,000-gallon fuel oil UST was identified in the parking garage ramp at 60 McLean Avenue. The tank is buried in the parking garage ramp and is not located in the basement.
- Eight (8) soil probes (designated SP-1 through SP-7 and SP-9) were installed by PG Environmental, Corp with a Geoprobe. The soil probes were installed to investigate the historic use of the site as a suspect laundry and printing facility, the current and historic use of the site as an auto repair facility and the presence of the 5,000-gallon UST.

- Soil probe SP-1 was installed at 46 McLean Avenue, soil probe SP-2 and SP-3 were installed at 48 McLean Avenue, soil probe SP-4 was installed at 50 McLean Avenue, soil probe SP-5 was installed at 60 McLean Avenue at the Tire Shop, soil probe SP-6 was installed at 60 McLean Avenue at the southern side of the parking garage ramp, soil probe SP-7 was installed to the south of the 5,000-gallon UST and soil probe SP-9 was installed in the basement directly to the north of the 5,000-gallon UST.
- The soil probes were installed until the groundwater table or refusal was encountered. Refusal was encountered at less than 1 foot below grade at SP-2, SP-3, and SP-4. Several attempts were made to install the probes in nearby locations; however, after three failed attempts at each location, it was determined that bedrock was present directly beneath the slab in the western portion of the site and soil probes could not be installed within the eastern portion of 46 McLean Avenue, throughout 48 McLean Avenue and throughout 50 McLean Avenue; therefore, soil samples were not collected from these areas.
- Soil probes SP-1, SP-5 and SP-6 were installed until groundwater was encountered at 15 feet below grade. Soil probes SP-7 and SP-9 were installed to 5 feet below grade. Refusal was encountered at 5 feet below grade in SP-7 and SP-9 was intended to investigate the area to the north of the UST. Since SP-9 was present in the basement below the UST depth it was only installed to 5 feet. A total of five (5) soil samples were submitted for laboratory analysis.
- The groundwater investigation consisted of the installation and sampling of two temporary monitoring wells designated MW-5 and MW-7. Groundwater was encountered at 10 feet below grade in MW-5 and MW-8. Monitoring well MW-5 was installed at 60 McLean Avenue in the tire shop. Monitoring well MW-8 was installed at 60 McLean Avenue in the southern portion of the parking garage ramp. Two (2) groundwater samples were submitted for laboratory analysis.
- A total of six sub slab probes (designated SV-1 to SV-6) were installed during the investigation with a Geoprobe. It should be noted that the SET report incorrectly states that SV-7 was one of the collected samples. Following a review of the Sample Location Plan, Tabulated Soil Vapor results, and raw analytical data report, IEC concluded that SV-7 was not one of the collected samples. The sub-slab probes were installed beneath the foundation slab. Sub-Slab SV-1 was installed at 46 McLean Avenue, Sub-Slab Vapor Probes SV-2 and SV-3 were installed at 48 McLean Avenue, Sub-Slab Vapor Probe SV-4 was installed at 50 McLean Avenue, Sub-Slab Vapor Probe SV-5 was installed at 60 McLean Avenue and Sub-Slab Vapor Probe SV-6 was installed at the southern portion of the parking



garage ramp. Additionally, two indoor air samples (designated IA-1 and IA-2) and one outdoor air sample (designated OA-1) were collected during the investigation.

- Volatile organic compounds (VOCs) were detected in SP-9, 2.5 to 5 feet at concentrations exceeding their respective UUSCO. Acetone was detected in SP-1 (7.5 to 10 feet), SP-5 (5 to 7.5 feet), SP-6 (7.5 to 10 feet) and SP-7 (2.5 to 5 feet) at concentrations exceeding its respective method detection limit (MDL) but less than its UUSCO (and Protection of Groundwater standard (PGW)) of 0.05 mg/kg. No other VOCs were detected in SP-1 (7.5 to 10 feet), SP-5 (5 to 7.5 feet), and SP-7 (2.5 to 5 feet) at concentrations exceeding their respective MDL.
- Several VOCs including, 1,2,4-Trimethylbenzene (0.0900 mg/kg), 1,3,5-Trimethylbenzene (0.0320 mg/kg), Ethyl Benzene (0.00980 mg/kg), Isopropylbenzene (0.00670 mg/kg), Methylcyclohexane (0.00930 mg/kg), n-Butylbenzene (0.0130 mg/kg), n-Propyl benzene (0.0120 mg/kg), o-Xylene (0.0120 mg/kg), m & p xylene (0.0310 mg/kg), p-isopropyltoluene (0.0150 mg/kg), sec-Butylbenzene (0.00750 mg/kg) were detected in SP-6, 7.5 to 10 feet. The remaining VOCs in SP-6, 7.5 to 10 feet were detected at concentrations less than their respective MDL.
- No semi-volatile organic compounds (SVOCs) were detected in the soil at concentrations exceeding their respective MDL.
- The VOC, acetone, was detected in MW-5 at a concentration exceeding its respective MDL. The remaining VOCs in MW-5 were detected at a concentration less than their MDL.
- Eleven (11) VOCs were detected in MW-8 at a concentration their respective GQS. These VOCs include the following compounds: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethyl benzene, isopropyltoluene, n-butylbenzene, n-propylbenzene, o-xylene, p/m-xylene, p-isopropyltoluene, sec-butylbenzene, toluene, and total xylenes.
- The compound, Carbon Tetrachloride, was detected in SV-1 (1.2  $\mu\text{g}/\text{m}^3$ ), SV-3 (10  $\mu\text{g}/\text{m}^3$ ), SV-4 (0.720  $\mu\text{g}/\text{m}^3$ ), SV-5 (0.390  $\mu\text{g}/\text{m}^3$ ) and in the indoor air IA-1 (1  $\mu\text{g}/\text{m}^3$ ) and the outdoor air, OA-1 (0.490  $\mu\text{g}/\text{m}^3$ ). According to the NYSDOH Decision Matrix A and based upon the concentrations detected mitigation is recommended for Carbon Tetrachloride.
- The compound, trichloroethene (TCE), was detected in SV-4 at a concentration of 2.5  $\mu\text{g}/\text{m}^3$ . Trichloroethene was not detected in any other sub-slab probe, the indoor air samples, or the outdoor air sample. According to the NYSDOH Decision Matrix A and based upon the concentrations detected no further action is required for trichloroethene.

- The compound, methylene chloride, was detected in SV-4 ( $5.6 \mu\text{g}/\text{m}^3$ ). Methylene chloride was not detected in any other sub-slab probe, the indoor air samples, or the outdoor air sample. According to the NYSDOH Decision Matrix B and based upon the concentrations detected no further action is required for methylene chloride.
- The compound, tetrachloroethene (PCE), was detected sub-slab samples SV-1 ( $30 \mu\text{g}/\text{m}^3$ ), SV-2 ( $210 \mu\text{g}/\text{m}^3$ ), SV-3 ( $220 \mu\text{g}/\text{m}^3$ ), SV-4 ( $110 \mu\text{g}/\text{m}^3$ ), SV-5 ( $3.6 \mu\text{g}/\text{m}^3$ ) and the indoor air sample, IA-1 ( $4 \mu\text{g}/\text{m}^3$ ), and the outdoor air sample, OA-1 ( $0.890 \mu\text{g}/\text{m}^3$ ). Tetrachloroethene was not detected in SV-6 or IA-2. According to NYSDOH Decision Matrix B and based upon the concentrations detected, the levels of PCE should be monitored over time.
- The compound, Vinyl Chloride, was detected in the sub-slab sample SV-5 at a concentration of  $0.270 \mu\text{g}/\text{m}^3$ . Vinyl Chloride was not detected in any other sub-slab probe, the indoor air samples or the outdoor air sample. According to NYSDOH Decision Matrix C and based upon the concentrations detected, the levels of Vinyl Chloride require no further action at this time.
- The compounds 1,1,1-Trichloroethane, cis 1-2-dichloroethene, 1,1-Dichloroethylene, were not detected in the sub slab vapor samples or indoor air sample.
- An evaluation of the analytical results indicated elevated levels of VOCs were detected in SV-6. These VOCs include Cyclohexane ( $190,000 \mu\text{g}/\text{m}^3$ ), Ethyl Benzene ( $13,000 \mu\text{g}/\text{m}^3$ ), n-Heptane ( $300,000 \mu\text{g}/\text{m}^3$ ), n-Hexane ( $280,000 \mu\text{g}/\text{m}^3$ ), o-Xylene ( $4,300 \mu\text{g}/\text{m}^3$ ), m & p xylene ( $22,000 \mu\text{g}/\text{m}^3$ ) and Toluene ( $4,500 \mu\text{g}/\text{m}^3$ ).
- The results of the Phase II ESA indicate that the historic use of the site and the presence of an active 5,000-gallon UST do not appear to have impacted upon the environmental quality of the Property. This is evidenced by the soil screening and soil analytical results of SP-1, SP-5, SP-7 and SP-9 and the groundwater analytical results from MW-5. No VOCs or SVOCs were detected in the soil or the groundwater at concentrations exceeding regulatory standards from beneath the auto repair shops or around the 5,000-gallon UST. Additionally, the sub-slab vapor data collected from beneath the auto repair facilities shows only low-level exceedances in the soil vapor. These concentrations may be related to the current use of the Property as auto repair facilities.
- The results of the Phase II ESA indicated that the presence of an unnamed gasoline station adjacent to the Property, is most likely impacting upon the vapor quality and groundwater quality of the Property. This is evidenced by the presence of gasoline and solvent related VOCs in the groundwater beneath the bottom of the parking garage ramp (MW-8) in the eastern portion of the property at

concentrations exceeding the Groundwater Quality Standard. The gas station is located in the presumed downgradient direction; however, its gasoline tanks are within a 50 feet radius of influence of MW-8 and based upon the distance and the presence of historic spills documented to have impacted upon the groundwater the unnamed gasoline station is most likely the source of the VOCs identified in the groundwater.

- No evidence of a petroleum release was identified in the soil around MW-8 as evidenced by the soil screening results of SP-6. No olfactory/visual evidence of petroleum and no elevated levels of organic vapors were identified from zero to 10 feet below grade. However, olfactory evidence of petroleum was identified in the saturated soil from 10 to 15 feet below grade. Additionally, while the soil collected from SP-6 at 7.5 to 10 feet below grade had levels of VOCs exceeding the MDL but less than the UUSCO, these concentrations can be attributed to fluctuations in the groundwater table.
- Based on the results of the Phase II ESA, SET made the following recommendations:
  - During future construction activities it is recommended the active 5,000-gallon UST be removed in accordance with local, state and federal guidelines.
  - A soil vapor mitigation system should be designed and installed within the new building to prevent vapors from the adjacent gasoline station from impacting the indoor air.
  - The NYSDEC should be notified of a release from the adjacent property, 67 McLean Avenue. A copy of this report should then be provided to the NYSDEC for their review and comment.
  - Soil excavated during construction activities should be disposed of in accordance with local, state and federal regulations.

Structural Engineering Technologies, P.C. (SET) Supplementary Phase II ESA (Phase IIb), July 6, 2020

Below is a summary of the SET Supplemental Phase II ESA:

- Six (6) soil probes (designated SP-10 through SP-15) were installed by PG Environmental, Corp with a Geoprobe. The soil probes were installed to further delineate levels of VOCs and SVOCs previously detected.
- Soil probe SP-10 was installed at 48 Mclean Avenue in the previous location of SP-2/SV-2. Soil probe SP-11 was installed at the parking of the parking garage ramp at 60 Mclean Avenue in a similar location of SP-6/SV-6. Soil probe SP-12 is located on the sidewalk to the south of the parking garage ramp along Mclean Avenue. Soil Probe SP-13 was installed to the west of SP-12 and soil probe SP-14 was installed to the east of SP-12. Soil probe SP-15 was installed in VP-Discount Tire (60 Mclean Avenue) in a similar location as SP-5/MW-5/SV-5.

- Refusal was encountered at 5 feet in SP-10A and SP-15A. Several attempts were made to install the probes in nearby locations; however, after three failed attempts at each location, it was determined that the probe could not be installed any deeper. Soil probes SP-11 through SP-14 were installed until 15 feet below grade. Groundwater was encountered at approximately 10 feet below grade.
- A total of 10 soil samples were submitted for laboratory analysis.
- During the investigation five (5) permanent monitoring wells designated WP-10A, WP-11, WP-12, WP-13, and WP-14 were installed. WP-10A was installed in the western portion of the site within 48 Mclean Avenue. Monitoring Wells WP-12, WP-13 and WP-14 were installed on the sidewalk along Mclean Avenue. Monitoring Well WP-15 was installed in the Tire Shop at 60 Mclean Avenue and Monitoring Well MW-11 was installed at the bottom of the parking garage ramp.
- Land survey was used to identify the location of the monitoring wells. The elevations of all installed monitoring wells were surveyed relative to a permanent surface benchmark. The results of the survey indicate groundwater is flowing towards the southwest.
- A total of five (5) groundwater samples were submitted for laboratory analysis.
- No SVOCs were detected in the soil at concentrations exceeding their respective UUSCO.
- Several VOCs were detected in WP-11, WP-12, WP-13, and WP-14 at concentrations exceeding their respective GQS. The VOC, 1,2,4-Trimethylbenzene was detected in at concentrations ranging from 130 µg/L in WP-13 to 700 µg/L in WP-11, which exceeds the GQS of 5 µg/L. The VOC, 1,3,5-Trimethylbenzene range from 40 µg/L in WP-13 to 230 µg/L in WP-11. The VOC Benzene was detected in WP-11 at a concentration of 3.2 µg/L which exceeds the GQS of 1 µg/L. The VOC, Ethyl Benzene was detected at concentrations ranging from 0.740 µg/L in WP-10A to 340 µg/L WP-11. The GQS for Ethyl Benzene is 5 µg/L. Isopropyl benzene was detected at concentrations ranging from 21 µg/L in WP-13 to 85 µg/L in WP-11. The GQS for Isopropyl benzene is 5 µg/L. The VOC, o-Xylene was detected at a concentration ranging from 12 µg/L in WP-14 to 340 µg/L in WP-11 and the VOC p-& m-Xylene was detected at concentrations ranging from 3.2 in WP-10A to 1,000 in WP-11. The GQS for o-Xylene and p-m-Xylene is 5 µg/L. The VOC, p-Isopropyl toluene was detected at concentrations ranging from 19 µg/L in WP-12 to 35 µg/L in WP-11. The GQS for p-Isopropyl toluene is 5 µg/L. The VOC sec-Butylbenzene was detected at concentrations ranging from 11 µg/L in WP-12 to 18 µg/L in WP-11. The GQS from sec-Butylbenzene is 5 µg/L. Toluene was detected at concentrations ranging from 3 µg/L in WP-10A to 52 µg/L in WP-11. The GQS for Toluene is 5 µg/L.

- The SVOC, Naphthalene, was detected in WP-12 (48 µg/L) and WP-14 (67.6 µg/L) at concentrations exceeding their respective GQS of 10 µg/L. No other SVOCs were detected at concentrations exceeding their respective GQS.
- Based upon the nature of the contaminants, the documented NYSDEC Spill incidents at the suspect gasoline station and the potential radius of influence of these gasoline releases, the suspect gasoline station at 67 Mclean Avenue still appears to be the source of the gasoline contamination on-site. This is evidenced by the fact that no levels of VOCs were identified in the unsaturated soil during the Phase II performed in April 2020 or this current Phase II(B). Additionally, based upon the chemical inventory performed in June 2020, there does not appear to be a source of VOCs on the Property. Furthermore, the suspect gasoline station located at 67 Mclean Avenue is associated with four closed NYSDEC Spills. One of the spills is reported to have impacted the groundwater and the three other spills are reported to have impacted the soil. There is no record of a cleanup being performed at 67 Mclean Avenue.

Structural Engineering Technologies, P.C. (SET) Fourth Round Groundwater Testing, November 5, 2020

Below is a summary of the SET 4<sup>th</sup> Quarter Groundwater sampling event for 2020:

- The groundwater sampling event was performed on May 4 and 5 2022, and consisted of the gauging and sampling of six (6) permanent groundwater monitoring wells installed as part of the Phase IIb ESA.
- No water was present in wells WP-10A and WP-15. Groundwater depth was measured at between 9.10 and 10.88 fbg in the remaining four (4) monitoring wells.
- The results of the quarterly sampling event indicated the levels of VOCs in the groundwater had generally significantly decreased with the exception of the results of MW-11. Specifically, levels of BTEX in WP-12 had decreased from 562.60 µg/L in June 2020 to 142 µg/L in October 2020 and levels of total VOCs had decreased from 1,433 µg/L in June 2020 to 857.5 µg/L in October 2020. Levels of BTEX in WP-13 had decreased from 256.80 µg/L in June 2020 to 2 µg/L in October 2020 and levels of total VOCs had decreased from 560.30 in June 2020 µg/L to 123.5 µg/L in October 2020. Levels of total BTEX and levels of total VOCs were not detected in WP-14 in October 2020.
- However, the levels of total BTEX in WP-12 had increased from August 2020 to October 2020 and levels of total VOCs in WP-12 and WP-13 had increased from August 2020 to October 2020. Specifically, levels of BTEX in WP-12 had increased from 100 µg/L in August 2020 to 142 µg/L in

October 2020 and levels of total VOCs had increased from 829.6 µg/L to 857.5 µg/L in October 2020. Levels of total VOCs in WP-13 had increased from 69.6 µg/L in August 2020 to 123.5 µg/L in October 2020. Additionally, the levels of total BTEX in WP-11 had increased from 1,798.20 µg/L in June 2020 to 3,500 µg/L in October 2020 and levels of total VOCs had increased from 3,369.20 µg/L to 11,359 µg/L in October 2020.

- WP-15 was sampled for the first time during August 2020. The total BTEX concentration was identified to be 1,222.3 µg/L and the total VOC concentration was 3,345.5 µg/L in WP-15. WP-10A and WP-15 were dry during the October sampling event and could not be sampled.

### 3.4 Recognized Areas of Concern

Petroleum-related VOCs and SVOCs have been identified in groundwater beneath the southeastern portion of the Site. Furthermore, based on site history, chlorinated VOCs (CVOs) may have been used, stored and/or generated at the Property. Chlorinated VOCs, specifically carbon tetrachloride and PCE, have been detected in soil vapor beneath the Site at concentrations that return a “No Further Action” decision according to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion decision matrices (see **Tables 3.1** through **3.5**).

The metals mercury and nickel were detected above the NYSDEC Protection of Groundwater (PGW) Soil Cleanup Objective (SCO) in shallow soil from 0-3 fbg in the southcentral and northwestern portions of the site SB-10A (0-3), located in 50 Mclean Avenue and SB-1 (0-2), located on the northwestern portion of the 2<sup>nd</sup> floor of the Site building, respectively.

In SB-8B (0-3) located in 48 McLean Avenue, the poly chlorinated biphenyls (PCBs) Aroclor 2354 and 1260 were detected at 0.328 and 0.349 mg/kg respectively, exceeding the UUSCO of 0.1 mg/kg for both compounds. In SB-12 (0-4), located in 60 Mclean Avenue, the pesticides 4,4'-DDE and 4,4'-DDT were detected at 0.0462 and 0.0589 mg/kg, respectively, exceeding the UUSCO of 0.0033 mg/kg for both compounds. In SB-1 (0-2) and SB-2 (0-2), located in the northwestern portion of the site on the 2<sup>nd</sup> floor, Trivalent chromium was detected at 720 mg/kg and 35 mg/kg, respectively in exceedance of its UUSCO of 30 mg/kg. Hexavalent Chromium was detected in SB-1 (0-2) at 2 mg/kg in exceedance of the UUSCO of 0.18 mg/kg and the Protection of Groundwater (PGW) Standard of 0.73 mg/kg. Mercury was detected in exceedance of the UUSCO of 0.18 mg/kg in six (6) soil boring locations [SB-3 (0-2), SB-4 (0-2), located in the northern central and northeastern portions of the 2<sup>nd</sup> floor SB-8B(0-3), located in 48 McLean Avenue, SB-10A (0-3), located east of SB-8B in 50 McLean Avenue, SB-10B (0-3) and SB-11(0-2), also located in 50 Mclean Avenue, and SB-

18 (0-2), located within the ramp leading to the 2<sup>nd</sup> floor] the highest of which was SB-3 (0-2) at 2 mg/kg, which was also in exceedance of the PGW standard of 0.73 mg/kg. The PGW standard for mercury was also exceeded in SB-10A (0-3) at 1.27 mg/kg. The lowest exceedance of mercury was located in SB-8B (0-3) at 0.428 mg/kg. Nickel was detected in exceedance of its UUSCO of 30 mg/kg in four (4) soil boring locations [SB-10B (0-3), SB-11 (0-4), SB-12 (0-4), and SB-1 (0-2)]. In SB-1 (0-2) Nickel was detected at 143 mg/kg exceeding the UUSCO and the PGW Standard of 130 mg/kg. In SB-10B, SB-11 and SB-12 Nickel was detected in exceedance of its UUSCO at 31.5 mg/kg, 36.5 mg/kg and 35.8 mg/kg, respectively. Lead was detected in SB-18 (0-2) at 219 mg/kg in exceedance of its UUSCO of 63 mg/kg. Zinc was detected in SB-1 (0-2) at 110 mg/kg in marginal exceedance of its UUSCO of 109 mg/kg, and was also detected in SB-8B at 217 mg/kg in exceedance of the UUSCO. Copper was detected in SB-1 (0-2) and SB-2 (0-2) at 62.1 mg/kg and 120 mg/kg, respectively, in exceedance of its UUSCO of 50 mg/kg.

In summary, soil exceedances were located along the northern portion of the site on the 2<sup>nd</sup> floor of the building, the central portion of the Site building, located on the 1<sup>st</sup> floor, and one boring in the ramp on the southeastern portion of the Site. Refer to **Plate 6, 7, and 8** for existing sample collection locations/detected analytes. Refer to **Tables 1, 2, and 3**, for Investigation Analysis Summary.

Total Iron was detected in four (4) of the sampled groundwater monitoring wells above the TOGS guidance value of 300 ug/L. The exceedances ranged from 1,110 ug/L in WP-11 to 13,000 ug/L in MW-4A. Total Magnesium was detected in one of the sampled groundwater monitoring well at 104,000 ug/L above the TOGS guidance value of 35,000 ug/L in monitoring well MW-4A. Total Manganese was detected in three (3) groundwater monitoring wells in exceedance of the TOGS guidance value of 300 ug/L. The exceedances ranged from 513.2 ug/L in MW-4A to 1,783 ug/L in MW-7A.

Total Sodium was detected in exceedance of its TOGS guidance value of 20,000 ug/L in six (6) of the groundwater monitoring wells. Exceedances ranged from 51,700 ug/L in MW-5A to 894,000 ug/L in MW-4A.

Dissolved Iron was detected in three (3) of the sampled groundwater monitoring wells above the TOGS guidance value of 300 ug/L. The exceedances ranged from 571 ug/L in WP-11 to 2790 ug/L in MW-9A. Dissolved Magnesium was detected in one groundwater sample above its TOGS guidance value of 35,000 ug/L, at 112,000 ug/L in MW-4A. Dissolved Manganese was detected in three (3) of the sampled groundwater monitoring wells above the TOGS guidance value of 300 ug/L. The exceedances ranged from 520.7 ug/L in MW-4A to 1803 ug/L in MW-7A. Dissolved Sodium detected in exceedance of its TOGS guidance value of

20,000 ug/L in six (6) of the groundwater monitoring wells. Exceedances ranged from 51,600 ug/L in MW-5A to 884,000 ug/L in MW-4A.

The SVOC Phenol was detected in M-4A at 1.1 ug/L in exceedance of the TOGS guidance value of 1 ug/L. Naphthalene was detected at 47 ug/l and 49 ug/L in MW-7A and MW-9A, in exceedance of the TOGS guidance value of 10 ug/L. In addition, the following Polyaromatic Hydrocarbons (PAHs) were detected in MW-9A above their respective TOGS guidance value of 0.002 ug/L: Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Indeno(1,2,3-cd)pyrene.

The cVOC Tetrachloroethene (PCE) was marginally detected in six (6) groundwater monitoring wells sampled but was below the TOGS guidance value of 5 ug/L. The detections ranged from 0.42 ug/L in MW-4A to 0.75 ug/L in WP-15. The remaining VOC exceedances were comprised of petroleum (BTEX) compounds and additional breakdown compounds. Benzene was detected in exceedance of the TOGS guidance value of 1 ug/L in MW-7A and MW-9A at 7.4 and 4.6 ug/L, respectively. Toluene was detected in exceedance of the TOGS guidance value of 5 ug/l in MW-7A and MW-9A at 48 and 17 ug/L. EthylBenzene was detected in exceedance of the TOGS guidance value of 5 ug/L in MW-4A, MW-7A, MW-9A and WP-11 at 12 ug/L , 300 ug/L, 14 ug/L, and 7.3 ug/L, respectively. p/m-Xylene and o-xylene were detected in the same four wells as mentioned previously (MW-4A, MW-7A, MW-9A and WP-11). The highest exceedance of Xylenes (Total) was detected in MW-7A at 1400 ug/L. Breakdown petroleum compounds N-Butylbenzene and sec-butylbenzene were detected in M-7A and MW-9A marginally exceeding their respective TOGS guidance values of 5 ug/L. The highest exceedance was sec-butylbenzene at 7.9 ug/L in M-7A. Breakdown petroleum compounds Isopropylbenzene, n-propylbenzene, and p-isopropyltoulene, were also detected in MN-7A and MW-9A in exceedance of their TOGS guidance value of 5 ug/L. The highest exceedance of these was Napthalene in MW-9A at 83 ug/L. Additional breakdown compounds 1,3,5-Trimethylbenzene and 1,2,4-trimethylbenzene were detected in MW-7A at 110 and 340 ug/L, exceeding their respective TOGS guidance values of 5 ug/L. In MW-9A, 1,2,4-trimethylbenzene was detected above its TOGS guidance value at 220 ug/L. 1,3,5-Trimethylbenzene and 1,2,4-trimethylbenzene were also detected above their TOGS guidance value in WP-11 at 6.8 and 21 ug/l, respectively. 1,2,4-trimethylbenzene was detected in exceedance of its TOGS guidance value of 5 ug/L in MW-7A and MW-9A at 12 and 9.3 ug/L, respectively.



#### **4 FIELD INVESTIGATION**

The RI was performed at the Site in May 2022. The purpose of the RI was to further delineate the nature and extent of impacts detected in the Phase II and Phase IIb Site Investigations completed by SET between April and July 2020, in accordance with DER-10-3.1, to formulate a conceptual site model and an effective strategy for site remediation. A description of the 2020 field investigations performed by SET at the Site are summarized in Section 3.3 and previous laboratory reports are included in **Appendix I**.

The following scope of work was performed in the May 2022 RI to supplement the data and findings of previous investigations:

- Installation of nine (9) soil vapor points throughout the property for the collection of nine (9) soil vapor samples to further define the extent of cVOCs and petroleum compounds across the Site to assess the potential for off-site migration in relation to downgradient receptors.
- Collection of four (4) indoor air and two (2) ambient outdoor air samples for laboratory analysis.
- Advancement 21 remedial investigation soil borings to a maximum depth of approximately 10-feet below grade surface (bgs), or refusal in cases where bedrock was encountered, for collection of soil samples for field screening and laboratory analyses.
- Installation and sampling of three (3) permanent groundwater monitoring wells for collection of representative groundwater samples for laboratory analysis.
- Collection of representative groundwater samples from five (5) existing permanent groundwater wells previously installed by others in the southeastern portion of the site.

All samples collected during the RI were transported under chain of custody procedures to Alpha Analytical (Alpha) located in Westborough, Massachusetts, an Environmental Laboratory Approval Program (ELAP)-Certified laboratory.

Quality Assurance/Quality Control sampling during the RI included collection of one duplicate, one field blank and one matrix spike/matrix spike duplicate (MS/MSD) sample per 20 field samples and one trip blank per cooler for soil and groundwater.

The laboratory reported the results for RI data in Analytical Services Protocol (ASP) Category B deliverable packages. An electronic data deliverable (EDD) in the required NYSDEC format was provided by the laboratory. Analytical data packages are presented in **Appendix I**. A DUSR was prepared by an independent data validator in accordance with Appendix 2B of DER-10 and is provided in **Appendix G**. The field activities completed as part of this RI are described in the following sections.

#### **4.1 Community Air Monitoring**

Due to all Remedial Investigation work being conducted within the enclosed building, it was determined that Community Air Monitoring was not required, as the general public would not be exposed to any contaminants associated with the installation of soil borings, groundwater monitoring wells, or soil vapor points. However, on the first day of remedial investigation activity (May 2, 2022), IEEG conducted baseline air monitoring for particulates and VOCs downwind of the activities, which included installation of soil borings within the building. No exceedances of the particulate or VOC thresholds, as outlined in the Remedial Investigation Work Plan, were encountered during the first day of drilling. A maximum particulate concentration of 0.012 mg/m<sup>3</sup> was noted at 11:00am, and a maximum PID reading of 0.2 ppm was noted at 9:00am. Due to the benign readings noted during the first day of the Remedial Investigation activities, no further continuous Community Air Monitoring was performed. On site personnel remained cognizant of visible dust during the entire RI, and where applicable instituted dust mitigation practices, such as wetting the Site in the locations of ground intrusive activity to suppress dust migration. See **Appendix K** for the baseline air logs.

#### **4.2 Geophysical Survey**

On May 3, 2022, prior to any subsurface disturbance activities, a geophysical survey was performed by Coastal Environmental Solutions (Coastal). The geophysical survey utilized ground-penetrating radar (GPR) to identify the subsurface water, sewer, drainage and gas service lines within the Site boundaries to ensure the selected boring locations were not in an area underlain by subsurface utilities or anomalies that may hinder the advancement of soil vapor points, soil borings, and monitoring wells or may pose a health and safety risk. The locations of the associated piping and the water, sewer, drainage and natural gas lines were marked on

the Site and boring locations were ensured to be clear of any subgrade utilities. One Underground Storage Tank (UST) was identified within the ramp leading to the second floor of the building. Documentation indicates the tank holds a capacity of approximately 5,000 Gallons of No.2 Fuel oil, which is used to heat the building.

#### **4.3 Soil Vapor Investigation**

The NYSDEC and the NYSDOH require assessment of soil vapor at contaminated sites to collect data to evaluate health risk associated with potential exposure to VOCs through vapor intrusion into occupied spaces. The soil vapor sampling points were installed by Coastal on May 3, 2022, and the soil vapor samples were collected by IEEG on May 4, 2022. The locations of the soil vapor sampling points are shown on **Figure 3**. The sample locations were chosen to confirm soil vapor conditions under the Site and were based on contaminants of concern identified during the previous Phase II ESA and 2020 Investigation.

In addition to the soil vapor points designated SV-2A through SV-10A (SV-1A was collected but not submitted to the lab for analysis due to the presence of water in the summa canister), installed as part of the IEEG 2022 Remedial investigation at the Site, four (4) indoor air samples and two (2) ambient outdoor air samples were also collected to aid in comparison to NYSDOH Indoor air and Sub-slab soil vapor decision matrices. Prior to conducting the investigation, a NYSDOH Pre-Inspection Checklist was completed and can be found in **Appendix L**.

Ten (10) soil vapor sampling points designated SV-1A through SV-10A, four (4) indoor air sampling points designated IA-1A through IA-4A, and two (2) outdoor air sampling points designated OA-1A and OA-2A were installed during this RI. SV-1A was not able to be analyzed, as discussed above. The sample locations chosen were as follows:

- **SV-1A:** Located in the northwestern portion of the 2<sup>nd</sup> floor (not analyzed due to presence of groundwater).
- **SV-2A:** Located in the northern central portion of the 2<sup>nd</sup> floor.
- **SV-3A:** Located in the northeastern portion of the 2<sup>nd</sup> floor.
- **SV-4A:** Located in the boiler room in the eastern portion of the site.
- **SV-5A:** Located in the southwestern unit (46 McLean Avenue).
- **SV-6A:** Located in the southern central unit (48 Mclean Avenue).

- **SV-7A:** Located in on the southern central unit (50 Mclean Avenue).
- **SV-8A:** Located in the southern central unit (60 Mclean Avenue – Suite 1).
- **SV-9A:** Located in the southern central unit (60 Mclean Avenue – Suite 2).
- **SV-10A:** Located in the eastern pizza shop unit (70 McLean Avenue).
- **IA-1A:** Located in the northern central portion of the 2<sup>nd</sup> floor.
- **IA-2A:** Located in the southwestern unit (46 McLean Avenue).
- **IA-3A:** Located in the southern central unit (60 Mclean Avenue – Suite 1).
- **IA-4A:** Located in the eastern pizza shop unit (70 McLean Avenue).
- **OA-1A:** Located along the southern exterior wall of unit 60 McLean Avenue.
- **OA-2A:** Located along the eastern exterior wall of the site.
- **SV-DUP-1:** Collected as a duplicated of SV-9A.

#### **4.3.1 Installation of Temporary Soil Vapor Points**

The soil vapor points were advanced to a depth of between 3 and 5 fbg, or depth of refusal in instances where bedrock was encountered. The sampling implant, constructed of 3/8-inch diameter 6-inch-long stainless-steel wire wrapped screen, was inserted down the bore hole to an anchor point. The implant was threaded to dedicated polyethylene tubing (0.5-inch diameter) and lowered to near the bottom of the borehole. Approximately 2 feet of a porous, inert backfill material (i.e., washed No. 2 sand) was then used to fill the annulus to create the sampling zone. The soil vapor monitoring points were sealed above the sampling zone with a bentonite slurry for a minimum distance of three (3) feet to prevent outdoor air infiltration and the remainder of the borehole was filled with concrete to the surface. A soil vapor sample point construction detail is presented in **Appendix B**. The soil vapor points were allowed to equilibrate for a minimum of 24 hours prior to sampling. Following the 24-hour equilibrium time, a helium leak test was performed on each soil vapor point. A plastic shroud was sealed to the floor using bentonite and was used to keep the tracer gas in contact with the vapor probe during testing. Helium was introduced to the cavity of the shroud and a helium detector apparatus was used to test the content of the soil vapor probe. No helium infiltration was observed in the nine (9) soil vapor probes installed as part of the RI, and the integrity of the seals were considered verified.

#### **4.3.2 Soil Vapor Sampling Procedures**

Prior to sampling, the vapor points were each purged to evacuate potential atmospheric air prior to sample collection to ensure the sample would be representative of subsurface soil vapor conditions. The evacuation process was completed by using a PID attached to the polyethylene tubing of the sampling point. A PID has a flow rate of approximately 0.02 liters per minute. A total of three tube volumes was purged during the evacuation and during the prior helium tracer gas test. A PID reading was also recorded once the evacuation with the PID was completed.

After purging was complete, a laboratory supplied clean 2.7-liter Summa canister with a laboratory pre-calibrated flow controller with a flow rate of 0.02 liters per minute, was attached to the vapor sampling point polyethylene tubing. Sampling of the sub-slab soil vapor then proceeded by fully opening the flow control valve on each sample canister. Immediately after opening the flow control valve on each canister, the initial vacuum (inches of mercury) was recorded in the field log and on the sample tag. The Summa canisters supplied by the analytical laboratory arrived with approximately 29.32 to 30.20 inches of mercury vacuum.

The samples were collected over a period of approximately 2-hours. When approximately 2.7 liters of sample had been collected or the canister pressure dropped to approximately 4 inches of mercury (approx. 2 hours), the samples were stopped by closing the flow controller valves. The final vacuum recorded in the field notebook and on the sample tag.

#### **4.3.3 Soil Vapor Sample Laboratory Analysis**

The soil vapor sample identification, date, start time, start vacuum, end time, and end vacuum for each Summa canister sample were recorded on a sample log sheet and the laboratory chain of custody. Nine (9) soil vapor samples, one (1) duplicate soil vapor sample, four (4) indoor air samples, and two (2) ambient outdoor air samples were submitted to Alpha on May 4, 2022, via laboratory courier for laboratory analysis of VOCs via EPA Method TO-15. One soil vapor sample (SV-1A) was not submitted for laboratory analytical analysis due to water infiltration in the summa cannister. All Summa canisters were “Batch Certified” by Alpha Analytical Laboratories, of MA (ELAP #11627).

#### 4.4 Soil Investigation

The RI included 21 borings completed by Coastal during the period from May 23 to 25, 2022, to further investigate the contaminants of concern detected during previous investigations completed by others. The soil boring locations are identified on **Plate 3**.

Where possible, the continuous soil samples were collected at 5-foot intervals to a final depth specific to each boring. Grab soil samples were collected for laboratory analysis. Recovered soil was screened for visual, olfactory, and instrumental evidence of environmental impacts and was visually classified for soil type, grain size, color, texture, and moisture content. Instrument screening for the presence of VOCs was performed with a PID equipped with a 10.6 electron volt (eV) lamp. For this investigation, a MiniRae 3000PID was used and calibrated to isobutylene span gas to yield total VOCs in parts per million by volume (ppm<sub>v</sub>) referenced to benzene. Boring logs documenting these observations are provided in **Appendix C**. Soil cuttings were backfilled into the original boring locations that were not converted into monitoring wells and/or containerized into Department of Transportation (DOT)-approved 55-gallon steel drums

The 21 soil borings advanced during the remedial investigation and their respective locations were as follows:

- **SB-1:** Remedial Investigation boring located in the northwestern portion of the Site on the 2<sup>nd</sup> Floor.
- **SB-2:** Remedial Investigation boring located east of SB-1.
- **SB-3:** Remedial Investigation boring located east of SB-2 in the northern central portion of the Site on the 2<sup>nd</sup> Floor.
- **SB-4:** Remedial Investigation boring located in the northeastern portion of the Site.
- **SB-5:** Remedial Investigation boring located southeast of SB-3.
- **SB-6 :** Remedial Investigation boring located in the northern portion of 46 McLean Avenue.
- **SB-7:** Remedial Investigation boring located in the southern portion of 46 McLean Avenue.
- **SB-8A:** Remedial Investigation boring located in the northwestern portion of 48 McLean Avenue.
- **SB-8B:** Remedial Investigation boring located in the northeastern portion of 48 McLean Avenue.
- **SB-9:** Remedial Investigation boring located in the central portion of 48 McLean Avenue.
- **SB-10A:** Remedial Investigation boring located in the northwestern portion of 50 McLean Avenue.
- **SB-10B:** Remedial Investigation boring located in the northeastern portion of 50 McLean Avenue
- **SB-11:** Remedial Investigation boring located in the southern portion of 50 McLean Avenue.
- **SB-12:** Remedial Investigation boring located in the northern portion of 60 McLean Avenue (Suite 1)
- **SB-13:** Remedial Investigation boring located in the southern portion of 60 McLean Avenue (Suite 1)

- **SB-14:** Remedial Investigation boring located in the cellar room adjacent to the boiler.
- **SB-16:** Remedial Investigation boring located in the northeastern portion of 60 McLean Avenue (Suite 2).
- **SB-17:** Remedial Investigation boring located in the southwestern portion of 60 McLean Avenue (Suite 2).
- **SB-18:** Remedial Investigation boring located south of the UST in the ramp.
- **SB-19:** Remedial Investigation boring located south of the UST in the ramp.
- **SB-20:** Remedial Investigation boring located in the central portion of 70 McLean Avenue.

#### **4.4.1 Advancement of Soil Borings**

Each borehole location was cleared for utilities by way of GPR prior to commencement of drilling. A hydraulically driven direct push Geoprobe® DT22 Soil Sampling System was utilized to collect continuous soil cores to the boreholes final depth. Dual tube sampling uses two sets of probe rods to collect continuous soil cores. One set of rods is driven into the ground as an outer casing. These 2.25 in outer rods receive the driving force from the hammer and provide a sealed borehole from which soil samples may be recovered minimizing the risk of cross contamination. The second, smaller set of 1.25 inner rods are placed inside the outer casing. The smaller rods hold a non-reactive transparent plastic sample collection sleeve (liner) in place as the outer casing is driven one sampling interval. The small rods are then retracted to retrieve the filled 5-foot liner. The plastic sleeves were removed for subsequent inspection and sample acquisition. The drilling rods were decontaminated between each soil boring location using an Alconox wash followed by a deionized water rinse.

#### **4.4.2 Soil Sampling Rational and Methodology**

A total of 27 soil samples were collected during the RI, including Quality Assurance/Quality Control samples, and submitted for laboratory analysis from the 21 soil borings. Due to the presence of bedrock in the majority of soil boring locations, and subsequent limited recovery, soil samples were collected from either the 0–2 foot, 0–3 foot, or 0–4 foot interval, depending on the depth that bedrock was encountered. In the southeastern portion of the site, where shallow bedrock was not encountered, additional soil samples were collected from the 7–9 foot interval and/or biased towards evidence of contamination (PID screening, visual, odors).

Samples for VOC analysis were collected directly from the acetate liner via laboratory supplied Terra Core® soil sample kits. The remaining soil sample volumes from soil cores were separated into two aliquots where one was placed in appropriate laboratory supplied containers for the remaining analyses and the other was placed in a labelled clean zip lock plastic bag for headspace analyses.

#### **4.4.3 Soil Sample Laboratory Analysis**

Representative soil samples from the 21 investigatory soil borings for laboratory analysis were collected from the shallow 0-2-foot, 0-3-foot, or 0-4-foot interval, and the 7-9 foot interval (where possible). Sample collection locations and depths were selected in the field based on field observations and field screening. A total of 25 grab soil samples, plus 2 duplicate samples, were collected during the RI, as described below:

27 samples from the 21 RI borings were collected from the respective interval and analyzed for the following:

- Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035
- TCL SVOCs plus TICs by USEPA method 8270D
- TCL Pesticides and herbicides by USEPA methods 8081B and 8151A
- PCBs by USEPA method 8082A
- Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A
- Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537
- 1,4-dioxane by USEPA Method 8270 SIM isotope dilution

A summary of the RI analytical program including appropriate field/equipment blanks and of sample parameter hold times and sample container requirements are provided in Appendix F, the Quality Assurance Project Plan (QAPP) Table 1 and Table 2, within the NYSDEC-approved RIWP. Refer to **Figure 3** for the soil boring locations.

#### **4.5 Groundwater Investigation**

A total of four (4) monitoring wells were permanently installed on the Site on May 3, 2022. The four (4) wells (designated MW-4A, MW-5A, MW-7A, and MW-9A) were installed to the following depths:



- In monitoring well MW-4A, refusal was met at 1.5 feet bgs however liquid was observed perched on top of bedrock and a monitoring well was installed with screened Schedule 40 PVC only.
- In monitoring well MW-5A, refusal was met at 3 feet bgs and a monitoring well was installed with screened 20 mil slotted Schedule 40 PVC only.
- Monitoring well MW-7A was completed to 15 feet bgs with 10 feet of screened 20 mil slotted Schedule 40 PVC.
- Monitoring well MW-9A was completed to 15 feet bgs with 10 feet of screened 20 mil slotted Schedule 40 PVC.

These permanent groundwater monitoring wells were installed by advancing the designated soil borings into the groundwater table to the designated interval depths. The monitoring wells were used to evaluate groundwater flow direction and groundwater quality data. The location for the groundwater monitoring wells on Site is presented on **Figure 3**.

#### **4.5.1 Installation of Monitoring Wells**

Bedrock was identified at varying depths across the site; however, it was not encountered within the first fifteen feet of soil column in the southeastern portion of the Site. Based on previous environmental and geotechnical investigations. Groundwater flow was expected to flow in a southerly direction. Based on this information, the following monitoring well locations were selected:

- **MW-4A:** located in the northeastern portion of the 48 Mclean Avenue unit.
- **MW-5A:** located in the northeastern portion of the 50 Mclean Avenue unit.
- **MW-7A:** located on the ramp downgradient from the UST.
- **MW-9A:** located in the 70 Mclean Avenue unit east of the ramp and UST.

All the monitoring wells were installed using 2-inch, inner diameter (ID), flush-joint schedule 40 polyvinyl chloride (PVC) casing with a flush-joint schedule 40 PVC, 0.010-inch machine slotted well screen. The specific construction details can be found in **Appendix F**. Each well screen interval and attached riser was placed at the bottom of each borehole interval and a silica sand filter pack (Morie sand size #2) was installed from the base of the well screen to a maximum of 2 feet above the top of the screen. Seals in the boreholes were constructed between sand packs. A two-foot bentonite chip seal was then installed around the casing above the filtration media and allowed to hydrate sufficiently to mitigate the potential for downhole grout

contamination. A grout mixture was placed above the bentonite seal to a point approximately one (1) foot below existing grade. Concrete was used to fill the area surround 6 to 8-inches of the remaining well casing in conjunction with the installation of an eight-inch, steel flush mounted road box with an access cover in a concrete pad. The newly installed monitoring wells were completed with lockable J-plugs.

#### **4.5.2 Monitoring Well Development**

Between May 4 and 5, 2022, upon their completion, the newly installed monitoring wells were developed in accordance with NYSDEC protocols. Development of the monitoring wells was accomplished using a Monsoon XL® Sampling Pump with dedicated disposable high-density polyethylene (HDPE) tubing. Field parameters including pH, temperature, turbidity, dissolved oxygen (DO), oxidation- reduction potential (ORP) and specific conductance were measured periodically (e.g., every well volume or as necessary) during development. Field measurements continued until they became relatively stable. Stability is defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements. The well development groundwater was containerized in Steel 55-gallon DOT drums, labeled, and stored on the Site pending characterization, transport, and disposal.

#### **Groundwater Sample Collection**

Groundwater sampling was conducted with a Monsoon pump using the low-flow sampling procedures following USEPA guidance *“Low Stress [low flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells”*, dated September 19, 2017. During purging, field parameters were measured including water level drawdown, purge rate, pH, specific conductance, temperature, dissolved oxygen, turbidity and oxidation reduction-potential (ORP), every five minutes using a water quality meter (Horiba) and a depth-to-water interface probe that was decontaminated between wells. Samples were not collected until the field parameters have stabilized. Field parameters were considered stable once three sets of measurements were within  $\pm 0.1$  standard units for pH,  $\pm 3\%$  for conductivity and temperature,  $\pm 10$  millivolts for ORP, and  $\pm 10\%$  for turbidity and dissolved oxygen. Purge rates were adjusted to keep the drawdown in the well to less than 0.3 feet, as practical.

Additionally, attempts were made to achieve a stable turbidity reading of less than 10 Nephelometric Turbidity Units (NTU) prior to sampling. Due to turbidity readings not stabilizing at readings of less than 10 NTU for the wells sampled, both filtered and unfiltered samples for metal compounds were collected from the wells. Lab filtered samples were elected to be used.

On May 4 and 5, 2022, nine (9) groundwater samples, including one (1) duplicate sample, were collected from the referenced monitoring wells/sampling points and analyzed for:

- Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035
- TCL SVOCs plus TICs by USEPA method 8270D
- TCL Pesticides and herbicides by USEPA methods 8081B and 8151A
- PCBs by USEPA method 8082A
- Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A
- Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537
- 1,4-dioxane by USEPA Method 8270 SIM isotope dilution

A summary of the RI analytical program including appropriate field/equipment blanks and of sample parameter hold times and sample container requirements are provided in Tables 1 and 2 of the QAPP, located in the NYSDEC-approved RIWP. Refer to **Figure 3** for the groundwater monitoring well locations.

Representative groundwater samples were placed in pre-cleaned laboratory provided sample bottles, placed on ice and cooled to 4°C in the field, and transported under chain-of-custody command to Alpha for analysis. The laboratory has furnished ASP Category B deliverables package to facilitate groundwater data evaluation and preparation of a DUSR by a third- party validation expert. See **Appendix H** for the DUSR.

#### **4.5.3 Monitoring Well Elevation Survey**

Control Point Associates, Inc. (CP) conducted a well elevation survey of the monitoring wells on May 24, 2022. The survey was performed utilizing an automatic engineers' level and stadia rod. Vertical locations of the monitoring wells, including ground surface elevation and well casing elevations were surveyed to the nearest 0.01 foot. Location coordinates (provided in **Table 5**) were taken at the time of the field survey, utilizing the New York State RTK Network (NYSNET), while elevations were based on the North American Vertical Datum of 1988 (NAVD88).

#### **4.6 Field Equipment Decontamination**

Handheld sampling equipment, including oil/water interface probes, water quality meters, pumps, down-hole drill casings, and hand augers were decontaminated using an Alconox® -based solution and triple rinsed with distilled water. Down-hole drilling equipment was decontaminated between each boring by rinsing with an Alconox® -based solution. Decontamination wastewater was placed into DOT-approved 55- gallon drums for future off-site disposal.

#### **4.7 Investigation Derived Waste Management**

Investigation derived waste (IDW) generated during the RI was properly handled and containerized. Groundwater from monitoring well development and purging, and decontamination water were placed into DOT-approved 55-gallon steel drums with sealed tops. Drill cuttings exhibiting no evidence of chemical, or petroleum impacts were used to backfill soil borings. Three (3) drums of purged groundwater were staged in a secured area on-site (1 drum per lot) pending transport by a licensed waste hauler for disposal at an approved facility.

#### **4.8 Quality Control Sampling**

As part of the May 2022 RI, field blanks, trip blanks and duplicate samples were collected for QA/QC purposes in accordance with the QAPP. The QA/QC samples collected/analyzed during the RI are provided in the data summary **Tables 1** through **4**. Matrix-specific QA/QC samples that were collected for the RI are summarized below:

##### Soil QA/QC Samples

- Two (2) field duplicate samples
- Two (2) field blank samples
- Two (2) trip blank samples

##### Groundwater QA/QC Samples

- One (1) field duplicate sample
- One (1) field blank sample
- One (1) trip blank sample
- One (1) MS sample
- One (1) MSD sample

### Soil Vapor QA/QC Samples

- One (1) field duplicate sample

Field blanks were collected to determine the effectiveness of the decontamination procedures implemented for the equipment used during sample collection to indicate potential cross-contamination (e.g., quality control of decontamination procedures).

Field duplicate samples were collected to assess the precision of the analytical methods relative to the sample matrix. The duplicates were collected from the same material as the primary sample by splitting the volume of homogenized sample collected in the field into two sample containers.

Trip blank samples were collected to assess the potential for contamination of the sample containers and samples during transport from the laboratory, to the field, and back to the laboratory for analysis. Trip blanks contain about 40 milliliters of acidic water (doped with hydrochloric acid) that is prepared and sealed by the laboratory when the empty sample containers are shipped to the field, and then unsealed and analyzed for VOCs by the laboratory when the sample shipment is received from the field.

## **4.9 Data Validation**

The analytical data packages from the RI and prior investigation in 2020 were validated by Ms. Polly Newbold with DDMS, Inc. of St. Paul, Minnesota (DDMS), an independent third-party data validator subcontractor in accordance with USEPA and NYSDEC validation protocols. The validator's credentials are provided in **Appendix G** and the DUSRs are included in **Appendix H**.

### **4.9.1 Data Usability Summary Report Preparation**

A DUSR was prepared for each sampling matrix and analytes. The DUSR presents the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. The independent data validator reviews and considers the following as part of their evaluation for the soil, soil vapor, and groundwater data:

- Lab Report Narrative Review
- Data Package Completeness and COC Records
- Sample preservation and Hold Times

- Initial and Continuing Calibration
- QC Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Surrogate Spikes
- Internal Standard Response and Retention Times
- Laboratory Duplicates
- Field Duplicates
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Sample Extraction and digestion
- Field duplicate, trip blanks, and field blanks sample results

The independent data validator reviews and considers the following as part of their evaluation for the of the soil vapor samples:

- Holding times
- Canister certification
- Laboratory blanks
- Laboratory control samples
- System monitoring compounds
- Target compound identification and qualification
- Field duplicate sample results

#### **4.9.2 Data Usability and Qualifiers**

The Category B analytical laboratory reports for the soil vapor samples, soil samples and groundwater samples collected during the 2020 investigation and 2021 RI were provided by Alpha and were forwarded to PES Inc. for evaluation and preparation of DUSRs. The analytical results were reviewed by DDMS for overall usability issues.

Based on the results of the data validation, the following qualifiers may be assigned to the data in accordance with USEPA's guidelines and best professional judgment:

- U** Data qualified with this qualifier are usable at the reporting limit (RL).
- UJ** Data qualified with this qualifier are to be used cautiously as they are estimated data with some quality control issues.
- J** Data qualified with this qualifier are to be used cautiously as they are estimated data with some quality control issues.
- R** Data qualified with this data qualifier are not usable due to server quality control issues.

After data validation was complete, validated data was used to prepare the tables and figures included in this report. The data reviewed by DDMS is acceptable for the intended purpose of this RI.

## **5 INVESTIGATION FIELD OBSERVATIONS AND ANALYTICAL RESULTS**

The following sections provide information regarding the field observations and laboratory analytical results for the soil vapor, soil and groundwater samples collected during this 2022 Remedial Investigation.

Consistent with an NYSDEC approved RIWP dated December 24, 2020, and revised on June 30, 2021, the 2022 RI scope included twenty (20) soil borings (identified as SB-1 through SB-20) from which 27 samples were collected, three (3) permanent monitoring wells (MW-4A, MW-7A, and MW-9A) and five (5) previously installed monitoring wells (WP-11 through WP-15), from which groundwater samples were collected, nine (9) soil vapor points (SV-2A through SV-10A) from which nine (9) soil vapor samples were collected from, four (4) indoor air samples, and two (2) outdoor air samples.

### **5.1 Field Observations**

The general Site topography was observed to undulate and slope from north to south towards McLean Avenue, and the site is located at an elevation of approximately 84 feet amsl. Bedrock outcrops are located and were observed north and west of the Site.

### **5.2 Geology and Hydrogeology**

Soil borings during the RI were advanced to a minimum depth of approximately 2-feet bgs, and a maximum depth of 15-feet bgs at the Site during the May 2022 investigation.

The geology of the shallow soil down to approximately 3-5 fbg (in areas where bedrock was encountered) consists predominantly of fine to medium grained sand. No evidence of anthropogenic material (brick, wood, or glass) was observed. In the southeastern portion of the Site where bedrock was not encountered, consisted of brown to gray fine sand and silt. The soil boring logs from the RI are provided in **Appendix C**. **Figure 4** provides a bedrock contour map.

CP conducted a well elevation survey of the monitoring wells on May 24, 2022. This data was used in conjunction with the groundwater well gauging data collected on May 5, 2022 (summarized in **Table 4**) to

prepare the sample location plan and groundwater contour map presented in **Figure 5**. Referring to **Table 4** and **Figure 5** and based off NAVD88 elevations (based off GPS observations taken at the time of the field survey, utilizing NYSNET) the elevation of the water table across the Site ranges from 1.29 fbg in MW-5A, located in the central portion of the site (within 50 McLean Avenue), to 10.57 fbg in MW-9A, located on the southeastern side of the Site (70 McLean Avenue), and is a result of the TOC elevation measurements minus the measured depth to water (DTW) readings. Based on the potentiometric surface map contours, groundwater flow direction is generally to the southeast in the eastern portion of the site and southwest in the western portion of the site due to the presence of a shallow bedrock ridge in the central portion of the Site.

### 5.3 Soil Vapor Analytical Results

A total of 9 soil vapor samples were collected from locations across the Site (see **Appendix E** for Soil Vapor Sampling Logs). Results of the soil vapor samples are summarized in **Table 3**, and VOC detections are shown on **Figure 8**. The Category B laboratory report for the soil vapor analysis is included in **Appendix I**. Results of the soil vapor analysis indicated that the cVOC PCE was detected at varying concentrations throughout the site. However, when compared to Indoor air concentrations and the NYSDOH decision Matrices guidelines the indoor air levels do not warrant action be taken at this time. However, multiple petroleum compounds were detected in soil vapor in the southeastern portion of the Site, and located downgradient from the UST located in the ramp that leads to the 2<sup>nd</sup> floor of the building.

There are currently no standards for soil vapor established by either the NYSDEC or the NYSDOH. The NYSDOH has established guidance for evaluating soil vapor intrusion in which the results of soil vapor samples are compared to corresponding indoor air quality results. The NYSDOH has established guidance for evaluating soil vapor intrusion in which the results of soil vapor samples are compared to corresponding indoor air quality results. The guidance is presented in Matrix A, Matrix B, and Matrix C from the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (matrices were updated in May 2017). The matrices provide guidance relative to carbon tetrachloride, cis-1,2 dichloroethene, 1,1-dichloroethene, TCE, PCE, 1,1,1-trichloroethane, methylene chloride, and vinyl chloride.

The soil vapor results reported from the samples collected during the RI indicate PCE and TCE concentrations are present in subsurface vapors. Additionally, multiple petroleum compounds were found present in soil



vapor. Chlorinated VOCs, specifically carbon tetrachloride and PCE, have been detected in soil vapor beneath the Site at concentrations that return a “No Further Action” decision according to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion decision matrices (see **Tables 3.1** through **3.5**).

## **5.4 Soil Analytical Results**

A total of 21 soil borings were advanced during the 2022 RI investigation performed by IEEG to collect representative samples across the Site. The soil laboratory analytical results were compared to NYSDEC Part 375 Unrestricted Use SCOs, the Part 375 PGW SCOs and the Part 375 RR SCOs. Results of the 27 soil samples are summarized in **Table 1** and soil analytical results with exceedances are shown on **Figures 6**. Laboratory analytical data reports are in **Appendix I**.

### **5.4.1 Soil Investigation**

A total of 25 remedial investigation soil samples were collected from the varying depths across the Site to determine the conditions of shallow soils lying above bedrock across the Site. Two (2) duplicate soil samples were also collected as part of the QAQC for the project. Soil samples and duplicates from the RI borings were analyzed for TCL VOCs plus TICs, SVOCs plus TICs, PCBs, organochlorine pesticides and TAL metals with hexavalent chromium and the emerging contaminants 1,4-dioxane and NYSDEC PFAS list.

#### 5.4.2 Soil Analytical Results

A total of 25 soil samples were collected from 21 different soil borings across the Site. Below is a summary of the laboratory analysis results:

- No VOCs, SVOCs, or emerging contaminants (PFAS/PFOS or 1,4-dioxane) were detected at concentrations above their respective regulatory standards.
- The PCBs aroclor 1254 and 1264 were detected in sample SB-8B (0-3') at concentrations of 0.328 mg/kg and 0.349 mg/kg respectively, exceeding the UUSCO of 0.1 mg/kg for both compounds.
- The pesticides 4,4'-DDE and 4,4'-DDT were detected in sample SB-12 (0-4') at concentrations of 0.0462 mg/kg and 0.0589 mg/kg, respectively, exceeding the UUSCO of 0.0033 mg/kg for both compounds.
- The metal trivalent chromium was detected in samples SB-1 (0-2') and SB-2 (0-2') at concentrations of 720 mg/kg and 35 mg/kg, respectively in exceedance of its UUSCO of 30 mg/kg.
- Hexavalent chromium was detected in SB-1 (0-2) at 2 mg/kg in exceedance of the UUSCO of 0.18 mg/kg and the Protection of Groundwater (PGW) Standard of 0.73 mg/kg.
- Mercury was detected in exceedance of the UUSCO of 0.18 mg/kg in six (6) soil boring locations (SB-3 (0-2), SB-4 (0-2), SB-8B(0-3), SB-10A (0-3), SB-10B (0-3), SB-11(0-2), and SB-18 (0-2)) the highest of which was SB-3 (0-2) at 2 mg/kg, which was also in exceedance of the PGW standard of 0.73 mg/kg. The PGW standard for mercury was also exceeded in SB-10A (0-3) at 1.27 mg/kg.
- Nickel was detected in exceedance of its UUSCO of 30 mg/kg in four (4) soil boring locations. (SB-10B (0-3), SB-11 (0-4), SB-12 (0-4), and SB-1 (0-2)). In SB-1 (0-2) Nickel was detected at 143 mg/kg exceeding the UUSCO and the PGW Standard of 130 mg/kg. In SB-10B, SB-11 and SB-12 Nickel was detected in exceedance of its UUSCO at 31.5 mg/kg, 36.5 mg/kg and 35.8 mg/kg, respectively.
- Lead was detected in SB-18 (0-2) at 219 mg/kg in exceedance of its UUSCO of 63 mg/kg.
- Zinc was detected in SB-1 (0-2) at 110 mg/kg in marginal exceedance of its UUSCO of 109 mg/kg and was also detected in SB-8B at 217 mg/kg in exceedance of the UUSCO.
- Copper was detected in SB-1 (0-2) and SB-2 (0-2) at 62.1 mg/kg and 120 mg/kg, respectively, in exceedance of its UUSCO of 50 mg/kg.

## 5.5 Groundwater Analytical Results

A total of eight (8) groundwater samples were collected from three (3) newly installed permanent groundwater monitoring wells and five (5) previously installed permanent monitoring wells. Results for the groundwater samples collected from the Site can be found in **Table 2** and are compared to NYSDEC AWQS for Class GA groundwater, and the groundwater exceedances are shown on **Figure 7**. Laboratory analytical reports are located in **Appendix I**.

The sampled well included nine (9) monitoring wells screened from 5-15 fbg or in cases where bedrock was encountered, from grade to the depth of shallow bedrock. One set of groundwater samples were collected and analyzed from each monitoring well sampling point for TCL VOCs plus TICs, SVOCs plus TICs, PCBs, organochlorine pesticides and TAL metals with hexavalent chromium and the emerging contaminants 1,4-dioxane and NYSDEC PFAS list.

### 5.5.1 Field Measurements

Synoptic water-level measurements in onsite well ranged from 1.29 fbg in MW-5A, located in the central portion of the site (within 50 McLean Avenue), to 10.57 fbg in MW-9A, located on the southeastern side of the Site (70 McLean Avenue). Refer to **Figure 5** for an illustration of groundwater flow associated with the Site. **Table 4** provides a summary of the top of monitoring well casing elevation, depth to groundwater measurement and the calculated groundwater elevation, and provides a summary of the final field measurements collected during well purging.

### 5.5.2 Groundwater Sample Analysis

- The cVOC Tetrachloroethene (PCE) was marginally detected in six (6) groundwater monitoring wells sampled but were below the TOGS guidance value of 5 ug/L. The detections ranged from 0.42 ug/L in MW-4A to 0.75 ug/L in WP-15.
- Benzene was detected in exceedance of the TOGS guidance value of 1 ug/L in MW-7A and MW-9A at 7.4 and 4.6 ug/L, respectively.
- Toluene was detected in exceedance of the TOGS guidance value of 5 ug/l in MW-7A and MW-9A at 48 and 17 ug/L.
- Ethylbenzene was detected in exceedance of the TOGS guidance value of 5 ug/L in MW-4A, MW-7A, MW-9A and WP-11 at 12 ug/L , 300 ug/L, 14 ug/L, and 7.3 ug/L, respectively.

- p/m-Xylene and o-xylene were detected in the same four wells as mentioned previously (MW-4A, MW-7A, MW-9A and WP-11). The highest exceedance of Xylenes (Total) was detected in MW-7A at 1400 ug/L.
- Breakdown petroleum compounds N-Butylbenzene and sec-butylbenzene were detected in M-7A and MW-9A marginally exceeding their respective TOGS guidance values of 5 ug/L. The highest exceedance was sec-butylbenzene at 7.9 ug/L in M-7A.
- Breakdown petroleum compounds Isopropylbenzene, n-propylbenzene, and p-isopropyltoluene, were also detected in MN-7A and MW-9A in exceedance of their TOGS guidance value of 5 ug/L. The highest exceedance of these was Napthalene in MW-9A at 83 ug/L.
- Additional breakdown compounds 1,3,5-Trimethylbenzene and 1,2,4-trimethylbenzene were detected in MW-7A at 110 and 340 ug/L, exceeding their respective TOGS guidance values of 5 ug/L. In MW-9A, 1,2,4-trimethylbenzene was detected above its TOGS guidance value at 220 ug/L. 1,3,5-Trimethylbenzene and 1,2,4-trimethylbenzene were also detected above their TOGS guidance value in WP-11 at 6.8 and 21 ug/l, respectively. 1,2,4-trimethylbenzene was detected in exceedance of its TOGS guidance value of 5 ug/L in MW-7A and MW-9A at 12 and 9.3 ug/L, respectively.
- The SVOCs phenol was detected in MW-4A at a concentration (1.1ug/L) exceeding its AWQS of 1 ug/L.
- The SVOC naphthalene was detected in samples MW-7A and MW-9A at concentrations in excess of the AWQS of 10 ug/L, at 47 ug/L and 49 ug/L respectively.
- The SVOCs benzo(a)anthracene (0.05 ug/L), benzo(a)pyrene (0.04 ug/L), benzo(b)fluoranthene (0.08 ug/L), benzo(k)fluoranthene (0.03 ug/L), chrysene (0.04 ug/L), and indeno(1,2,3-cd)pyrene (0.04 ug/L) were detected in MW-9A at concentrations exceeding their respective AWQS of 0.002 ug/L.
- Several total and dissolved metals, including iron, magnesium, manganese, and sodium, were detected at concentrations above their AWQS. These metals are considered background naturally occurring compounds.

No PCBs or organochlorine pesticides were detected at concentrations above their AWQS in the eight (8) samples collected from the groundwater monitoring wells.

### 5.5.2.1 NYSDEC Emerging Contaminants 1,4-Dioxane, and PFAS

Four (4) groundwater samples were analyzed for the emerging contaminants identified as 1,4-Dioxane and the NYSDEC PFAS List. DEC has released DRAFT Guidance Values for PFAS PFOA and 1,4-Dioxane. The guidance values are as follows:

New York State Groundwater Effluent Limitations (Class GA) July 2020		
Substance (CAS. No.)	Maximum Allowable Concentration	Category
1,4-Dioxane (123-91-1)	0.35 ug/L	B
Perfluorooctane Sulfonic Acid (PFOS) (1763-23-1)	2.7 ng/L	B
Perfluorooctanoic Acid (PFOA)	6.7 ng/L	B

Ng/L = nanograms per liter

Several NYSDEC PFAS List compounds were detected in groundwater monitoring wells MW-4A, MW-5A, MW-7A and MW-9A as follows:

- **Perfluorooctanoic Acid (PFOA)** was detected at concentrations exceeding the Draft Guidance Value of 6.7 ng/L at 78.8 ng/L, 44.8 ng/L and 21.4 ng/L in MW-4A, MW-7A and MW-9A, respectively.
- **Perfluorooctanesulfonic Acid (PFOS)** was detected at concentrations exceeding the Draft Guidance Value of 2.7 ng/L at 4.99 ng/L, 8.2 ng/L and 8.26 ng/L in MW-4A, MW-7A and MW-9A, respectively.

1,4-Dioxane was detected at concentrations of 0.184 ug/L and 0.064 ug/L in MW-4A and MW-7A and was non-detect in MW-9. These concentrations were below the NYSDEC Draft Guidance Values. A summary of the analytical results for the groundwater monitoring wells are compared to the NYSDEC TOGS in **Table 2**.

## 5.6 QA/QC Field and Trip Blank Sample Results

During the RI, field blank samples were collected as equipment blanks during soil and groundwater sample collection for QA/QC purposes in accordance with the QAPP. Additionally, trip blanks accompanied the VOC sample collection containers/coolers and were submitted with samples for transported to the Alpha for VOC analysis. A summary of the results for these QA/QC samples is provided in **Tables 1** through **3**. The deionized water used for decontamination of field equipment was obtained in bulk from Alpha and was a type IV deionized water which indicates it was produced through a cartridge filter, carbon filter, dual ion exchange units, UV Sterilizer, and final filtered at 0.2 µS/cm, the source of which was not from distillation. This water was analyzed as sample Field Blank DI-Water and no VOCs/Tics, SVOCs/TICs, PCBs, organochlorine pesticides, metals, PFAS compounds or 1,4-dioxane were detected. The deionized water used for the collection of field blanks was provided by Alpha with sample collection containers.

## **5.7 Evaluation of Results**

The nature and extent of contamination at the Site, based on field observation and the analytical results of the various media samples collected as part of this RI, are discussed in the following sections.

The main contaminant of concern identified at the Site, in soil, are the heavy metals, lead, nickel, zinc, mercury and chromium, two PCB compounds, and two Pesticide compounds. In groundwater, VOCs and SVOCs were found primarily located downgradient of the UST in groundwater monitoring wells MW-7A, MW-9A and WP-11. In soil vapor, PCE and a number of VOC compounds were identified. Two (2) locations were found in exceedance of the NYSDOH minimum guidelines for PCE, however, the indoor air level for that location indicated low levels of PCE in indoor air and yielded a no further action response when compared to the NYSDOH Decision Matrices. The remaining petroleum related VOC compounds identified in soil vapor do not have NYSDOH air guidelines.

### **5.7.1 Chemicals of Concern Distribution**

In summary, in soil, the heavy metal Chromium was found above Protection of Groundwater Standards in two locations, in SB-1 and SB-2, located in the northwestern portion of the Site on the second floor on top of shallow bedrock. Mercury was found above PGW standards in SB-3 and SB-4 on the second floor above shallow bedrock, and in SB-8B, SB-10A and SB-11, in units 48 McLean Avenue and 50 McLean Avenue located on the first floor. Mercury was also found in SB-18 within the ramp in the southeastern portion of the site, downgradient from the UST. Nickel was found exceeding the Restricted Residential SCO in SB-1, and above the Unrestricted SCO in SB-10B, SB-11 and SB-12. Lead and Zinc were found above their respective UUSCOs in SB-1. Lead was also found exceeding the UUSCO in SB-18. Two Pesticides were found exceeding their respective UUSCOs in SB-12. Two PCBs were found exceeding their respective UUSCOs in SB-8B.

It should also be noted that compounds on the NYSDEC PFAS list were detected in groundwater samples collected from across the Site, but not in the onsite soils, indicating the presence of these compounds is the cause of an offsite source. The dissolved metals identified in groundwater above the AWQS were magnesium, manganese, iron and sodium which are likely naturally occurring compounds.

## **6 QUALITATIVE HUMAN EXPOSURE ASSESSMENT**

A qualitative exposure assessment for human health has been prepared to evaluate exposure to the identified contaminants of concern in accordance with the May 2010 NYSDEC Final DER-10 Technical Guidance for Site Investigation and Remediation. The following sections provide the details for both assessments.

### **6.1 Human Health Exposure Assessment**

Human health exposure risk was evaluated for both the current and the proposed future use conditions associated with the Site. The assessment includes an evaluation of potential sources and migration pathways of site contamination, potential receptors, exposure media, and receptor intake routes and exposure pathways.

#### **6.1.1 Current Site Condition**

Currently, the Site is unoccupied and is developed with a single two-story building with a partial sub-grade boiler room located in the northeast section of the building. The portion of the building that fronts along McLean Avenue is composed of six (6) commercial units: 46 McLean Avenue (formerly occupied by JS Garage); 48 McLean Avenue (formerly occupied by Simax Transmissions); 50 McLean Avenue (formerly occupied by Claudio Transmissions); 60 McLean Avenue Suite 1 (formerly occupied by Victor and Rene); 60 McLean Avenue Suite 2 (formerly occupied by VP Tires); and 70 McLean Avenue (formerly occupied by Pizza Barn). The second story of the building that extends into northern segment of the Site is accessible via ramp or stairwell from McLean Avenue and is addressed 60 McLean Avenue Suite 200. This area was predominantly inactive storage space for former occupant inventory, including dolls and stuffed toys, frames, leather goods, office supplies, antiquated printing machines or vacant space. A small portion of the 2<sup>nd</sup> floor was, until recently, still operable and utilized for heating sealing to customize jerseys, sweatshirts and performance wear. The building encompasses the entire Lot and has a footprint approximately 37,897 square feet (SF).

#### **6.1.2 Proposed Future Use Conditions**

The proposed development project consists of a commercial storage facility that will incorporate the existing façade of the current building. The proposed development will be approximately 88,830 gross-square-foot (GSF) and 86.5 feet in height (3 stories) and upon completion will include 11 parking spaces, storage units and office space. The building will be constructed slab on grade, with final excavation depth ranging from 4-feet bgs beneath the building slab, and 6-feet bgs in areas of footings. The water table is expected at between

approximately 13 and 19-feet bgs and is not expected to impact the development. Development is slated to take 27 months to complete. Plans for the Site redevelopment are provided in **Appendix A**.

### **6.1.3 Exposure Assessment**

This exposure assessment discusses potential migration routes by which chemicals in the environment may be able to reach human receptors. This discussion is based on current and hypothetical future conditions at the Site and investigation area. A complete exposure pathway for the COCs identified for the Site includes an evaluation of the following:

- The contaminant source(s) and location of the release(s) to the environment, and the contaminated medium at the potential points of exposure;
- Description of the contaminant release and transport mechanisms to the exposed population;
- Identification of all points of potential human contact with the contaminated medium;
- Possible exposure route (i.e., ingestion, inhalation, dermal absorption); and
- Description of the receptor populations the who may be exposed to contaminants.

An exposure pathway is considered complete when these five elements are documented. A potential exposure pathway exists if one or more of the five elements is unknown. An exposure pathway can be eliminated from further evaluation when one of the five elements has not existed in the past, does not exist in the present and can reasonably be expected to never exist in the future. The following section identifies potential points of human contact with contaminated media and exposure pathways identified for the Site.

#### **6.1.3.1 Soil Exposure**

As described above in Section 5.4, soil samples collected during the RI indicated the presence of Metals, PCBs, and pesticides at concentrations above the NYSDEC Part 375 PGW and UU SCOs. An individual could be exposed to these contaminants through direct contact with Site soil during ground intrusive work at the Site. An individual could be exposed to these contaminants through direct contact with Site soil during ground intrusive work at the Site. Direct contact without the use of proper personal protective equipment (PPE) and personal hygiene measures could lead to dermal contact and incidental ingestion of these compounds. Since the Site is currently completely covered by the Site buildings and/or concrete and asphalt, potential contact with Site soil is restricted to slab demolition, remedial and construction contract workers at the Site performing ground intrusive activities. The general public is not currently exposed to direct contact with Site soil, which is currently covered by the historic industrial buildings. A community air monitoring program



(CAMP) will be implemented during intrusive activities to minimize the potential for off-site exposures from soil/dust leaving the Site.

The planned future use of the Site will likely be commercial use. The forthcoming RAWP will discuss plans to limit future exposure and will include the use of an engineered cover system (e.g., building slab, pavement and certified clean soil cover) to minimize the potential for exposure by direct contact with contaminated soil and a Site Management Plan and other institutional and engineering controls as appropriate.

Environmental Media and Exposure Route	Human Exposure Assessment
Direct contact with subsurface Soils	<ul style="list-style-type: none"> <li>• Remedial or construction workers can come into contact with soil if they perform ground intrusive work at the Site.</li> <li>• During remediation or construction, workers, trespassers, passersby, and utility workers could come into contact with contaminated soil contained in dust through inhalation, incidental ingestion and dermal contact.</li> </ul>

#### 6.1.3.2 Groundwater Exposure

Groundwater is not used for drinking or irrigation (the area is connected to the public water supply), therefore, there is no direct contact with or ingestion of groundwater by the general public (on-Site or off-Site). Individuals who perform groundwater sampling or remedial activities may come into contact with contaminated groundwater if proper PPE and personal hygiene measures are not used, which could lead to dermal contact and the potential for incidental ingestion of these compounds.

The planned future use of the Site is commercial use. The future building will be serviced by the public water supply. Based on this and the proposed remedy, the potential for public exposure by direct contact with contaminated groundwater will be reduced or eliminated.

Environmental Media and Exposure Route	Human Exposure Assessment
Ingestion of groundwater	<ul style="list-style-type: none"> <li>• Contaminated groundwater is not used for drinking water, as the Site is connected to the public water supply.</li> </ul>
Direct contract with groundwater (and incidental ingestion)	<ul style="list-style-type: none"> <li>• Based on the depth to water, contact with contaminated groundwater during construction is low. Remedial workers performing groundwater sampling activities could come into contact through dermal contact and incidental ingestion.</li> </ul>

### 6.1.3.3 Soil Vapor Exposure

As described above in Section 5.3, soil vapor samples collected during the RI indicated the presence of cVOCs, specifically PCE, in soil vapor at the Site. The future Site use will be mixed commercial/residential use, and vapor mitigation will be evaluated in the forthcoming RAWP. Since the Site buildings are not currently occupied and will not be occupied prior to redevelopment, there is no potential for human exposure to soil vapor intrusion on the Site. The buildings will be accessed for demolition and the potential for exposure for this short-term access is low, as there will likely be infiltration of ambient air through the access points, windows, doors, and former ventilation fans in the exterior walls.

The future building will occupy the entire Site, where contaminants were detected in soil vapor samples, results in the potential for soil vapor intrusion. However, the proposed remedy will be designed to mitigate this potential exposure impact.

Environmental Media and Exposure Route	Human Exposure Assessment
Inhalation of air (exposures related to soil vapor intrusion)	<ul style="list-style-type: none"><li>Remedial workers, trespassers, and construction workers may be exposed to contaminated soil vapor inside the building or within open excavations.</li></ul>

## 6.2 Conceptual Site Model

A Conceptual Site Model (CSM) was developed based on RI findings and previous investigations to produce a simplified framework for understanding of the distribution of contaminants in the various media and the risk posed to potential receptors via potential migration pathways, and potentially complete exposure pathways. Potential sources of contamination have been identified and include historic fill and off-site groundwater sources.

This RIR has included updating of the initial CSM to consider the relationship between contaminant sources and contaminants of concern, environmental media and receptors through consideration of migration and exposure pathways. This conceptual model is based on current Site conditions and surrounding land use as well as the planned future Site and the surrounding land uses. The remedy selected for the Site will address the complete exposure pathways in a RAWP.

Bedrock was encountered at varying shallow depths beneath the majority of the Site, except for the southeastern portion of the Site where bedrock was not encountered to a depth of fifteen (15) feet below grade, and in soil borings SB-6 and SB-7 located in 46 McLean Avenue (the western portion of the Site on the first floor).

Soils situated above bedrock predominantly consisted of fine to medium grained sands. Low levels of chlorinated VOCs in soil vapor, heavy metals in soil and groundwater, and BTEX compounds are present in soil and groundwater media at the Site.

In addition, the emerging contaminants PFAS and PFOA were detected exceeding their respective NYSDEC Draft Guidance Values in groundwater in four (4) groundwater wells sampled (MW-4A, MW-5A, MW-7A and MW-9A). However, neither compound was detected in any soil sample that was analyzed for same.

The site is currently vacant with limited access to authorized workers and the project development team. Under future conditions, human receptors may include construction and remediation workers, authorized guests visiting the site, and the public adjacent to the site, as well as potential future building occupants. An illustrative CSM, **Plate 1**, is a pictorial depiction of environmental hazards associated with contaminated soil, groundwater and soil vapor.

## 7 FINDINGS AND CONCLUSIONS

The data collected during the RI and described herein is intended to determine, to the extent possible, the nature and extent of contamination in soil, soil vapor, and groundwater and will be used to evaluate appropriate remedial action alternatives for the Site. The conclusions are based on data collected during the initial investigations performed in May 2022 by IEEC. The findings and conclusions are as follows:

- **Field Observations:** The general Site topography was observed to slope from northwest to southeast across the Site and is likely influenced by bedrock. The current on-site building was constructed on top of bedrock, which can be observed in outcroppings directly north and west of the Site.

- **Stratigraphy:** Due to the abundance of bedrock refusals encountered in soil borings, soil recovery was limited, however where soils were present, they generally consisted of fine to medium grained sand, and in the southeastern portion of the property where bedrock was not encountered to a depth of 15 feet, generally consisted of silty sand.
- **Hydrogeology:** Synoptic water-level measurements recorded at onsite wells ranged from 1.29 fbg in MW-5A, located in the central portion of the site (within 50 McLean Avenue), to 10.57 fbg in MW-9A, located on the southeastern side of the Site (70 McLean Avenue). The difference in depth to water elevation is the result of shallow bedrock located across the majority of the site.
- **Soil Vapor Contamination:** In soil vapor, PCE and a number of VOC compounds were identified. One location was found in exceedance of the NYSDOH minimum guidelines for PCE however the indoor air level for that location indicated low levels of PCE in indoor air and yielded a no further action response when compared to the NYSDOH Decision Matrices. The VOC compounds identified in soil vapor do not have NYSDOH air guidelines.
- **Soil:** The heavy metals, lead, nickel, zinc, mercury and chromium, two PCB compounds, and two Pesticide compounds were found in exceedance of Soil Cleanup Objectives. The heavy metal Chromium was found above Protection of Groundwater Standards in two locations, in SB-1 and SB-2, located in the northwestern portion of the Site on the second floor on top of shallow bedrock. Mercury was found above PGW standards in SB-3 and SB-4 on the second floor above shallow bedrock, and in Sb-8B, SB-10A and Sb-11, in units 48 McLean Avenue and 50 McLean Avenue located on the first floor. Mercury was also found in SB-18 within the ramp in the southeastern portion of the site, downgradient from the UST. Nickel was found exceeding the Restricted Residential SCO in Sb-1, and above the Unrestricted SCO in SB-10B, SB-11 and SB-12. Lead and Zinc were found above their respective UUSCOs in SB-1. Lead was also found exceeding the UUSCO in SB-18. Two Pesticides were found exceeding their respective UUSCOs in SB-12. Two PCBs were found exceeding their respective UUSCOs in SB-8B.
- **Groundwater:** No non-aqueous phase liquids or DNAPL was detected in the 9 groundwater monitoring wells at the Site, however a sheen was observed in MW-4A. Volatile organic compounds (VOCs), primarily BTEX compounds and their breakdown compounds were detected at concentrations above the TOGS Class GA SGVs in four (4) groundwater samples collected from MW-4A, MW-7A MW-9A and WP-11. Three of those monitoring wells (MW-7A, MW-9A and WP-

11) are located downgradient from the UST located within the access ramp that leads the second floor of the building. It should be noted that wells located further downgradient, in the sidewalk (WP-12, WP-13 and WP-14) did not contain VOC exceedances therefore an off-site source can likely be ruled out. Other contaminants including some PAHs and Metals were marginally detected above the referenced standard and are typical of regional groundwater conditions in urban areas. Pesticides, PCBs and 1,4-dioxane were not detected in any of the groundwater samples collected during this RI.

- **Perfluorooctanoic Acid (PFOA)** was detected at concentrations exceeding the Draft Guidance Value of 0.0067 ug/L at 0.0788 µg/L, 0.0448 µg/L and 0.0214 ug/L in MW-4A, MW-7A and MW-9A, respectively.
- **Perfluorooctanesulfonic Acid (PFOS)** was detected at concentrations exceeding the Draft Guidance Value of 0.0027 ug/L at 0.00499 µg/L, 0.0082 µg/L and 0.00826 ug/L in MW-4A, MW-7A and MW-9A, respectively.

Perfluorinated Alkyl Acids (PFAS), specifically PFOA and PFOS, were detected at 0.0214 ug/L to 0.0788 ug/L in three (3) samples collected from the groundwater monitoring wells, which exceeded the NYSDEC standard of 0.0067 µg/L (or 67 pg/L). However, due to there being no exceedances in the soil samples collected, by comparison, these detections of PFOA and PFOS are not determined to be attributable to the Site. In addition, no other individual PFAS (excluding PFOA and PFOS) were detected at concentrations exceeding the NYSDEC Standard of 100 ng/L, and total concentrations of PFAS did not exceed 500 ng/L in all samples collected.

- **Source Area:** The most prevalent COCs identified during previous investigations and this RI are petroleum related VOCs and SVOCs in soil and groundwater located proximal to and hydraulically downgradient from the UST located in the entrance ramp to the second floor of the site building.

The RI determined the degree and extent of on-site contamination from potential on- or off-site sources. Sufficient analytical data was gathered during this RI to establish site-specific soil cleanup levels and develop a remedy for the Site. The remedy will be described and evaluated in a RAWP prepared in accordance with NYSDEC BCP guidelines. The remedy will address the petroleum related compounds associated with the onsite UST.

## 8 REFERENCES

1. Structural Engineering Technologies, P.C. (SET) Phase I ESA, October 2, 2018
2. Structural Engineering Technologies, P.C. (SET) Phase II ESA, April 22, 2020
3. Structural Engineering Technologies, P.C. (SET) Supplementary Phase II ESA (Phase IIb), July 6, 2020
4. Structural Engineering Technologies, P.C. (SET) Fourth Round Groundwater Testing, November 5, 2020
5. New York State Department of Environmental Conservation Department of Environmental Remediation DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010
6. New York Codes, Rules and Regulations (NYCRR) Part 375 Environmental Remediation Programs Effective December 14, 2006
7. NYSDEC Commissioners Policy CP-51 Soil Cleanup Guidance issued October 21, 2010
8. NYSDEC Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitations dated June 1998
9. New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates
10. United States Environmental Protection Agency, Low Flow Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, January 19, 2010
11. Bedrock map, derived from spatial data developed and distributed by ESRI and the New York State Museum (2008)
12. Hydraulic Framework of Long Island New York Map (1989)

FIGURE 1: CONCEPTUAL SITE MODEL

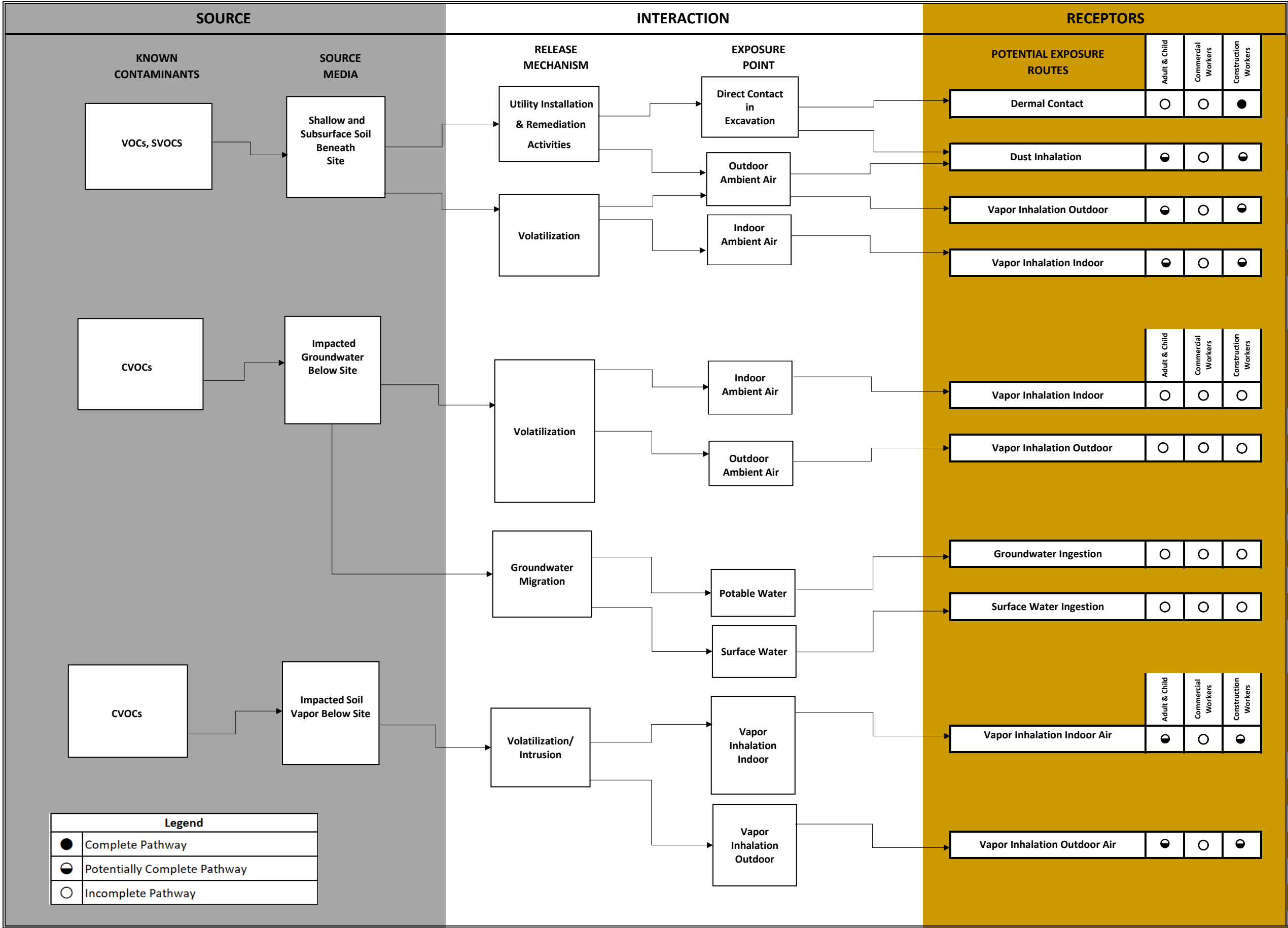


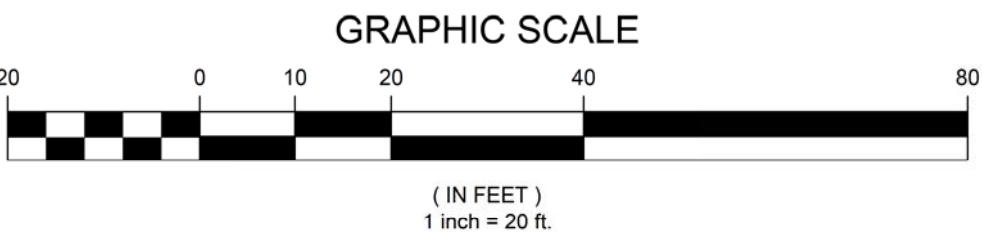
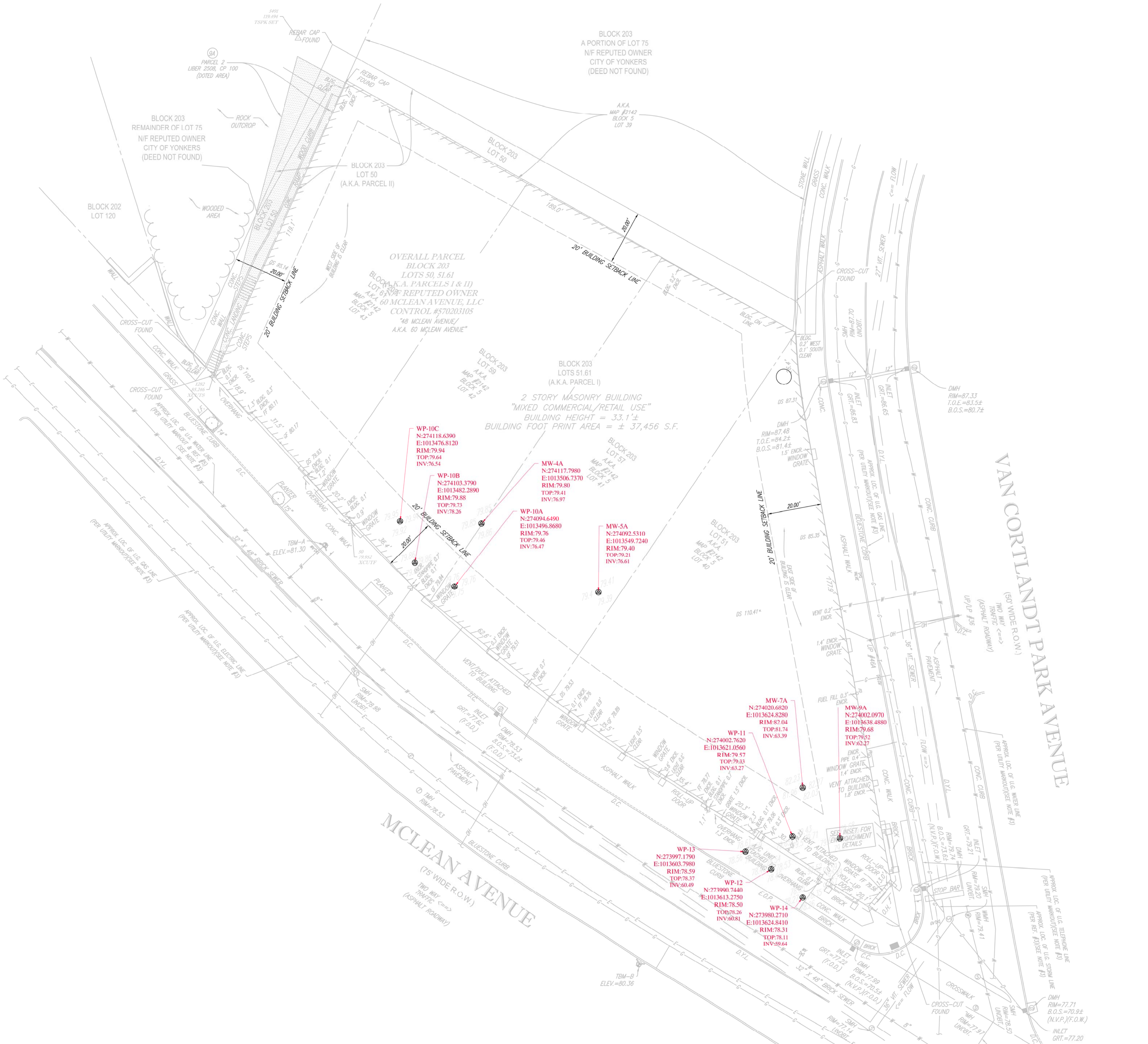


FIGURE 2

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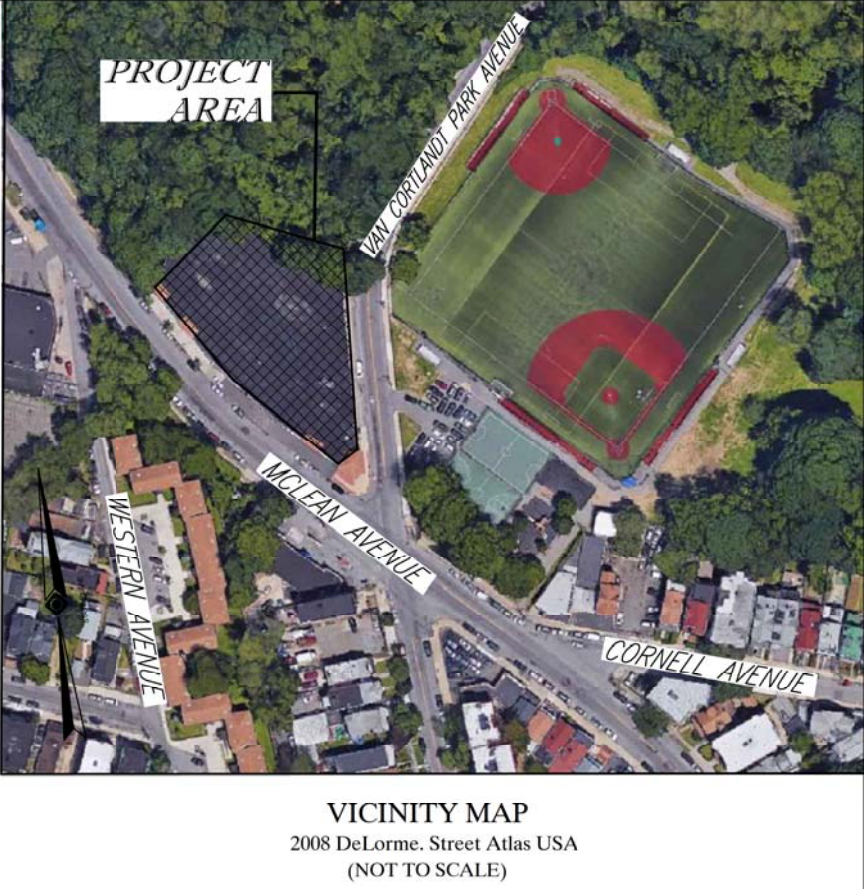
NOTES:

1. PROPERTY KNOWN AS LOTS 50 & 51.61, BLOCK 203, AS SHOWN ON THE TAX MAP OF THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.
2. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
3. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY, UTILIZING THE NEW YORK STATE DOT RTK NETWORK (NYSNET).
4. \*THIS PLAN HAS BEEN PREPARED FOR THE SOLE PURPOSE OF DISPLAYING THE LOCATION OF MONITORING WELLS. RECORD MAPPING AND/OR AERIAL IMAGERY AS SHOWN HEREON IS FOR REFERENCE PURPOSES ONLY.\*



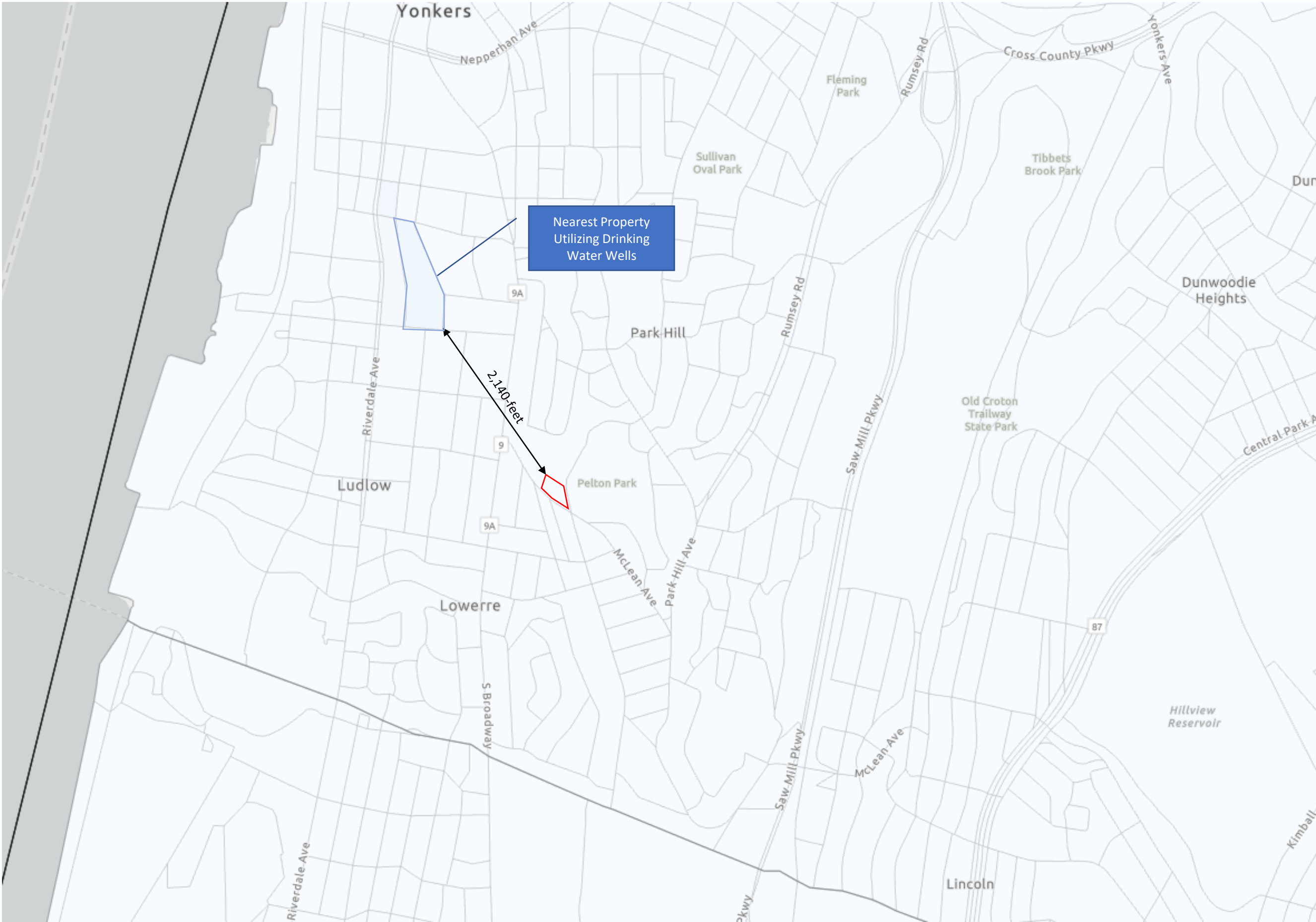
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NO. DATE BY DESCRIPTION APPROVED				
REVISIONS				
PROJECT NAME <b>BLOCK 203, LOT 51</b> 60 MCLEAN AVENUE CITY OF YONKERS, WESTCHESTER COUNTY STATE OF NEW YORK				
DRAWING TITLE <b>MONITORING WELL LOCATION SURVEY</b>				
SEAL & SIGNATURE 		FIELD DATE: 05-24-22 FIELD BK: 22-01 F. B. PAGE: 47 DATE: 05-27-2022 SCALE: 1" = 20' PROJECT No: 04-170017-01 DRAWING BY: M.M. CHK BY: D.S. APPROVED BY: J.S.S. DWG No: V-001.0.0		
JONATHAN SCHMIDT NEW YORK PROFESSIONAL LAND SURVEYOR #030821		DATE: 05-27-2022 CAD FILE No: 04-170017-01 PAGE No: 1 OF 1		





Legend

PROJECT SITE BOUNDARY

Private Drinking Water  
Well Location Map

60 McLean Avenue,  
Yonkers, NY

FIGURE 3

Project #:	15514
Drawn By:	CJC
Checked By:	GMC

Base Map:  
USEPA Private Domestic Well  
Map

Date: 4/26/23

Revisions


Not To Scale

IMPACT ENVIRONMENTAL  
CLOSURES, INC.

170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
TEL (631) 269-8800  
FAX (631) 269-1599



# PLATES

60 McLean Avenue, Yonkers, NY

Remedial Action Work Plan  
NYSDEC BCP #C360211



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599





NOTES:

*Base Map Source: Westchester GIS Mapper*

**SITE LOCATION MAP**

**60 McLean Avenue  
Yonkers, New York**



Plate No: 01

PROJECT NO.	15514-01
DESIGNED BY:	LR
DRAWN BY:	LR
CHECKED BY:	CC
DATE:	12/14/2020
SCALE:	N.T.S

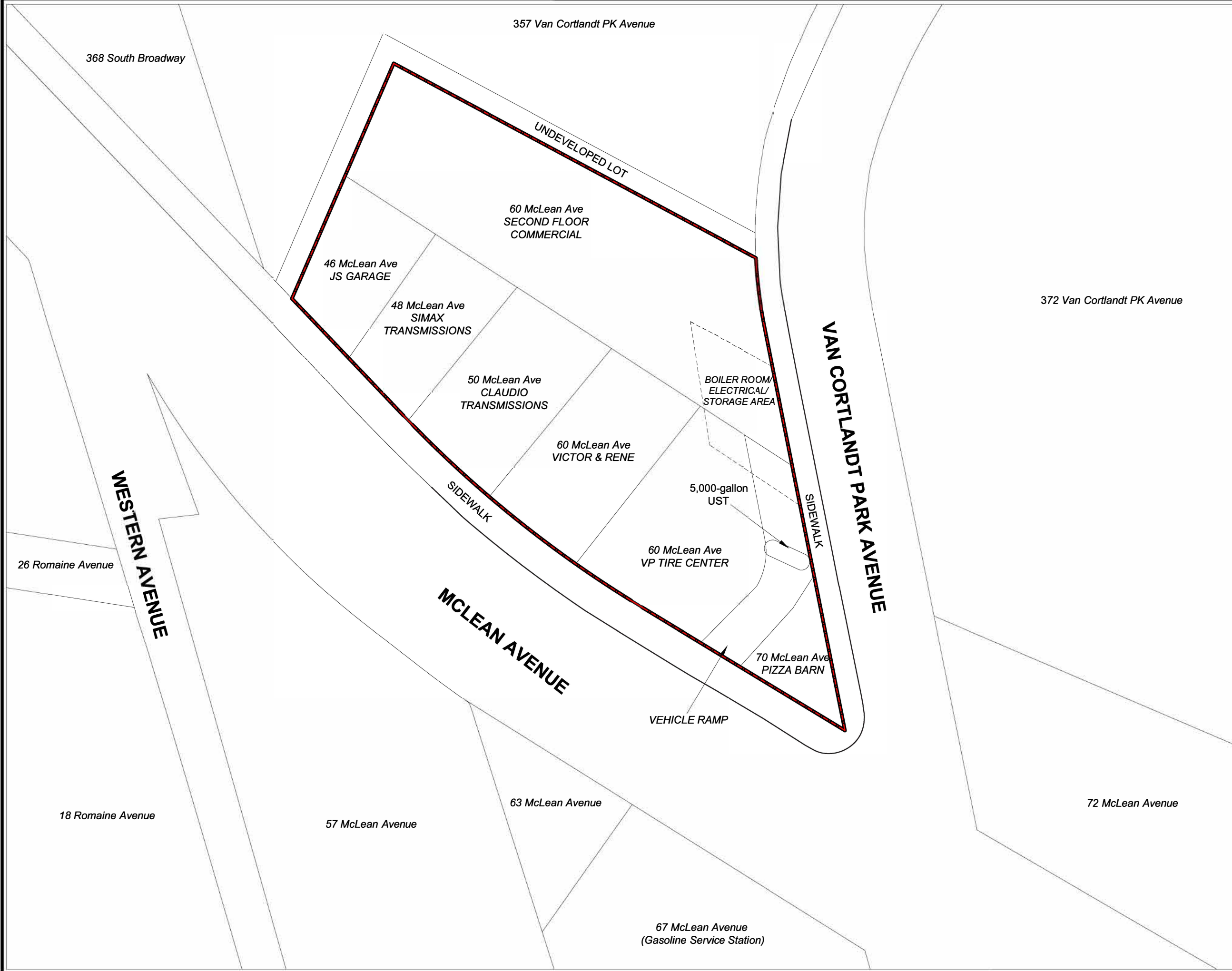
REVISIONS	

**IMPACT ENVIRONMENTAL  
ENGINEERING & GEOLOGY**

170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
TEL (631) 269-8800  
FAX (631) 269-1599








LEGEND

PROPERTY LINE

PROJECT



NORTH

0'

10'

20'

50'

NOTES:

EXISTING SITE MAP

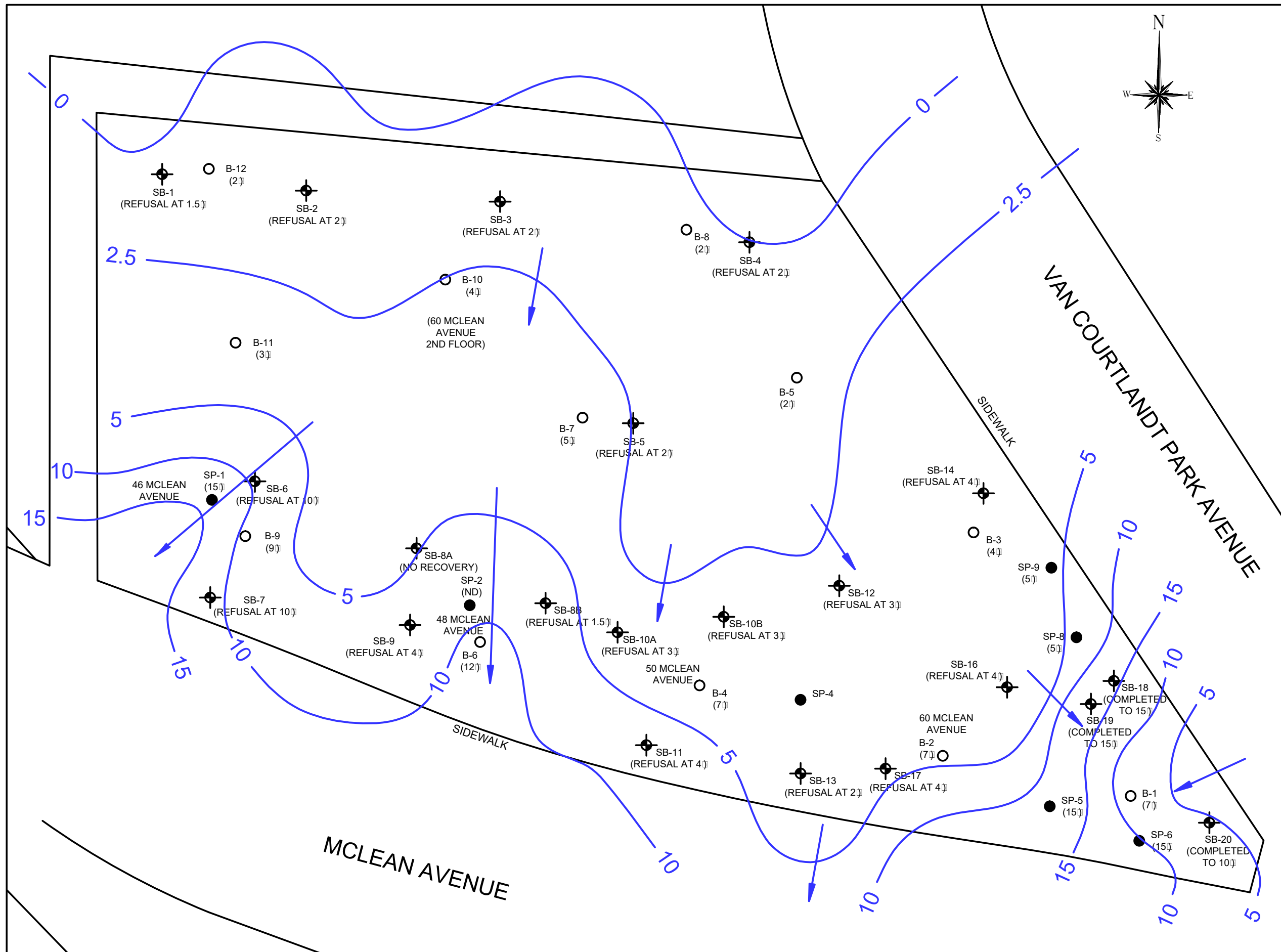
60 McLean Avenue Yonkers, New York	Plate No: 02	
	PROJECT NO.	15514-01
	DESIGNED BY:	LR
	DRAWN BY:	LR
	CHECKED BY:	CC
	DATE:	12/11/2020
	SCALE:	SEE ABOVE
	REVISIONS	

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LEGEND:

- 10 — CONTOUR (FEET)
- >— SURFACE SLOPE
- ⊕ IEEG 2022 RI SOIL BORING
- PG ENVIRONMENTAL 2018 GEOTECH BORING
- SET 2020 PHASE II SOIL BORING

**BEDROCK SURFACE  
MAP**

60 McLEAN AVENUE  
YONKERS, NEW YORK

PLATE NO.

04

PROJECT NO.	15514
DESIGNED BY:	AK
DRAWN BY:	JRS
CHECKED BY:	JRS/ICC
DATE:	7-21-22
SCALE:	1:20
REVISIONS	
NO.	DATE:

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LOCATION	SB-1 (0-2)
SAMPLING DATE	5/3/2022
GENERAL CHEMISTRY	
Chromium, Trivalent	720
Chromium, Hexavalent	2
METALS, TOTAL	
Copper, Total	62.1
Nickel, Total	143
Zinc, Total	110

LOCATION	SB-21 (0-2)
SAMPLING DATE	12/9/2022
GENERAL CHEMISTRY	
Chromium, Total	29.1
METALS, TOTAL	
Lead, Total	172
Mercury, Total	0.19
Zinc, Total	112

LOCATION	SB-22 (0-2)
SAMPLING DATE	12/9/2022
GENERAL CHEMISTRY	
Chromium, Total	25.2
METALS, TOTAL	
Lead, Total	65.1

LOCATION	SB-2 (0-2)
SAMPLING DATE	5/3/2022
GENERAL CHEMISTRY	
Chromium, Trivalent	35
Chromium, Hexavalent	ND
METALS, TOTAL	
Copper	120
Nickel	28.5
Zinc	60.1

LOCATION	SB-3 (0-2)
SAMPLING DATE	5/3/2022
METALS, TOTAL	
Mercury	2

LOCATION	SB-4 (0-2)
SAMPLING DATE	5/3/2022
METALS, TOTAL	
Mercury	0.547

LOCATION	SB-10A (0-3)
SAMPLING DATE	4/21/2022
METALS, TOTAL	
Mercury	1.27

LOCATION	SB-12 (0-4)
SAMPLING DATE	4/21/2022
METALS, TOTAL	
Nickel	35.8

LOCATION	SB-8B (0-3)
SAMPLING DATE	5/3/2022
PCBs	
Aroclor 1254	0.328
Aroclor 1260	0.349
PCBs, Total	0.677
METALS, TOTAL	
Mercury	0.428
Zinc	217

LOCATION	SB-11 (0-4)
SAMPLING DATE	4/21/2022
METALS, TOTAL	
Nickel	365
Mercury	0.227

LOCATION	SB-12 (0-4)
SAMPLING DATE	4/21/2022
METALS, TOTAL	
Nickel	35.8
PESTICIDES	
4,4' -DDT	0.0462
4,4' -DDE	0.00589

LOCATION	SB-18 (0-2)
SAMPLING DATE	4/21/2022
METALS, TOTAL	
Lead	219
Mercury	0.474

LOCATION	NY-UNRES	NY-RRES	NY-PGW
Miscellaneous/Inorganics			
Chromium, Trivalent	30	180	~
Chromium, Hexavalent	1	110	19
Total Cyanide	27	27	40
METALS, TOTAL			
Copper	50	270	1,750
Manganese	1,600	2,000	2,000
Mercury	0.18	0.81	0.73
Nickel	30	310	130
Zinc	109	10,000	2,480
VOCs			
PCE	1,300	19,000	0.47
TCE	470	21,000	0.47
CIS-1,2-DCE	250	100,000	0.25
SVOCs			
Benz(a)anthracene	1,000	1,000	1
Benzo(a)pyrene	1,000	1,000	22
Benzo(b)fluoranthene	1,000	1,000	1.7
Benzo(k)fluoranthene	800	3,900	1.7
Chrysene	1,000	3,900	1
Dibenz(a,h)anthracene	330	330	1,000
Indeno(1,2,3-cd)pyrene	500	500	8.2
PESTICIDES			
4,4' -DDD	0.0033	62	14
4,4' -DDE	0.0033	92	17
4,4' -DDT	0.0033	47	136
PCBs			
Aroclor 1254	0.1	1	3.2
Aroclor 1260	0.1	1	3.2

\*Units in mg/kg

#### LEGEND:

Soil Boring Location

NY UNRES- NY PART 375 UNRESTRICTED RESIDENTIAL  
NY RRES- NY PART 375 RESTRICTED RESIDENTIAL  
NY PGW- NY PART 375 PROTECTION OF GROUNDWATER

#### SOIL ANALYTICAL MAP

60 McLean Avenue  
Yonkers, New York

Plate No: 06

PROJECT NO:	15614-01
DESIGNED BY:	LR
DRAWN BY:	AK
CHECKED BY:	CC
DATE:	05/11/2022
SCALE:	SEE ABOVE
REVISIONS	

#### IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
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NYSDEC Part 375 Standards	
Compound	Technical Operational Guidance Standards (TOGS) 1.1.1 Class G.A. Ambient Water Quality Standards (AWQS)
Total Metals - ug/L	
Iron, Total	300
Manganese, Total	300
Sodium, Total	20000
Dissolved Metals - ug/L	
Iron, Dissolved	300
Manganese, Dissolved	300
Sodium, Dissolved	20000
SVOCs - ug/L	
Phenol	1
Naphthalene	10
Benzo(a)anthracene	0.002
Benzo(b)fluoranthene	0.002
Benzo(k)fluoranthene	0.002
Chrysene	0.002
Indeno(1,2,3-cd)pyrene	0.002
VOCs - ug/L	
Benzene	1
Toluene	5
Ethylbenzene	5
p/m-Xylene	5
o-Xylene	5
n-Butylbenzene	5
sec-Butylbenzene	5
Isopropylbenzene	5
p-Isopropyltoluene	5
Naphthalene	10
n-Propylbenzene	5
1,3,5-Trimethylbenzene	5
1,2,4-Trimethylbenzene	5
1,2,4,5-Tetramethylbenzene	5
Perfluorinated Alkyl Acids (PFAS) - ng/L	
Perfluorooctanoic Acid (PFOA)	6.7
Perfluorooctanesulfonic Acid (PFOS)	2.7

NOTE:  
GROUNDWATER SAMPLES COLLECTED IN MAY 2021 WERE ANALYZED FOR  
VOCs, SVOCs AND METALS ONLY

- LEGEND:
- ▲ Groundwater Sampling Location
  - ▲ Previously Installed Groundwater Well Location

GROUNDWATER  
ANALYTICAL  
MAP

60 McLean Avenue  
Yonkers, New York

Plate No: 07

PROJECT NO.	15514-01
DESIGNED BY:	LR
DRAWN BY:	AK
CHECKED BY:	CC
DATE:	04/27/2023
SCALE:	SEE ABOVE
REVISIONS	

IMPACT ENVIRONMENTAL  
CLOSURES, INC.

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LOCATION	MW-9A
SAMPLING DATE	5/4/2022
Total Metals - ug/L	
Iron, Total	8560
Manganese, Total	785
Sodium, Total	183000
Dissolved Metals - ug/L	
Iron, Dissolved	2790
Manganese, Dissolved	642.8
Sodium, Dissolved	184000
SVOCs - ug/L	
Naphthalene	49
Benzo(a)anthracene	0.05
Benzo(b)fluoranthene	0.08
Benzo(k)fluoranthene	0.03
Chrysene	0.04
Indeno(1,2,3-cd)pyrene	0.04
VOCs - ug/L	
Benzene	4.6
Toluene	17
Ethylbenzene	230
p/m-Xylene	230
o-Xylene	14
n-Butylbenzene	5.6
sec-Butylbenzene	5.7
Isopropylbenzene	32
p-Isopropyltoluene	10
Naphthalene	83
n-Propylbenzene	38
1,2,4-Trimethylbenzene	220
1,2,4,5-Tetramethylbenzene	9.3
Perfluorinated Alkyl Acids (PFAS) - ng/L	
Perfluorooctanoic Acid (PFOA)	21.4
Perfluorooctanesulfonic Acid (PFOS)	8.26

LOCATION	WP-11	WP-11
SAMPLING DATE	5/5/2021	5/4/2022
Total Metals - ug/L		
Iron, Total	-	1110
Sodium, Total	-	140000
Dissolved Metals - ug/L		
Iron, Dissolved	-	571
Sodium, Dissolved	-	134000
SVOCs - ug/L		
Naphthalene	12	1.3
VOCs - ug/L		
Benzene	4	0.43
Toluene	23	0.97
Ethylbenzene	54	5.3
p/m-Xylene	130	17
o-Xylene	66	7.3
n-Butylbenzene	6.8	0.83
sec-Butylbenzene	6.5	0.91
Isopropylbenzene	16	2.3
p-Isopropyltoluene	11	1.5
Naphthalene	26	3
n-Propylbenzene	19	2.6
1,3,5-Trimethylbenzene	39	6.8
1,2,4-Trimethylbenzene	120	21
1,2,4,5-Tetramethylbenzene	10	1.4

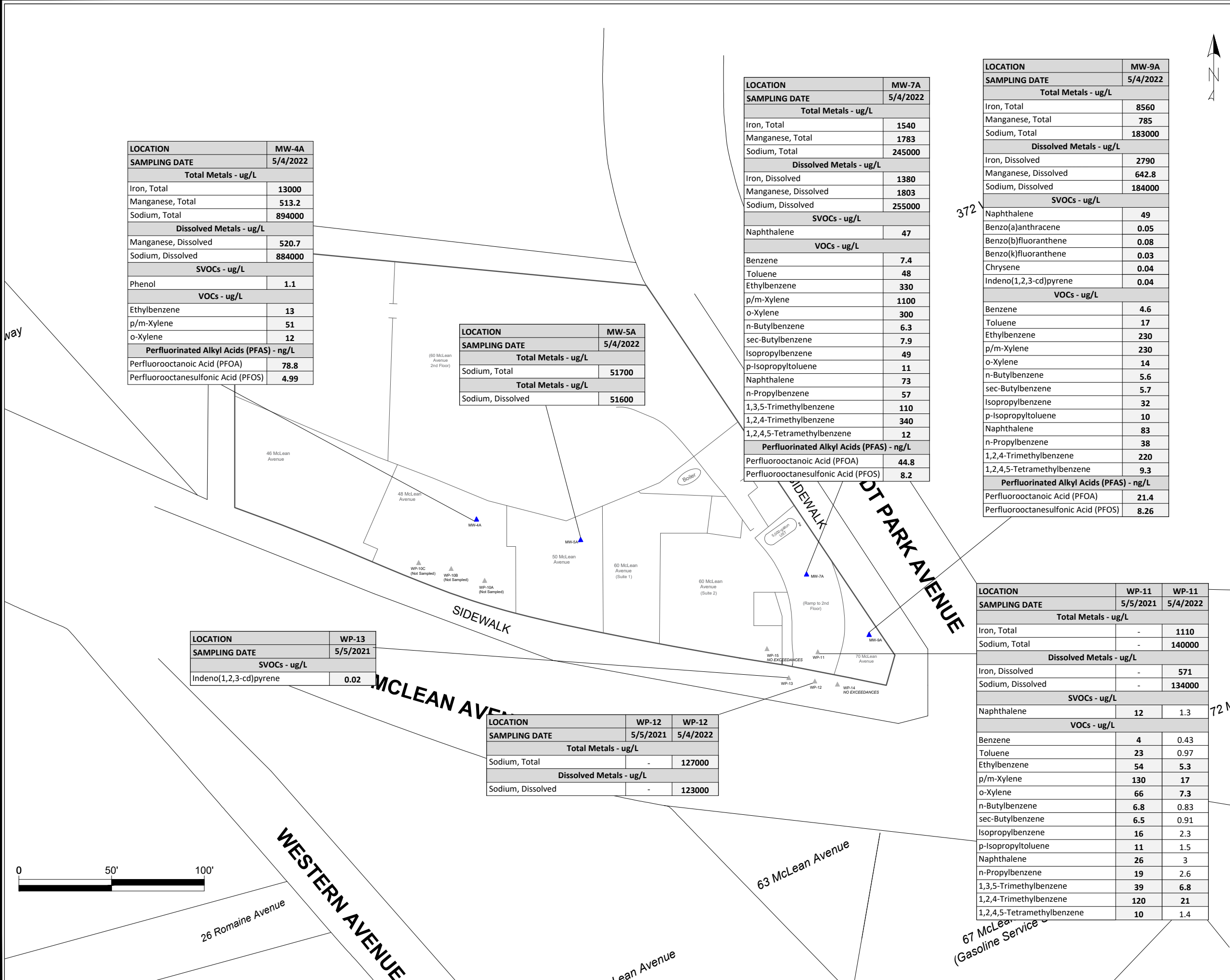
LOCATION	MW-7A
SAMPLING DATE	5/4/2022
Total Metals - ug/L	
Iron, Total	1540
Manganese, Total	1783
Sodium, Total	245000
Dissolved Metals - ug/L	
Iron, Dissolved	1380
Manganese, Dissolved	1803
Sodium, Dissolved	255000
SVOCs - ug/L	
Naphthalene	47
VOCs - ug/L	
Benzene	7.4
Toluene	48
Ethylbenzene	330
p/m-Xylene	1100
o-Xylene	300
n-Butylbenzene	6.3
sec-Butylbenzene	7.9
Isopropylbenzene	49
p-Isopropyltoluene	11
Naphthalene	73
n-Propylbenzene	57
1,3,5-Trimethylbenzene	110
1,2,4-Trimethylbenzene	340
1,2,4,5-Tetramethylbenzene	12
Perfluorinated Alkyl Acids (PFAS) - ng/L	
Perfluorooctanoic Acid (PFOA)	44.8
Perfluorooctanesulfonic Acid (PFOS)	8.2

LOCATION	MW-5A
SAMPLING DATE	5/4/2022
Total Metals - ug/L	
Sodium, Total	51700
Total Metals - ug/L	
Sodium, Dissolved	51600

LOCATION	MW-4A
SAMPLING DATE	5/4/2022
Total Metals - ug/L	
Iron, Total	13000
Manganese, Total	513.2
Sodium, Total	894000
Dissolved Metals - ug/L	
Manganese, Dissolved	520.7
Sodium, Dissolved	884000
SVOCs - ug/L	
Phenol	1.1
VOCs - ug/L	
Ethylbenzene	13
p/m-Xylene	51
o-Xylene	12
Perfluorinated Alkyl Acids (PFAS) - ng/L	
Perfluorooctanoic Acid (PFOA)	78.8
Perfluorooctanesulfonic Acid (PFOS)	4.99

LOCATION	WP-13
SAMPLING DATE	5/5/2021
SVOCs - ug/L	
Indeno(1,2,3-cd)pyrene	0.02

LOCATION	WP-12	WP-12
SAMPLING DATE	5/5/2021	5/4/2022
Total Metals - ug/L		
Sodium, Total	-	127000
Dissolved Metals - ug/L		
Sodium, Dissolved	-	123000



LOCATION	IA-1A
SAMPLING DATE	5/19/2022
VOCs	
Carbon tetrachloride	0.61
PCE	0.231
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	21.21
Total VOCs	138.614

LOCATION	SV-2A
SAMPLING DATE	5/19/2022
VOCs	
PCE	44.1
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Carbon tetrachloride	ND
Methylene chloride	ND
Total BTEX	8.417
Total VOCs	142.097

<b>LOCATION</b>	<b>SV-3A</b>
<b>SAMPLING DATE</b>	<b>5/19/2022</b>
<b>VOCs</b>	
PCE	32.9
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Carbon tetrachloride	ND
Methylene chloride	ND
Total BTEX	5.48
Total VOCs	294.03

LOCATION	OA-2A
SAMPLING DATE	5/19/2022
VOCs	
Carbon tetrachloride	0.566
PCE	0.156
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	5.04
Total BTEX	3.301
Total VOCs	38.864

LOCATION	SV-4A
SAMPLING DATE	5/19/2022
VOCs	
PCE	28
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Carbon tetrachloride	ND
Methylene chloride	ND
Heptane	1320
Total BTEx	ND
Total VOCs	1413.82

LOCATION	SV-10A
SAMPLING DATE	5/19/202
VOCs	
PCE	41.2
Carbon tetrachloride	ND
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	59.8
Total VOCs	562.33

LOCATION	IA-4A
SAMPLING DATE	5/19/2022
VOCs	
Carbon tetrachloride	0.642
PCE	1.28
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	17.62
Total VOCs	114.982

LOCATION	SV-9A
SAMPLING DATE	5/19/2022
VOCs	
PCE	21.2
Methylene chloride	3.93
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Carbon tetrachloride	ND
Total BTEX	15.76
Total VOCs	272.924

LOCATION	SV-8A
SAMPLING DATE	5/19/2022
VOCs	
PCE	296
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	2.4
Carbon tetrachloride	ND
Methylene chloride	ND
Total BTEX	13.517
Total VOCs	479.537

LOCATION	OA-1A
SAMPLING DATE	5/19/2022
VOCs	
Carbon tetrachloride	0.566
PCE	0.237
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	16.68
Total VOCs	246.251

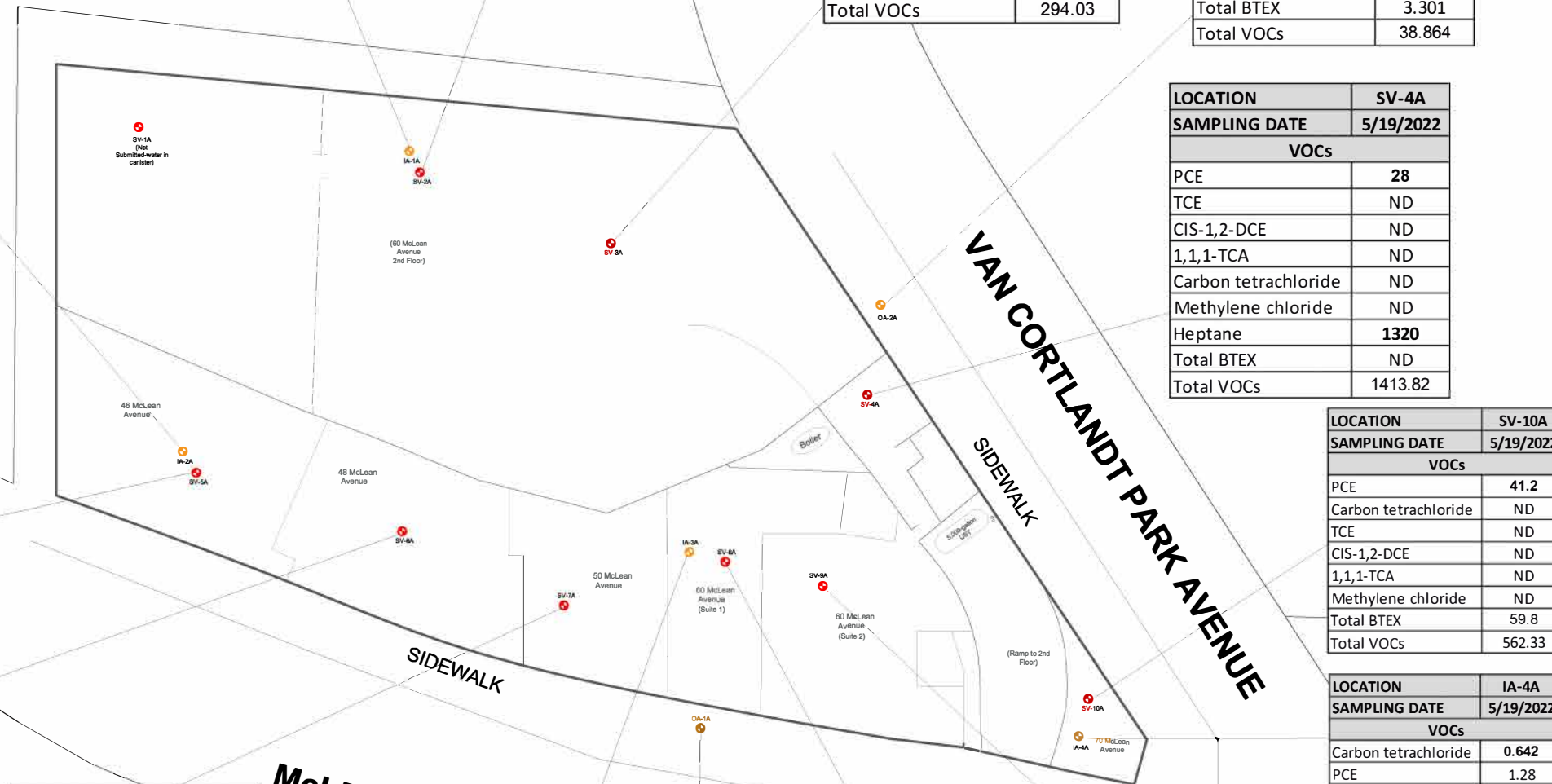
<b>LOCATION</b>	<b>IA-3A</b>
<b>SAMPLING DATE</b>	<b>5/19/2022</b>
<b>VOCs</b>	
Carbon tetrachloride	0.579
PCE	0.264
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	20.67
Total VOCs	425.113

LOCATION	SV-7A
SAMPLING DATE	5/19/2022
VOCs	
PCE	79.3
TCE	1.11
Carbon tetrachloride	1.32
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	8.969
Total VOCs	377.79



LOCATION	SV-6A
SAMPLING DATE	5/19/2022
VOCs	
PCE	96.3
TCE	3.14
CIS-1,2-DCE	ND
1,1,1-TCA	2.65
Carbon tetrachloride	ND
Methylene chloride	ND
Total BTEX	28.732
Total VOCs	730.484

<b>LOCATION</b>	<b>SV-5A</b>
<b>SAMPLING DATE</b>	<b>5/19/2022</b>
<b>VOCs</b>	
PCE	<b>368</b>
Carbon tetrachloride	2.23
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	15.899
Total VOCs	486.98

LOCATION	IA-2A
SAMPLING DATE	5/19/2022
VOCs	
Carbon tetrachloride	0.547
PCE	0.264
TCE	ND
CIS-1,2-DCE	ND
1,1,1-TCA	ND
Methylene chloride	ND
Total BTEX	90.62
Total VOCs	255.091



LEGEND:

-  Sub Slab Soil Vapor Sampling Point
-  Indoor/Outdoor Air Sampling Location

NOTES: \*Units in ug/m<sup>3</sup>

## SUB-SLAB & INDOOR/OUTDOOR AIR ANALYTICAL MAP

60 McLean Avenue  
Yonkers, New York

Plate No: 08

[illegible]

**IMPACT ENVIRONMENTAL  
ENGINEERING & GEOLOGY**

170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
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# TABLES

60 McLean Avenue, Yonkers, NY

Remedial Action Work Plan  
NYSDEC BCP #C360211



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
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**Table 1**  
**Soil Analytical Data Summary**  
60 McLean Avenue, Yonkers, NY

LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	NYCRR Restricted Residential SCOs	NYCRR Protection of Groundwater SCOs	NYCRR Unrestricted Use SCOs	Units	SB-1 (0-2)		SB-2 (0-2)		SB-3 (0-2)		SB-4 (0-2)		SB-5 (0-2)		SB-6 (0-2)		SB-6 (7-9)	
					5/3/2022		5/3/2022		5/3/2022		5/3/2022		5/3/2022		5/2/2022		5/2/2022	
					1,2223093-20		1,2223093-21		1,2223093-25		1,2223093-26		1,2223093-27		1,2223093-03		1,2223093-04	
					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
General Chemistry																		
Chromium, Trivalent	1500	~	30	mg/kg	720		35		13		16		15		12		16	
Solids, Total	~	~	~	%	86.8		86.8		94		94.4		88.7		91		91.4	
Cyanide, Total	27	40	27	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chromium, Hexavalent	400	19	1	mg/kg	2		ND		ND		ND		ND		ND		ND	
Organochlorine Pesticides by GC																		
Delta-BHC	500	0.25	0.04	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Lindane	9.2	0.1	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Alpha-BHC	3.4	0.02	0.02	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Beta-BHC	3	0.09	0.036	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Heptachlor	15	0.38	0.042	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aldrin	0.68	0.19	0.005	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endrin	89	0.06	0.014	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Dieldrin	1.4	0.1	0.005	mg/kg	ND		ND		ND		ND		ND		ND		ND	
4,4'-DDE	62	17	0.0033	mg/kg	ND		ND		ND		ND		ND		ND		ND	
4,4'-DDD	92	14	0.0033	mg/kg	ND		ND		ND		ND		ND		ND		ND	
4,4'-DDT	47	136	0.0033	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endosulfan I	200	102	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endosulfan II	200	102	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endosulfan sulfate	200	1000	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
cis-Chlordane	24	2.9	0.094	mg/kg	ND		ND		ND		ND		ND		0.000597	JIP	ND	
Perfluorinated Alkyl Acids by Isotope Dilution																		
Perfluorobutanoic Acid (PFBA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluoropentanoic Acid (PFPA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorohexanoic Acid (PFHxA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluoroheptanoic Acid (PFHpA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorooctanoic Acid (PFOS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorodecanoic Acid (PFDA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorooctanesulfonic Acid (PFHxS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorononanoic Acid (PFNA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorodecanesulfonic Acid (PFOS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorododecanoic Acid (PFDA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
N-Methyl Perfluorodecanesulfonamidoacetic Acid (NMeFOSAA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluoroundecanoic Acid (PFUnA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorododecanesulfonic Acid (PFDS)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorotetradecanoic Acid (PFTA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
N-Ethyl Perfluorodecanesulfonamidoacetic Acid (NEFOSAA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorotridecanoic Acid (PFTrDA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Perfluorotetradecanoic Acid (PFTA)	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
PFOA/PFOS, Total	~	~	~	mg/kg	-	-	-	-	ND		-	-	ND		-	-	-	-
Polychlorinated Biphenyls by GC																		
Aroclor 1016	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1221	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1232	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1242	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1248	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1254	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1260	1	3.2	0.1	mg/kg	0.0382		ND		ND		0.0112	J	ND		ND		ND	
Aroclor 1262	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1268	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
PCBs, Total	1	3.2	0.1	mg/kg	0.0382		ND		ND		0.0112	J	ND		ND		ND	
Semivolatile Organics by GC/MS																		
Acenaphthene	500	98	20	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Hexachlorobenzene	6	3.2	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Fluoranthene	500	1000	100	mg/kg	ND		ND		ND		ND		0.24		ND		ND	
Naphthalene	500	12	12	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	5.6	1	1	mg/kg	ND		ND		ND		ND		0.11		ND		ND	
Benzo(a)pyrene	1	22	1	mg/kg	ND		ND		ND		ND		0.092	J	ND		ND	
Benzo(b)fluoranthene	5.6	1.7	1	mg/kg	ND		ND		ND		ND		0.12		ND		ND	
Benzo(k)fluoranthene	56	1.7	0.8	mg/kg	ND		ND		ND		ND		0.045	J	ND		ND	
Chrysene	56	1	1	mg/kg	ND		ND		ND		ND		0.16		ND		ND	
Acenaphthylene	500	107	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Anthracene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	500	1000	100	mg/kg	ND		ND		ND		ND		0.063	J	ND		ND	
Fluorene	500	386	30	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Phenanthrene	500	1000	100	mg/kg	ND		ND		ND		ND		0.21		ND		ND	
Dibenz(a,h)anthracene	0.56	1000	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.5	mg/kg	ND		ND		ND		ND		0.066	J	ND		ND	
Pyrene	500	1000	100	mg/kg	ND		ND		ND		ND		0.23		ND		ND	
Dibenzofuran	350	210	7	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Pentachlorophenol	6.7	0.8	0.8	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Phenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
2-Methylphenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
3-Methylphenol/4-Methylphenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Total Metals																		
Arsenic, Total	16	16	13	mg/kg	2.28		0.268	J	ND		ND		0.61		0.648		ND	
Barium, Total	400	820	350	mg/kg	228		106		71.1		68		27.8		40		104	
Beryllium, Total	590	47	7.2	mg/kg	1.16		0.875		0.216		0.178	J	0.23		0.116	J	0.338	
Cadmium, Total	9.3	7.5	2.5	mg/kg	ND		ND		0.55		0.724		0.336	J	ND		ND	
Chromium, Total	~	~	~	mg/kg	727		34.8		13		15.7		14.9		12.2		15.9	
Copper, Total	270	1720	50	mg/kg	62.1		120		12.5		34.6		7.1		16.2		37.5	
Lead, Total	1000	450	63	mg/kg	6.39	J	6.26		5.89		4.22		7.75		2.09		8.04	
Manganese, Total	10000	2000	1600	mg/kg	594		175		102		124		225		129		45.8	
Mercury, Total	2.8	0.73	0.18	mg/kg	ND		ND		ND		ND		0.547		ND		ND	
Nickel, Total	310	130	30	mg/kg	143		28.5		21.2		16.9		8.17		17.7		17.6	
Selenium, Total	1500	4	3.9	mg/kg	0.693	J	ND		ND		ND		ND		ND		0.23	J
Silver, Total	1500	8.3	2	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Zinc, Total	10000	2480	109	mg/kg	110		60.1		14.2		30.2		17.2		12.3		20.5	
Volatile Organics by EPA 5035																		
Methylene chloride	500	0.05	0.05	mg/kg	ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	240	0.27	0.27	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chloroform	350	0.37	0.37	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Carbon tetrachloride	22	0.76	0.76	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Tetrachloroethene	150	1.3	1.3	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chlorobenzene	500	1.1	1.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	30	0.02	0.02	mg/kg	ND		ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	500	0.68</																

**Table 1**  
**Soil Analytical Data Summary**  
60 McLean Avenue, Yonkers, NY

LOCATION		NYCRR Restricted Residential SCOs	NYCRR Protection of Groundwater SCOs	NYCRR Unrestricted Use SCOs	Units	SB-7 (0-2)		SB-7 (7-9)		SB-SB (0-3)		SB-9 (0-4)		SB-10A (0-3)		SB-10B (0-3)		SB-11 (0-4)	
SAMPLING DATE	SAMPLING DATE					5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022				
LAB SAMPLE ID	LAB SAMPLE ID					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
SAMPLE TYPE	SAMPLE TYPE	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>General Chemistry</b>																			
Chromium, Trivalent Solids, Total	1500	~	~	30	mg/kg	11	J	20	J	25	15	20	J	23	26	26			
Cyanide, Total	27	40	27	mg/kg	ND	ND	95.9	95	39.1	91.7	99.6	86.3	98.8	98.8	98.8				
Chromium, Hexavalent	400	19	1	mg/kg	0.219	J	0.221	J	ND	ND	0.211	J	ND	ND	ND				
<b>Organochlorine Pesticides by GC</b>																			
Delta-BHC	500	0.25	0.04	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Lindane	9.2	0.1	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Alpha-BHC	3.4	0.02	0.02	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Beta-BHC	3	0.03	0.03	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Heptachlor	15	0.38	0.042	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aldrin	0.68	0.19	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Endrin	89	0.06	0.014	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Dieldrin	1.4	0.1	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
4,4'-DDE	62	17	0.0033	mg/kg	ND	ND	ND	ND	ND	0.00163	J	ND	ND	ND	ND				
4,4'-DDD	92	14	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
4,4'-DDT	47	136	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	0.00157	J	ND				
Endosulfan I	200	102	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Endosulfan II	200	102	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Endosulfan sulfate	200	1000	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
cis-Chlordane	24	2.9	0.094	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.000934	J	ND	ND				
<b>Perfluorinated Alkyl Acids by Isotope Dilution</b>																			
Perfluorobutanoic Acid (PFBA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluoropentanoic Acid (PFPA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorohexanoic Acid (PFBS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluoroheptanoic Acid (PFHxA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorooctanoic Acid (PFHpA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorononanoic Acid (PFHxS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorodecanoic Acid (PFOA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorooctanesulfonic Acid (PFHsP)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorononanoic Acid (PFNA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorodecenesulfonic Acid (PFOS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorododecanoic Acid (PFDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (8:2FTS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluoroundecanoic Acid (PFUnA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorodecenesulfonic Acid (PFDS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorooctanesulfonamide (FOSA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEFOSAA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorotridecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
Perfluorotetradecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
PFOA/PFOS, Total	~	~	~	mg/kg	-	-	-	-	-	-	-	-	ND	-	-				
<b>Polychlorinated Biphenyls by GC</b>																			
Aroclor 1216	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1221	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1232	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1242	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1248	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1254	1	3.2	0.1	mg/kg	ND	ND	ND	ND	0.328	ND	ND	ND	ND	ND	ND				
Aroclor 1260	1	3.2	0.1	mg/kg	ND	ND	ND	ND	0.349	ND	ND	ND	ND	ND	ND				
Aroclor 1262	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Aroclor 1268	1	3.2	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
PCBs, Total	1	3.2	0.1	mg/kg	ND	ND	ND	ND	0.677	ND	ND	ND	ND	ND	ND				
<b>Semivolatile Organics by GC/MS</b>																			
Acenaphthene	500	98	20	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.051	J	ND	ND				
Hexachlorobenzene	6	3.2	0.33	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Fluoranthene	500	1000	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.84	J	ND	ND				
Naphthalene	500	12	12	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.056	J	ND	ND				
Benzo(a)anthracene	5.6	1	1	mg/kg	ND	ND	ND	ND	0.39	ND	ND	0.39	ND	ND	ND				
Benzo(a)pyrene	1	22	1	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.39	ND	ND	ND				
Benzo(b)fluoranthene	5.6	1.7	1	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.45	ND	ND	ND				
Benzo(k)fluoranthene	56	1.7	0.8	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.13	ND	ND	ND				
Chrysene	56	1	1	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.36	ND	ND	ND				
Acenaphthylene	500	107	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.036	J	ND	ND				
Anthracene	500	1000	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND				
Benzo(ghi)perylene	500	1000	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.19	ND	ND	ND				
Fluorene	500	386	30	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.039	J	ND	ND				
Phenanthrene	500	1000	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	ND				
Dibenz(a,h)anthracene	0.56	1000	0.33	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.046	J	ND	ND				
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.5	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND				
Pyrene	500	1000	100	mg/kg	ND	ND	ND	0.063	J	ND	ND	0.75	ND	ND	ND				
Dibenzofuran	350	210	7	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.035	J	ND	ND				
Pentachlorophenol	6.7	0.8	0.8	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Phenol	500	0.33	0.33	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
2-Methylphenol	500	0.33	0.33	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
3-Methylphenol/4-Methylphenol	500	0.33	0.33	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
<b>Total Metals</b>																			
Arsenic, Total	16	16	13	mg/kg	0.53	0.552	7.77	0.603	ND	0.766	0.917								
Barium, Total	400	820	400	mg/kg	19	43.4	154	68.3	82.8	184	112								
Beryllium, Total	590	200	7.2	mg/kg	0.094	J	0.162	J	0.322	J	0.23	0.163	J	0.178	J	0.397			
Cadmium, Total	9.3	7.5	2.5	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Chromium, Total	~	~	~	mg/kg	11.5	20	24.7	15	20.8	23.1	26.5								
Copper, Total	270	1700	50	mg/kg	10.8	19	25.4	14.6	3.67	12.6	34.7								
Lead, Total	1000	2000	60	mg/kg	2.18	450	69	4.87	8.65	8.21	29.4								
Manganese, Total	1000	2000	1600	mg/kg	112	187	223	113	72.1	59.2	39.7								
Mercury, Total	2.8	0.73	0.18	mg/kg	ND	ND	0.428	0.092	1.27	0.065	J	0.227							
Nickel, Total	310	130	30	mg/kg	8.2	12	14.3	14.3	25.4	31.5	36.5								
Selenium, Total	1500	4	3.9	mg/kg	0.152	J	0.219	J	ND	0.135	J	0.241	J	0.23	J	0.246	J		
Silver, Total	1500	8.3	2	mg/kg	ND	ND	ND	ND	ND	ND	ND								
Zinc, Total	1000	2480	109	mg/kg	11.4	15	217	24.8	9.3	15.4	27.5								
<b>Volatile Organics by EPA 5035</b>																			
Methylene chloride	500	0.05	0.05	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
1,1-Dichloroethane	240	0.27	0.27	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Chloroform	350	0.37	0.37	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.00016	J	ND	ND				
Carbon tetrachloride	22	0.78	0.78	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Tetrachloroethene	150	1.3	1.3	mg/kg	ND	ND	ND	ND	0.00057	ND	ND	0.00078							
Chlorobenzene	500	1.1	1.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
1,2-Dichloroethane	30	0.02	0.02	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND							

U - compound not detected

NY-RESC: New York NYC

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation

Bold - compound not detected, but MDE above regulatory criteria





**Table 1**  
**Soil Analytical Data Summary**  
60 McLean Avenue, Yonkers, NY

LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	NYCRR Restricted Residential SCOs	NYCRR Protection of Groundwater SCOs	NYCRR Unrestricted Use SCOs	Units	SB-12 (0-4)		SB-14 (0-4)		SB-16 (0-4)		SB-17 (2-4)		SB-17 (0-2)		SB-18 (0-2)		SB-18 (7-9)	
					5/2/2022	5/4/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022	5/2/2022			
					L1223093-07	L1223458-04	L1223093-10	L1223093-11	L1223093-12	L1223093-16	L1223093-17	L1223093-17	L1223093-17	L1223093-17	L1223093-17			
					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
General Chemistry																		
Chromium, Trivalent	1500	~	30	mg/kg	22	J	27	J	9.5	J	10	J	9.3		14		9.2	J
Solids, Total	~	~	~	%	84.2		86.9		92		94.7		90		89.7		89	
Cyanide, Total	27	40	27	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chromium, Hexavalent	400	19	1	mg/kg	0.38	J	0.299	J	0.293	J	0.222	J	ND		ND		0.292	J
Organochlorine Pesticides by GC																		
Delta-BHC	500	0.25	0.04	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Lindane	9.2	0.1	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Alpha-BHC	3.4	0.02	0.02	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Beta-BHC	3	0.09	0.036	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Heptachlor	15	0.38	0.042	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aldrin	0.68	0.19	0.005	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endrin	89	0.06	0.014	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Dieldrin	1.4	0.1	0.005	mg/kg	ND		ND		ND		ND		ND		ND		ND	
4,4'-DDE	62	17	0.0033	mg/kg	0.0462		ND		ND		ND		ND		ND		ND	
4,4'-DDD	92	14	0.0033	mg/kg	ND		ND		ND		ND		ND		ND		ND	
4,4'-DDT	47	136	0.0033	mg/kg	0.00589		ND		ND		ND		ND		ND		ND	
Endosulfan I	200	102	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endosulfan II	200	102	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Endosulfan sulfate	200	1000	2.4	mg/kg	ND		ND		ND		ND		ND		ND		ND	
cis-Chlordane	24	2.9	0.094	mg/kg	0.000967	J	ND		ND		ND		ND		ND		ND	
Perfluorinated Alkyl Acids by Isotope Dilution																		
Perfluorobutanoic Acid (PFBA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentanoic Acid (PFPA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexanoic Acid (PFHSA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptanoic Acid (PFHpA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic Acid (PFHxS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorononanoic Acid (PFNA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorodecanoic Acid (PFDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (6:2FTS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotridecanesulfonic Acid (PFTrpS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroundecanoic Acid (PFUnA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanesulfonic Acid (PFDS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroundecanoic Acid (PFUnA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorododecanesulfonic Acid (PFDS)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorotetradecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PFOA/PFOS, Total	~	~	~	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls by GC																		
Aroclor 1016	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1221	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1232	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1242	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1248	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1254	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1260	1	3.2	0.1	mg/kg	ND	0.0114	J	ND		ND		ND		0.0102	J	ND		
Aroclor 1262	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Aroclor 1268	1	3.2	0.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
PCBs, Total	1	3.2	0.1	mg/kg	ND	0.0114	J	ND		ND		ND		0.0102	J	ND		
Semivolatile Organics by GC/MS																		
Acenaphthene	500	98	20	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Hexachlorobenzene	6	3.2	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Fluoranthene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Naphthalene	500	12	12	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	5.6	1	1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	1	22	1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	5.6	1.7	1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(k)fluoranthene	5.6	1.7	0.8	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chrysene	5.6	1	1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Acenaphthylene	500	107	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Anthracene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Benzo(ghi)perylene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Fluorene	500	386	30	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Phenanthrene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Dibenz(a,h)anthracene	0.56	1000	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.5	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Pyrene	500	1000	100	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Dibenzofuran	350	210	7	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Pentachlorophenol	6.7	0.8	0.8	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Phenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
2-Methylphenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
3-Methylphenol/4-Methylphenol	500	0.33	0.33	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Total Metals																		
Arsenic, Total	16	16	13	mg/kg	0.336	J	1		1.22		1.05		1.18		3.96		1.32	
Barium, Total	400	820	350	mg/kg	110		76.9		27.7		24.4		30.5		70.2		20.3	
Beryllium, Total	590	47	7.2	mg/kg	0.481		0.2	J	0.184	J	0.177	J	0.2	J	0.243		0.162	J
Cadmium, Total	9.3	7.5	2.5	mg/kg	ND	0.433	J	ND		ND		ND		ND		ND		
Chromium, Total	~	~	~	mg/kg	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Copper, Total	270	1720	50	mg/kg	29.7		32		9.84		10.3		9.26		14		9.5	
Lead, Total	1000	450	63	mg/kg	7.67		3.38		26.4		3.92		5.41		26.2		4.81	
Manganese, Total	10000	2000	1600	mg/kg	700		154		45.8		71.1		47.9		128		59.4	
Mercury, Total	2.8	0.73	0.18	mg/kg	ND		ND		ND		ND		ND		0.474		ND	
Nickel, Total	310	130	30	mg/kg	35.8		20.1		8.7		6.99		10.4		10.2		6.15	
Selenium, Total	1500	4	3.9	mg/kg	0.413	J	ND		0.18	J	0.144	J	0.2	J	0.792	J	ND	
Silver, Total	1500	8.3	2	mg/kg	0.136	J	ND		ND		ND		ND		0.461		ND	
Zinc, Total	10000	2480	109	mg/kg	27.5		40		18.3		13.7		15.9		97.4		14.3	
Volatile Organics by EPA 5035																		
Methylene chloride	500	0.05	0.05	mg/kg	ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	240	0.27	0.27	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chloroform	350	0.37	0.37	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Carbon tetrachloride	22	0.76	0.76	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Tetrachloroethene	150	1.3	1.3	mg/kg	ND		ND		ND		ND		ND		ND		ND	
Chlorobenzene	500	1.1	1.1	mg/kg	ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	30	0.08	0.08	mg/kg	ND		ND		ND		ND	</						

**Table 1**  
**Soil Analytical Data Summary**  
60 McLean Avenue, Yonkers, NY

SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE		NYCRR Restricted Residential SCOs	NYCRR Protection of Groundwater SCOs	NYCRR Unrestricted Use SCOs	Units	SB-19 (0-2)		SB-19 (7-9)		SB-20 (0-2)		SB-20 (7-9)		SB-DUP-2		SB-DUP-1	
						5/2/2022		5/2/2022		5/4/2022		5/4/2022		5/4/2022		5/2/2022	
						1.2223093-13		1.2223093-14		1.2223458-01		1.2223458-02		1.2223093-13		1.2223458-05	
						SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>General Chemistry</b>																	
Chromium, Trivalent	1500	~	~	30	mg/kg	9.7	J	7.5		9.4	J	7.3	J	32	J	6.7	
Solids, Total	~	~	~	~	%	85.3		95.1		84.5		89.7		88.9		93.4	
Cyanide, Total	27	40	27	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Chromium, Hexavalent	400	19	1	mg/kg	0.188	J	ND		0.509	J	0.424	J	0.427	J	ND		
<b>Organochlorine Pesticides by GC</b>																	
Delta-BHC	500	0.25	0.04	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Lindane	9.2	0.1	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Alpha-BHC	3.4	0.02	0.02	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Beta-BHC	3	0.09	0.036	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Hestchlor	15	0.38	0.042	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aldrin	0.68	0.19	0.005	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Endrin	89	0.06	0.014	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Dieldrin	1.4	0.1	0.005	mg/kg	ND	ND		ND		ND		ND		ND		ND	
4,4'-DDE	62	17	0.0033	mg/kg	ND	ND		ND		ND		ND		ND		ND	
4,4'-DDD	92	14	0.0033	mg/kg	ND	ND		ND		ND		ND		ND		ND	
4,4'-DDT	47	136	0.0033	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Endosulfan I	200	102	2.4	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Endosulfan II	200	102	2.4	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Endosulfan sulfate	200	1000	2.4	mg/kg	ND	ND		ND		ND		ND		ND		ND	
cis-Chlordane	24	2.9	0.094	mg/kg	ND	ND		ND		ND		ND		ND		ND	
<b>Perfluorinated Alkyl Acids by Isotope Dilution</b>																	
Perfluorobutanoic Acid (PFBA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluoropentanoic Acid (PFPeA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorohexanoic Acid (PFHxA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluoroheptanoic Acid (PFHpA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorooctanoic Acid (PFHxS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorooctanoic Acid (PFOA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	0.000045	J	ND		
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorooctanesulfonic Acid (PFHxS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorononanoic Acid (PFNA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorooctanesulfonic Acid (PFOS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorodecanoic Acid (PFDA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
1H,1H,2H,2H-Perfluorodecenesulfonic Acid (8:2FTS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMFOSAA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluoroundecanoic Acid (PFUHA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorodecenesulfonic Acid (PFDS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorooctanesulfonic Acid (PFOS)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
1H,1H,2H,2H-Perfluorooctanesulfonamidoacetic Acid (NEFOSAA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorodecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
Perfluorotetradecanoic Acid (PFTDA)	~	~	~	mg/kg	-	-	ND		-	-	-	-	ND		ND		
PFOS/PFOS, Total	~	~	~	mg/kg	-	-	ND		-	-	-	-	0.000045	J	ND		
<b>Polychlorinated Biphenyls by GC</b>																	
Aroclor 1016	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1221	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1232	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1242	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1248	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1254	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1260	1	3.2	0.1	mg/kg	ND	ND		0.0124	J	0.011	J	0.0172	J	0.0112	J	0.0112	J
Aroclor 1262	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Aroclor 1268	1	3.2	0.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
PCBs, Total	1	3.2	0.1	mg/kg	ND	ND		0.0124	J	0.011	J	0.0172	J	0.0172	J	0.0112	J
<b>Semivolatile Organics by GC/MS</b>																	
Acanthaphene	500	98	20	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Hexachlorobenzene	6	3.2	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Fluoranthene	500	1000	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Naphthalene	500	12	12	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	5.6	1	1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	1	22	1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	5.6	1.7	1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzo(k)fluoranthene	56	1.7	0.8	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Chrysene	56	1	1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Acenaphthylene	500	100	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Anthracene	500	1000	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzo(e)phenylene	500	1000	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Fluorene	500	386	30	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Phenanthrene	500	1000	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Dibenz(a,h)anthracene	0.56	1000	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.5	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Pyrene	500	1000	100	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Dibenzofuran	350	210	7	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Pentachlorophenol	6.7	0.8	0.8	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Phenol	500	0.33	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
2-Methylphenol	500	0.33	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
3-Methylphenol/4-Methylphenol	500	0.33	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
<b>Total Metals</b>																	
Arsenic, Total	16	16	13	mg/kg	1.02	0.705		1.29	1.19	ND		ND		ND		0.898	
Barium, Total	400	820	350	mg/kg	34.8	17		34.7	15.7	ND		219		18.5		ND	
Berilium, Total	590	47	7.4	mg/kg	0.234	0.104	J	0.278	0.087	J	0.588		0.13	J	0.088		
Cadmium, Total	9.3	7.5	2.5	mg/kg	ND	ND		0.18	0.139	J	ND		0.193	J	ND		
Chromium, Total	~	~	~	mg/kg	9.88	7.54		9.88	7.75		32.2		6.74		ND		
Copper, Total	270	1720	50	mg/kg	5.02	7.71		17.5	8.82		16.1		8.51		ND		
Lead, Total	1000	450	63	mg/kg	8.52	2.42		60.9	2.38		6.18		2.09	J	ND		
Manganese, Total	10000	2000	1600	mg/kg	76.7	32.2		38.5	38.5		52.5		52.5		ND		
Mercury, Total	2.8	0.73	0.18	mg/kg	ND	ND		0.05	J	ND		ND		ND		ND	
Nickel, Total	310	130	30	mg/kg	5.9	5.09		6.09	6.79		31.2		7.23		ND		
Selenium, Total	1500	4	3.9	mg/kg	0.288	J	0.184	J	ND		ND		ND		ND		
Silver, Total	1500	8.3	2	mg/kg	ND	ND		ND	ND		ND		ND		ND		
Zinc, Total	10000	2480	109	mg/kg	14.4	11.9		15.2	15		29.4		13.9		ND		
<b>Volatile Organics by EPA 5035</b>																	
Methylene chloride	500	0.05	0.05	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	240	0.27	0.27	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Chloroform	350	0.37	0.37	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Carbon tetrachloride	22	0.76	0.76	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Tetrachloroethene	150	1.3	1.3	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Chlorobenzene	500	1.1	1.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	30	0.02	0.02	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	500	0.68	0.68	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Benzene	44	0.06	0.06	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Toluene	500	0.7	0.7	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Ethylbenzene	390	1	1	mg/kg	0.0002	J		ND		ND		ND		ND		ND	
Vinyl chloride	13	0.02	0.02	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethene	500	0.33	0.33	mg/kg	ND	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethene	500	0.19	0.19	mg/kg	ND	ND		ND		ND		ND		ND		ND	
Trichloroethene	200	0.47	0.47	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,2-Dichlorobenzene	500	1.1	1.1	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,3-Dichlorobenzene	280	2.4	2.4	mg/kg	ND	ND		ND		ND		ND		ND		ND	
1,4-Dichlorobenzene	130	1.8	1.8	mg/kg													

U - compound not detected

NY-RESC: New York NYC

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation

ND - compound not detected, but MDE above regulatory criteria



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																								
Cyanide, Total	200	ug/l	21		2	J	2	J	ND		1	J	-	-	-	-	-	-	-	-	ND		ND	
Nitrogen, Nitrite	1000	ug/l	-	-	-	-	ND		19	J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate	10000	ug/l	-	-	-	-	2070		2450		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide	50	ug/l	-	-	-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	250000	ug/l	-	-	-	-	33000		26000		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium, Hexavalent	50	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Iron, Ferrous	~	ug/l	-	-	-	-	890		2200		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Ferric	~	ug/l	-	-	-	-	650		6400		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4 Dioxane by 8270D-SIM																								
1,4-Dioxane	0.35	ug/l	0.184		-	-	0.064	J	ND		-	-	-	-	-	-	-	-	-	-	ND		ND	
Total Metals																								
Aluminum, Total	~	ug/l	22.6		20		105		2700		66.4		59.2		-	-	-	-	-	-	ND		446	
Antimony, Total	3	ug/l	0.57	J	ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Arsenic, Total	25	ug/l	1.5		ND		ND		0.86		ND		ND		-	-	-	-	-	-	ND		ND	
Barium, Total	1000	ug/l	39.78		37.51		132.5		89.24		56.63		50.96		-	-	-	-	-	-	0.32	J	148.9	
Beryllium, Total	3	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Cadmium, Total	5	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Calcium, Total	~	ug/l	442000		29600		51600		39400		42500		42500		-	-	-	-	-	-	ND		54300	
Chromium, Total	50	ug/l	0.55	J	0.44	J	0.47	J	5.49		1.39		2.14		-	-	-	-	-	-	ND		1.34	
Cobalt, Total	~	ug/l	1.89		ND		2.44		3.79		0.23	J	ND		-	-	-	-	-	-	ND		2.53	
Copper, Total	200	ug/l	1.3		2.02		0.86	J	7.32		0.87	J	0.77	J	-	-	-	-	-	-	ND		1.5	
Iron, Total	300	ug/l	13000		71.2		1540		8560		1110		267		-	-	-	-	-	-	ND		1990	
Lead, Total	25	ug/l	2.02		ND		0.92	J	3.26		ND		ND		-	-	-	-	-	-	ND		1.02	
Magnesium, Total	35000	ug/l	104000		11900		14300		12500		15000		15100		-	-	-	-	-	-	ND		15900	
Manganese, Total	300	ug/l	513.2		1.5		1783		785.2		39.1		3.28		-	-	-	-	-	-	ND		1457	
Mercury, Total	0.7	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Nickel, Total	100	ug/l	1.98	J	2.27		3.26		6.45		0.98	J	0.73	J	-	-	-	-	-	-	ND		4.31	
Potassium, Total	~	ug/l	555000		4610		7760		5300		4530		4630		-	-	-	-	-	-	ND		6790	
Selenium, Total	10	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Silver, Total	50	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Sodium, Total	20000	ug/l	894000		51700		245000		183000		140000		127000		-	-	-	-	-	-	ND		270000	
Thallium, Total	0.5	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	0.29	J	0.3	J
Vanadium, Total	~	ug/l	ND		ND		ND		6.79		ND		ND		-	-	-	-	-	-	ND		ND	
Zinc, Total	2000	ug/l	46.78		4.28	J	34.09		17.64		ND		ND		-	-	-	-	-	-	ND		ND	





Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dissolved Metals																								
Aluminum, Dissolved	~	ug/l	6.12	J	12.3		3.76	J	ND		ND		23		-	-	-	-	-	-	9.08	J	8.6	J
Antimony, Dissolved	3	ug/l	0.74	J	ND		ND		ND		ND		ND		-	-	-	-	-	-	0.52	J	ND	
Arsenic, Dissolved	25	ug/l	0.67		ND		ND		0.3	J	ND		ND		-	-	-	-	-	-	ND		ND	
Barium, Dissolved	1000	ug/l	23.42		38.69		134.5		67.01		55.74		50.18		-	-	-	-	-	-	0.29	J	140.6	
Beryllium, Dissolved	3	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Cadmium, Dissolved	5	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Calcium, Dissolved	~	ug/l	464000		29500		51200		38600		39700		41400		-	-	-	-	-	-	ND		50900	
Chromium, Dissolved	50	ug/l	0.18	J	0.28	J	0.2	J	ND		ND		0.62	J	-	-	-	-	-	-	ND		ND	
Cobalt, Dissolved	~	ug/l	1.74		0.16	J	2.5		1.49		0.2	J	ND		-	-	-	-	-	-	ND		2.22	
Copper, Dissolved	200	ug/l	ND		3.72		ND		ND		ND		0.51	J	-	-	-	-	-	-	ND		ND	
Iron, Dissolved	300	ug/l	82.9		ND		1380		2790		571		111		-	-	-	-	-	-	37.1	J	957	
Lead, Dissolved	25	ug/l	ND		ND		0.47	J	ND		ND		ND		-	-	-	-	-	-	ND		ND	
Magnesium, Dissolved	35000	ug/l	112000		11600		14400		11400		14000		14500		-	-	-	-	-	-	ND		15400	
Manganese, Dissolved	300	ug/l	520.7		1.39		1803		642.8		34.46		2.7		-	-	-	-	-	-	2.37		1369	
Mercury, Dissolved	0.7	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Nickel, Dissolved	100	ug/l	2.14		2.31		3.32		1.52	J	0.68	J	ND		-	-	-	-	-	-	ND		3.51	
Potassium, Dissolved	~	ug/l	555000		4610		7820		4910		4150		4460		-	-	-	-	-	-	ND		6630	
Selenium, Dissolved	10	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Silver, Dissolved	50	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Sodium, Dissolved	20000	ug/l	884000		51600		255000		184000		134000		123000		-	-	-	-	-	-	66.2	J	277000	
Thallium, Dissolved	0.5	ug/l	ND		ND		0.25	J	0.16	J	0.25	J	0.16	J	-	-	-	-	-	-	ND		ND	
Vanadium, Dissolved	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Zinc, Dissolved	2000	ug/l	18.37		5.53	J	ND		ND		ND		4.93	J	-	-	-	-	-	-	ND		ND	
Organochlorine Pesticides by GC																								
Delta-BHC	0.04	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Lindane	0.05	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Alpha-BHC	0.01	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Beta-BHC	0.04	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Heptachlor	0.04	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aldrin	0	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Heptachlor epoxide	0.03	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endrin	0	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endrin aldehyde	5	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endrin ketone	5	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Dieldrin	0.004	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
4,4'-DDE	0.2	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
4,4'-DDD	0.3	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
4,4'-DDT	0.2	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endosulfan I	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endosulfan II	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Endosulfan sulfate	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Methoxychlor	35	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Toxaphene	0.06	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
cis-Chlordane	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
trans-Chlordane	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Chlordane	0.05	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Perfluorinated Alkyl Acids by Isotope Dilution																								
Perfluorobutanoic Acid (PFBA)	~	ug/l	0.0505		-	-	0.00857		0.005		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluoropentanoic Acid (PFPeA)	~	ug/l	0.0601		-	-	0.0316		0.00649		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorobutanesulfonic Acid (PFBS)	~	ug/l	ND		-	-	0.0031		0.00411		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorohexanoic Acid (PFHxA)	~	ug/l	0.0703		-	-	0.0259		0.00522		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluoroheptanoic Acid (PFHpA)	~	ug/l	0.0735		-	-	0.0153		0.00348		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorohexanesulfonic Acid (PFHxS)	~	ug/l	ND		-	-	0.00653		0.00501		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorooctanoic Acid (PFOA)	0.0067	ug/l	0.0788		-	-	0.0448		0.0214		-	-	-	-	-	-	-	-	-	-	ND		-	-
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	~	ug/l	0.112		-	-	0.00122	J	ND		-	-	-	-	-	-	-	-	-	-	0.0198		-	-
Perfluoroheptanesulfonic Acid (PFHpS)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorononanoic Acid (PFNA)	~	ug/l	0.0697		-	-	0.00124	J	0.000969	JF	-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorooctanesulfonic Acid (PFOS)	0.0027	ug/l	0.00499		-	-	0.0082		0.00826		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorodecanoic Acid (PFDA)	~	ug/l	0.00262		-	-	0.000909	J	0.000412	J	-	-	-	-	-	-	-	-	-	-	ND		-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluoroundecanoic Acid (PFUnA)	~	ug/l	0.00404		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorodecanesulfonic Acid (PFDS)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorooctanesulfonamide (FOSA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorododecanoic Acid (PFDoA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorotridecanoic Acid (PFTTrDA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
Perfluorotetradecanoic Acid (PFTA)	~	ug/l	ND		-	-	ND		ND		-	-	-	-	-	-	-	-	-	-	ND		-	-
PFOA/PFOS, Total	~	ug/l	0.0838		-	-	0.053		0.0297		-	-	-	-	-	-	-	-	-	-	ND		-	-
Polychlorinated Biphenyls by GC																								
Aroclor 1016	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1221	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1232	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1242	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1248	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1254	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1260	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1262	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Aroclor 1268	0.09	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
PCBs, Total	~	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS																								
1,2,4-Trichlorobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bis(2-chloroethyl)ether	1	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		2.3	
1,2-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,3-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,4-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
3,3'-Dichlorobenzidine	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4-Dinitrotoluene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,6-Dinitrotoluene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Chlorophenyl phenyl ether	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Bromophenyl phenyl ether	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bis(2-chloroisopropyl)ether	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bis(2-chloroethoxy)methane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Hexachlorocyclopentadiene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Isophorone	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Nitrobenzene	0.4	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
NDPA/DPA	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
n-Nitrosodi-n-propylamine	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bis(2-ethylhexyl)phthalate	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Butyl benzyl phthalate	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Di-n-butylphthalate	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Di-n-octylphthalate	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Diethyl phthalate	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Dimethyl phthalate	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Biphenyl	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Chloroaniline	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Nitroaniline	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
3-Nitroaniline	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Nitroaniline	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Dibenzofuran	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4,5-Tetrachlorobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Acetophenone	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4,6-Trichlorophenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
p-Chloro-m-cresol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Chlorophenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4-Dichlorophenol	1	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4-Dimethylphenol	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Nitrophenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Nitrophenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4-Dinitrophenol	10	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4,6-Dinitro-o-cresol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Phenol	1	ug/l	1.1	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Methylphenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
3-Methylphenol/4-Methylphenol	~	ug/l	0.78	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,4,5-Trichlorophenol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Benzoic Acid	~	ug/l	18	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Benzyl Alcohol	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Carbazole	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS-SIM																								
Acenaphthene	20	ug/l	ND		ND		0.02	J	0.03	J	ND		ND		ND		ND		ND		ND		0.02	J
2-Chloronaphthalene	10	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Fluoranthene	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Hexachlorobutadiene	0.5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Naphthalene	10	ug/l	ND		0.07	J	47		49		1.3		ND		0.1	J	ND		ND		ND		33	
Benzo(a)anthracene	0.002	ug/l	ND		ND		ND		0.05	J	ND		ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	0.000	ug/l	ND		ND		ND		0.04	J	ND		ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	0.002	ug/l	ND		ND		ND		0.08	J	ND		ND		ND		ND		ND		0.01	J	ND	
Benzo(k)fluoranthene	0.002	ug/l	ND		ND		ND		0.03	J	ND		ND		ND		ND		ND		0.01	J	ND	
Chrysene	0.002	ug/l	ND		ND		ND		0.04	J	ND		ND		ND		ND		ND		ND		ND	
Acenaphthylene	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Anthracene	50	ug/l	0.02	J	ND		ND		0.02	J	ND		ND		ND		ND		ND		ND		ND	
Benzo(ghi)perylene	~	ug/l	ND		ND		ND		0.04	J	ND		ND		0.02	J	ND		ND		ND		ND	
Fluorene	50	ug/l	ND		ND		0.03	J	0.04	J	ND		ND		ND		ND		ND		ND		0.02	J
Phenanthrene	50	ug/l	0.04	J	ND		0.03	J	0.08	J	ND		ND		ND		ND		ND		ND		0.04	J
Dibenzo(a,h)anthracene	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	0.002	ug/l	ND		ND		ND		0.04	J	ND		ND		0.02	J	ND		ND		ND		ND	
Pyrene	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Methylnaphthalene	~	ug/l	0.03	J	0.05	J	11		15		0.33		ND		0.02	J	ND		ND		ND		9	
Pentachlorophenol	1	ug/l	ND		ND		ND		ND		ND		ND		-	-	-	-	-	-	ND		ND	
Hexachlorobenzene	0.04	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Hexachloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by GC/MS																								
Methylene chloride	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloroform	7	ug/l	ND		5.6		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Carbon tetrachloride	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	1	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Dibromochloromethane	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	1	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Tetrachloroethene	5	ug/l	0.42	J	ND		ND		ND		0.49	J	0.35	J	0.74		0.41	J	0.75		ND		ND	
Chlorobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	0.6	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromodichloromethane	50	ug/l	ND		0.48	J	ND		ND		ND		ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	0.4	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	0.4	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,3-Dichloropropene, Total	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloropropene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromoform	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Benzene	1	ug/l	ND		ND		7.4		4.6		0.43	J	ND		ND		ND		ND		ND		4.1	
Toluene	5	ug/l	ND		ND		48		17		0.97	J	ND		ND		ND		ND		ND		27	
Ethylbenzene	5	ug/l	13		ND		330		230		5.3		ND		ND		ND		ND		ND		250	
Chloromethane	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromomethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Vinyl chloride	2	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Trichloroethene	5	ug/l	0.19	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	



Table 2  
Groundwater Sample Analytical Data Summary  
60 McLean Avenue, Yonkers, NY

LOCATION	TOGS 1.1.1. AWQS	Units	MW-4A		MW-5A		MW-7A		MW-9A		WP-11		WP-12		WP-13		WP-14		WP-15		FIELD BLANK		MW-DUP-1	
SAMPLING DATE			5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/5/2022		5/5/2022		5/5/2022		5/4/2022		5/5/2022	
LAB SAMPLE ID			L2223459-03		L2223459-04		L2223459-01		L2223459-02		L2223459-05		L2223459-06		L2123311-03		L2123311-04		L2123311-05		L2223459-07		L2223459-09	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,3-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,4-Dichlorobenzene	3	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Methyl tert butyl ether	10	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
p/m-Xylene	5	ug/l	51		ND		1100		230		17		0.74	J	ND		ND		ND		ND		730	
o-Xylene	5	ug/l	12		ND		300		14		7.3		ND		ND		ND		ND		ND		210	
Xylenes, Total	~	ug/l	63		ND		1400		240		24		0.74	J	ND		ND		ND		ND		940	
cis-1,2-Dichloroethene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloroethene, Total	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Dibromomethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	0.04	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Acrylonitrile	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Styrene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Dichlorodifluoromethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Acetone	50	ug/l	3.3	J	ND		ND		ND		ND		ND		ND		ND		ND		4	J	ND	
Carbon disulfide	60	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Butanone	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Vinyl acetate	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2-Hexanone	50	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromochloromethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
2,2-Dichloropropane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dibromoethane	0.0006	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,3-Dichloropropane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
n-Butylbenzene	5	ug/l	ND		ND		6.3	J	5.6	J	0.83	J	ND		ND		ND		ND		ND		12	
sec-Butylbenzene	5	ug/l	ND		ND		7.9	J	5.7	J	0.91	J	ND		ND		ND		ND		ND		11	J
tert-Butylbenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
o-Chlorotoluene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
p-Chlorotoluene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	0.04	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Hexachlorobutadiene	0.5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Isopropylbenzene	5	ug/l	ND		ND		49		32		2.3	J	ND		ND		ND		ND		ND		55	
p-Isopropyltoluene	5	ug/l	ND		ND		11		10		1.5	J	ND		ND		ND		ND		ND		21	
Naphthalene	10	ug/l	ND		ND		73		83		3		ND		ND		ND		ND		ND		65	
n-Propylbenzene	5	ug/l	ND		ND		57		38		2.6		ND		ND		ND		ND		ND		70	
1,2,3-Trichlorobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-Trichlorobenzene	5	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1,3,5-Trimethylbenzene	5	ug/l	ND		ND		110		2.6	J	6.8		0.89	J	ND		ND		ND		ND		130	
1,2,4-Trimethylbenzene	5	ug/l	ND		ND		340		220		21		2	J	ND		ND		ND		ND		380	
1,4-Dioxane	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
p-Diethylbenzene	~	ug/l	ND		ND		61		7.2		7.2		0.84	J	ND		ND		1	J	ND		90	
p-Ethyltoluene	~	ug/l	ND		ND		340		72		18		2.1		ND		ND		ND		ND		380	
1,2,4,5-Tetramethylbenzene	5	ug/l	ND		ND		12		9.3		1.4	J	ND		ND		ND		ND		ND		16	
Ethyl ether	~	ug/l	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
trans-1,4-Dichloro-2-butene	5	ug/l	ND		2.5	U	ND		ND		ND		ND		ND		ND		ND		ND		ND	
TOTAL BTEX							1,785.40		491.60														1,221.10	
TOTAL VOCs							4,252.60		1,221.00														3,391.10	

\* Comparison is not performed on parameters with non-numeric criteria.  
ug/L - micrograms per liter  
U - compound not detected  
J - Lab estimated value  
NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.  
Highlighted - exceeds the AWQS



TABLE 2.1  
2021 Goundwater Analysis  
Table  
60 McLean Avenue, Yonkers, NY

LOCATION				WP-11		WP-12		WP-13		WP-14		WP-15	
SAMPLING DATE				5/5/2021		5/5/2021		5/5/2021		5/5/2021		5/5/2021	
LAB SAMPLE ID				L2123311-01		L2123311-02		L2123311-03		L2123311-04		L2123311-05	
SAMPLE TYPE				WATER		WATER		WATER		WATER		WATER	
SAMPLE DEPTH (ft.)													
	CasNum	NY-AWQS	Units	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
<b>Semivolatile Organics by GC/MS</b>													
1,2,4-Trichlorobenzene	120-82-1		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Bis(2-chloroethyl)ether	111-44-4		1 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
1,2-Dichlorobenzene	95-59-1		3 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
1,3-Dichlorobenzene	541-73-1		3 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
1,4-Dichlorobenzene	106-46-7		3 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
3,3'-Dichlorobenzidine	91-94-1		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
2,4-Dinitrotoluene	121-14-2		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
2,6-Dinitrotoluene	606-20-2		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
4-Chlorophenyl phenyl ether	7005-72-3		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
4-Bromophenyl phenyl ether	101-55-3		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
Bis(2-chloroisopropyl)ether	108-60-1		5 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
Bis(2-chloroethoxy)methane	111-91-1		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Hexachlorocyclopentadiene	77-47-4		5 ug/l	ND	20	ND	20	ND	20	ND	20	ND	20
Isophorone	78-59-1		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Nitrobenzene	98-95-3		0.4 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
NDPA/DPA	86-30-6		50 ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
n-Nitrosodi-n-propylamine	621-64-7		ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Bis(2-ethylhexyl)phthalate	117-81-7		5 ug/l	ND	3	ND	3	ND	3	ND	3	ND	3
Butyl benzyl phthalate	85-68-7		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Di-n-butylphthalate	84-74-2		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Di-n-octylphthalate	117-84-0		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Diethyl phthalate	84-66-2		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Dimethyl phthalate	131-11-3		50 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Biphenyl	92-52-4		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
4-Chloroaniline	106-47-8		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
2-Nitroaniline	88-74-4		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
3-Nitroaniline	99-09-2		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
4-Nitroaniline	100-01-6		5 ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Dibenzofuran	132-64-9		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
1,2,4,5-Tetrachlorobenzene	95-94-3		5 ug/l	ND	10	ND	10	ND	10	ND	10	ND	10
Acetophenone	98-86-2		ug/l	ND	5	ND	5	ND	5	ND	5	ND	5
Benzyl Alcohol	100-51-6		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
Carbazole	86-74-8		ug/l	ND	2	ND	2	ND	2	ND	2	ND	2
<b>Semivolatile Organics by GC/MS-SIM</b>													
Acenaphthene	83-32-9		20 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
2-Chloronaphthalene	91-58-7		10 ug/l	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2
Fluoranthene	206-44-0		50 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Hexachlorobutadiene	87-68-3		0.5 ug/l	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Naphthalene	91-20-3		10 ug/l	12	0.1	ND	0.1	0.1J	0.1	ND	0.1	ND	0.1
Benzo(a)anthracene	56-55-3		0.002 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Benzo(a)pyrene	50-32-8		0 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Benzo(b)fluoranthene	205-99-2		0.002 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Benzo(k)fluoranthene	207-08-9		0.002 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Chrysene	218-01-9		0.002 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Acenaphthylene	208-96-8		ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Anthracene	120-12-7		50 ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Benzo(ghi)perylene	191-24-2		ug/l	ND	0.1	ND	0.1	0.02J	0.1	ND	0.1	ND	0.1
Fluorene	86-73-7		50 ug/l	0.02J	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Phenanthrene	85-01-8		50 ug/l	0.04J	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Dibenzo(a,h)anthracene	53-70-3		ug/l	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.1
Indeno(1,2,3-cd)pyrene	193-39-5		0.002 ug/l	ND	0.1	ND	0.1	0.02J	0.1	ND	0.1	ND	0.1
Pyrene	129-00-0		50 ug/l	ND	0.1	0.02J	0.1	ND	0.1	ND	0.1	ND	0.1
2-Methylnaphthalene	91-57-6		5 ug/l	5	0.1	ND	0.1	0.02J	0.1	ND	0.1	ND	0.1
Hexachlorobenzene	118-74-1		0.04 ug/l	ND	0.8	ND	0.8	ND	0.8	ND	0.8	ND	0.8
Hexachloroethane	67-72-1		5 ug/l	ND	0.8	ND	0.8	ND	0.8	ND	0.8	ND	0.8

TABLE 2.1  
2021 Groundwater Analysis  
Table  
60 McLean Avenue, Yonkers, NY

LOCATION			WP-11		WP-12		WP-13		WP-14		WP-15	
SAMPLING DATE			5/5/2021		5/5/2021		5/5/2021		5/5/2021		5/5/2021	
LAB SAMPLE ID			L2123311-01		L2123311-02		L2123311-03		L2123311-04		L2123311-05	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER	
SAMPLE DEPTH (ft.)												
	CasNum	NY-AWQS	Units	Results	RI	Results	RI	Results	RI	Results	RI	
Volatile Organics by GC/MS												
Methylene chloride	75-09-2	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,1-Dichloroethane	75-34-3	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
Chloroform	67-66-3	7 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Carbon tetrachloride	56-23-5	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,2-Dichloropropane	78-87-5	1 ug/l		ND	1	ND	1	ND	1	ND	1	
Dibromochloromethane	124-48-1	50 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,1,2-Trichloroethane	79-00-5	1 ug/l		ND	1.5	ND	1.5	ND	1.5	ND	1.5	
Tetrachloroethene	127-18-4	5 ug/l		0.5	0.5	0.38J	0.5	0.74	0.5	0.41J	0.5	
Chlorobenzene	108-90-7	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Trichlorofluoromethane	75-69-4	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2-Dichloroethane	107-06-2	0.6 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,1,1-Trichloroethane	71-55-6	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Bromodichloromethane	75-27-4	50 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
trans-1,3-Dichloropropene	10061-02-6	0.4 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
cis-1,3-Dichloropropene	10061-01-5	0.4 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,3-Dichloropropene, Total	542-75-6	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,1-Dichloropropene	563-58-6	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Bromoform	75-25-2	50 ug/l		ND	2	ND	2	ND	2	ND	2	
1,1,2,2-Tetrachloroethane	79-34-5	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
Benzene	71-43-2	1 ug/l		4	0.5	ND	0.5	ND	0.5	ND	0.5	
Toluene	108-88-3	5 ug/l		23	2.5	ND	2.5	ND	2.5	ND	2.5	
Ethylbenzene	100-41-4	5 ug/l		54	2.5	ND	2.5	ND	2.5	ND	2.5	
Chloromethane	74-87-3	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Bromomethane	74-83-9	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Vinyl chloride	75-01-4	2 ug/l		ND	1	ND	1	ND	1	ND	1	
Chloroethane	75-00-3	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,1-Dichloroethene	75-35-4	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
trans-1,2-Dichloroethene	156-60-5	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Trichloroethene	79-01-6	5 ug/l		ND	0.5	ND	0.5	ND	0.5	ND	0.5	
1,2-Dichlorobenzene	95-50-1	3 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,3-Dichlorobenzene	541-73-1	3 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,4-Dichlorobenzene	106-46-7	3 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Methyl tert butyl ether	1634-04-4	10 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
p/m-Xylene	179601-23-1	5 ug/l		130	2.5	1.2J	2.5	1.4J	2.5	ND	2.5	
o-Xylene	95-47-6	5 ug/l		66	2.5	ND	2.5	ND	2.5	ND	2.5	
Xylenes, Total	1330-20-7	5 ug/l		200	2.5	1.2J	2.5	1.4J	2.5	ND	2.5	
cis-1,2-Dichloroethene	156-59-2	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2-Dichloroethene, Total	540-59-0	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dibromomethane	74-95-3	5 ug/l		ND	5	ND	5	ND	5	ND	5	
1,2,3-Trichloropropane	96-18-4	0.04 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Acrylonitrile	107-13-1	5 ug/l		ND	5	ND	5	ND	5	ND	5	
Styrene	100-42-5	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Dichlorodifluoromethane	75-71-8	5 ug/l		ND	5	ND	5	ND	5	ND	5	
Acetone	67-64-1	50 ug/l		3.8J	5	ND	5	ND	5	ND	5	
Carbon disulfide	75-15-0	60 ug/l		ND	5	ND	5	ND	5	ND	5	
2-Butanone	78-93-3	50 ug/l		ND	5	ND	5	ND	5	ND	5	
Vinyl acetate	108-05-4	5 ug/l		ND	5	ND	5	ND	5	ND	5	
4-Methyl-2-pentanone	108-10-1	5 ug/l		ND	5	ND	5	ND	5	ND	5	
2-Hexanone	591-78-6	50 ug/l		ND	5	ND	5	ND	5	ND	5	
Bromochloromethane	74-97-5	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
2,2-Dichloropropane	594-20-7	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2-Dibromoethane	106-93-4	0.0006 ug/l		ND	2	ND	2	ND	2	ND	2	
1,3-Dichloropropane	142-28-9	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,1,1,2-Tetrachloroethane	630-20-6	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Bromobenzene	108-86-1	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
n-Butylbenzene	104-51-8	5 ug/l		6.8	2.5	ND	2.5	ND	2.5	ND	2.5	
sec-Butylbenzene	135-98-8	5 ug/l		8.5	2.5	ND	2.5	ND	2.5	ND	2.5	
tert-Butylbenzene	98-06-6	5 ug/l		0.86J	2.5	ND	2.5	ND	2.5	ND	2.5	
o-Chlorotoluene	95-49-8	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
p-Chlorotoluene	106-43-4	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2-Dibromo-3-chloropropane	96-12-8	0.04 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Hexachlorobutadiene	87-68-3	0.5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
Isopropylbenzene	98-82-8	5 ug/l		16	2.5	ND	2.5	ND	2.5	ND	2.5	
p-Isopropyltoluene	99-87-6	5 ug/l		11	2.5	ND	2.5	ND	2.5	ND	2.5	
Naphthalene	91-20-3	10 ug/l		26	2.5	ND	2.5	ND	2.5	ND	2.5	
n-Propylbenzene	103-65-1	5 ug/l		19	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2,3-Trichlorobenzene	87-61-6	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,2,4-Trichlorobenzene	120-82-1	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	5 ug/l		39	2.5	1.2J	2.5	ND	2.5	ND	2.5	
1,2,4-Trimethylbenzene	95-63-6	5 ug/l		120	2.5	3.4	2.5	ND	2.5	ND	2.5	
1,4-Dioxane	123-91-1	5 ug/l		ND	250	ND	250	ND	250	ND	250	
p-Diethylbenzene	105-05-5	5 ug/l		54	2	1.3J	2	ND	2	2	1J	
p-Ethyltoluene	622-96-8	5 ug/l		97	2	3.5	2	ND	2	ND	2	
1,2,4,5-Tetramethylbenzene	95-93-2	5 ug/l		10	2	ND	2	ND	2	ND	2	
Ethyl ether	60-29-7	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	
trans-1,4-Dichloro-2-butene	110-57-6	5 ug/l		ND	2.5	ND	2.5	ND	2.5	ND	2.5	

\* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.  
Exceedences



**Table 3**  
**Soil Vapor and Indoor/Outdoor Air Sample Analytical Data Summary**  
60 McLean Avenue, Yonkers, NY

LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	NY-IAC- A	NY-IAC- B	NY-IAC- C	NY-SSC- A	NY-SSC- B	NY-SSC- C	SV-2A		SV-3A		SV-4A		SV-5A		SV-6A		SV-7A		SV-8A		SV-9A		SV-10A		IA-1A		IA-2A		IA-3A		IA-4A		OA-1A		OA-2A		SV-DUP			
							5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022		5/4/2022	
							1.2224094-01		1.2224094-02		1.2224094-15		1.2224094-03		1.2224094-05		1.2224094-06		1.2224094-07		1.2224094-10		1.2224094-11		1.2224094-14		1.2224094-04		1.2224094-13		1.2224094-12		1.2224094-08		1.2224094-17		1.2224094-09			
							SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR	
Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual			
Volatile Organics in Air																																								
Dichlorodifluoromethane	~	~	~	~	~	~	3.04		2.43		ND		2.49		2.8		2.5		2.79		2.49		2.61		3.01		2.85		2.75		2.97		2.76		2.87		2.34			
Chloromethane	~	~	~	~	~	~	ND		ND		ND		0.661		0.774		0.502		ND		0.434		ND		1.64		1.64		1.52		1.57		1.39		1.51		ND			
Freon-114	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		1.4		U		ND		ND			
Vinyl chloride	~	~	0.2	~	~	6	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,3-Butadiene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		0.743		ND		ND		ND		ND		ND		ND		ND			
Bromomethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Chloroethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Ethanol	~	~	~	~	~	~	22		159		ND		51.3		213		62.4		25.2		53.1		39		53.3		67.5		19.8		11		16.1		13.8		90.8			
Vinyl bromide	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Acetone	~	~	~	~	~	~	52		76.7		16.8		33.3		318		150		117		87.7		75.3		23.5		12		257		9.17		123		ND		132			
Trichlorofluoromethane	~	~	~	~	~	~	1.38		1.19		ND		ND		1.3		1.46		1.18		ND		1.16		1.33		1.28		1.26		1.24		1.21		1.25		ND			
Isopropanol	~	~	~	~	~	~	3.37		5.16		ND		1.72		27.8		7.03		3.79		63.4		4.45		8.33		1.95		9.76		1.67		7.79		1.57		10.6			
1,1-Dichloroethene	0.2	~	~	~	6	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Tertialr butyl Alcohol	~	~	~	~	~	~	ND		2.75		ND		ND		11.8		7.09		2.62		4.4		2.09		ND		ND		ND		ND		ND		ND		4.27			
Methylene chloride	~	3	~	~	~	100	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5.64			
3-Chloropropene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Carbon disulfide	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		2.38		ND		ND		1.17		ND		ND		ND		ND		ND		ND			
Freon-113	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
trans-1,2-Dichloroethene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1-Dichloroethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Methyl tert butyl ether	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
2-Butanone	~	~	~	~	~	~	4.63		6.34		ND		4.22		16.3		11.7		7.11		6.55		12.7		ND		2.29		2.49		3.89		1.65		ND		6.4			
cis-1,2-Dichloroethene	0.2	~	~	~	6	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		-		-		-		-		ND			
Ethyl Acetate	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		2.34		ND		ND		ND			
Chloroform	~	~	~	~	~	~	1.03		ND		ND		6.06		ND		38.6		1.05		ND		18.1		ND		ND		ND		ND		ND		ND		ND			
Tetrahydrofuran	~	~	~	~	~	~	1.7		ND		ND		ND		ND		ND		2.6		ND		ND		ND		ND		ND		2.02		ND		ND		ND			
1,2-Dichloroethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
n-Hexane	~	~	~	~	~	~	ND		ND		4.72		1.1		1.01		1.07		0.754		4.76		165		11.5		24.1		90.2		16.9		47.2		6.13		2.28			
1,1,1-Trichloroethane	~	3	~	~	~	100	ND		ND		ND		ND		2.65		ND		2.4		ND		ND		-		-		-		-		-		-		ND			
Benzene	~	~	~	~	~	~	0.696		ND		ND		0.709		0.872		1.75		36.1		1.51		36.1		3.39		6.71		2.42		2.55		2.36		0.901		ND			
Carbon tetrachloride	0.2	~	~	~	6	~	ND		ND		ND		2.23		ND		1.32		ND		ND		ND		-		-		-		-		-		-		ND			
Cyclohexane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		78.8		1.92		5.27		6.71		7.13		4.06		0.747		ND			
1,2-Dichloropropane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Bromodichloromethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,4-Dioxane	~	~	~	~	~	~	ND		ND		ND		ND		0.818		1.66		ND		0.948		ND		ND		ND		ND		ND		ND		ND		ND			
Trichloroethene	0.2	~	~	~	6	~	ND		ND		ND		3.14		1.11		ND		ND		ND		ND		-		-		-		-		-		-		ND			
2,2,4-Trimethylpentane	~	~	~	~	~	~	ND		ND		ND		ND		1.41		1.01		ND		ND		ND		2.56		20		3.15		2.78		2.7		1.08		ND			
Heptane	~	~	~	~	~	~	ND		ND		1320		ND		1.09		0.959		0.906		2.95		58.6		2.5		8.03		2.23		24		2.75		0.844		1.97			
cis-1,3-Dichloropropene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
4-Methyl-2-pentanone	~	~	~	~	~	~	ND		ND		44.3		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
trans-1,3-Dichloropropene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1,2-Trichloroethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Toluene	~	~	~	~	~	~	4.33		3.64		ND		3.71		6.14		5.5		6.48		8.93		19.5		7.61		35.4		6.33		4.97		5.05		2.4		9.12			
2-Hexanone	~	~	~	~	~	~	ND		ND		1.76		ND		1.06		ND		0.832		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Dibromochloromethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dibromoethane	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Tetrachloroethene	~	3	~	~	~	100	44.1		32.9		28		368		96.3		79.3		296		21.2		41.2		-		-		-		-		-		-		15.9			
Chlorobenzene	~	~	~	~	~	~	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Ethylbenzene	~	~	~	~	~	~	ND		ND		ND		2.36		4.82		ND		0.947		1.01		ND		1.96		8.21		2.05		3.17		1.62		ND		ND			
p/m-Xylene	~	~	~	~	~	~	2.47		1.84		ND		7.08		13.5		2.57		3.11		3.12		2.85		5.82		28.7		6.73		5.47		5.26</							

\* Comparison is not performed on parameters with non-numeric criteria

ug/m3 - micrograms per cubic meter

U - compound not detected

J - lab estimated value

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017

NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017

NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017

NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017

NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2010.

NY-SSC-C: New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017



**Table 4**  
**Groundwater Gauging Data**  
60 McLean Avenue, Yonkers, NY

Well Name	TOC Elevation	Depth to Water (ft)	Groundwater elevation
<b>MW-4A</b>	79.41	1.44	77.97
<b>MW-5A</b>	79.21	1.29	77.92
<b>MW-7A</b>	81.74	N/A	N/A
<b>MW-9A</b>	79.52	10.57	68.95
<b>WP-11</b>	79.33	10.3	69.03
<b>WP-12</b>	78.26	9.45	68.81
<b>WP-13</b>	78.37	9.51	68.86
<b>WP-14</b>	78.11	9.21	68.9
<b>WP-15</b>	N/A	10.51	N/A

MW - IEEG 2022 Monitoring Well  
WP - Well point installed by others  
TOC - Top of casing  
ft - feet  
N/A - not applicable

**Table 5**  
**Monitoring Well Location Coordinates**  
60 McLean Avenue, Yonkers, NY

Well Name	Latitude	Longitude
MW-4A	40°55'8.57"N	73°53'38.92"W
MW-5A	40°55'8.25"N	73°53'38.35"W
MW-7A	40°55'7.76"N	73°53'37.36"W
MW-9A	40°55'7.26"N	73°53'37.05"W
WP-11	40°55'7.41"N	73°53'37.37"W
WP-12	40°55'7.19"N	73°53'37.52"W
WP-13	40°55'7.27"N	73°53'37.69"W
WP-14	40°55'7.11"N	73°53'37.31"W
WP-15	40°55'7.47"N	73°53'37.60"W

# APPENDICES

60 McLean Avenue, Yonkers, NY

Remedial Action Work Plan  
NYSDEC BCP #C360211



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599

# Appendix A

60 McLean Avenue, Yonkers, NY

Site Redevelopment Plans



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599



# 60 MCLEAN AVE YONKERS, NY 10705

## SAFE N LOCK STORAGE



OWNER: SNL YONKERS LLC

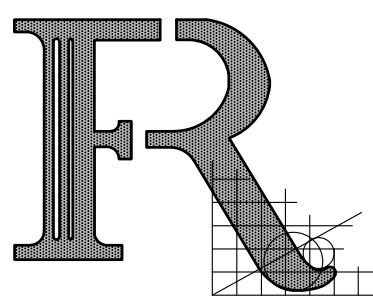
SITE ADDRESS: 60 MCLEAN AVENUE,  
YONKERS, NEW YORK 10705

DESCRIPTION: RENOVATION OF  
EXISTING BUILDING AND NEW 3RD  
STORY ADDITION

## o FRANK G. RELF ARCHITECT, P.C. o

35 PINELAWN ROAD, SUITE 207W ● MELVILLE, NY 11747 ● Phone (631) 271-4432 ● Fax (631) 271-4532

### ELEVATION



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tel 631.271.4432  
fax 631.271.4532  
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#### CONSULTANTS:

**Terry W. Wall, Jr., P.E., S.E.**  
**Consulting Structural Engineering**  
1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

#### MEP CONSULTANT:

**GAP ENGINEERING, P.C.**  
3 COLBY COURT  
DIX HILLS, NEW YORK 11746  
(631) 499-6599

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FRANK G. RELF ARCHITECT, P.C.

#### REVISIONS :

#	DATE	COMMENT
1	2/18/21	REVISED PER DOB COMMENTS
2		
3		
4		
5		
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#### ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

#### CLIENT:

**SNL YONKERS LLC**  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

#### PROJECT:

**YONKERS SELF STORAGE**  
60 MCLEAN AVENUE  
YONKERS, NY 10705

#### TITLE DRAWING:

TITLE SHEET

#### SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

T-001.00

ALT

OF XX

#### DOB JOB NUMBER:

### PROJECT DESCRIPTION

#### DESCRIPTION OF WORK

THE RENOVATION AND CONVERSION OF AN EXISTING TWO STORY WAREHOUSE INTO A THREE STORY FULLY CLIMATE CONTROLLED SELF STORAGE FACILITY. THE BUILDING WILL HAVE NEW FIRE ALARM AND FIRE SPRINKLER SYSTEMS THROUGHOUT. TWO NEW ELEVATORS ALONG WITH 3 NEW EGRESS STAIRS WILL BE CONSTRUCTED. THE EXTERIOR OF THE BUILDING WILL BE RE-PAINTED AND NEW FINISHES TO MATCH EXISTING APPLIED AT THE THIRD FLOOR.

#### APPLICABLE CODES

2015 INTERNATIONAL BUILDING CODE WITH 2017 NYS SUPPLEMENT  
2015 INTERNATIONAL PLUMBING CODE  
2015 INTERNATIONAL MECHANICAL CODE  
2015 INTERNATIONAL FUEL GAS CODE  
2012 INTERNATIONAL ENERGY CONSERVATION CODE  
2014 NATIONAL ELECTRICAL CODE  
ANSI A117.1-2003

#### CONSTRUCTION TYPE:

IB

#### CLASSIFICATION:

S-1

#### FIRE SUPPRESSION SYSTEM:

YES

#### FIRE RATINGS:

BUILDING ELEMENT	
STRUCTURAL FRAME	
INCLUDING COLUMNS, GIRDERS, TRUSSES	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS AND PARTITIONS	
INTERIOR	0
FLOOR CONSTRUCTION	
INCLUDING SUPPORTING BEAMS AND JOISTS	0
ROOF CONSTRUCTION	
BEAMS AND JOISTS	0

### DECLARATION

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE XXXX CODES

### GENERAL INFORMATION / RESPONSIBILITIES

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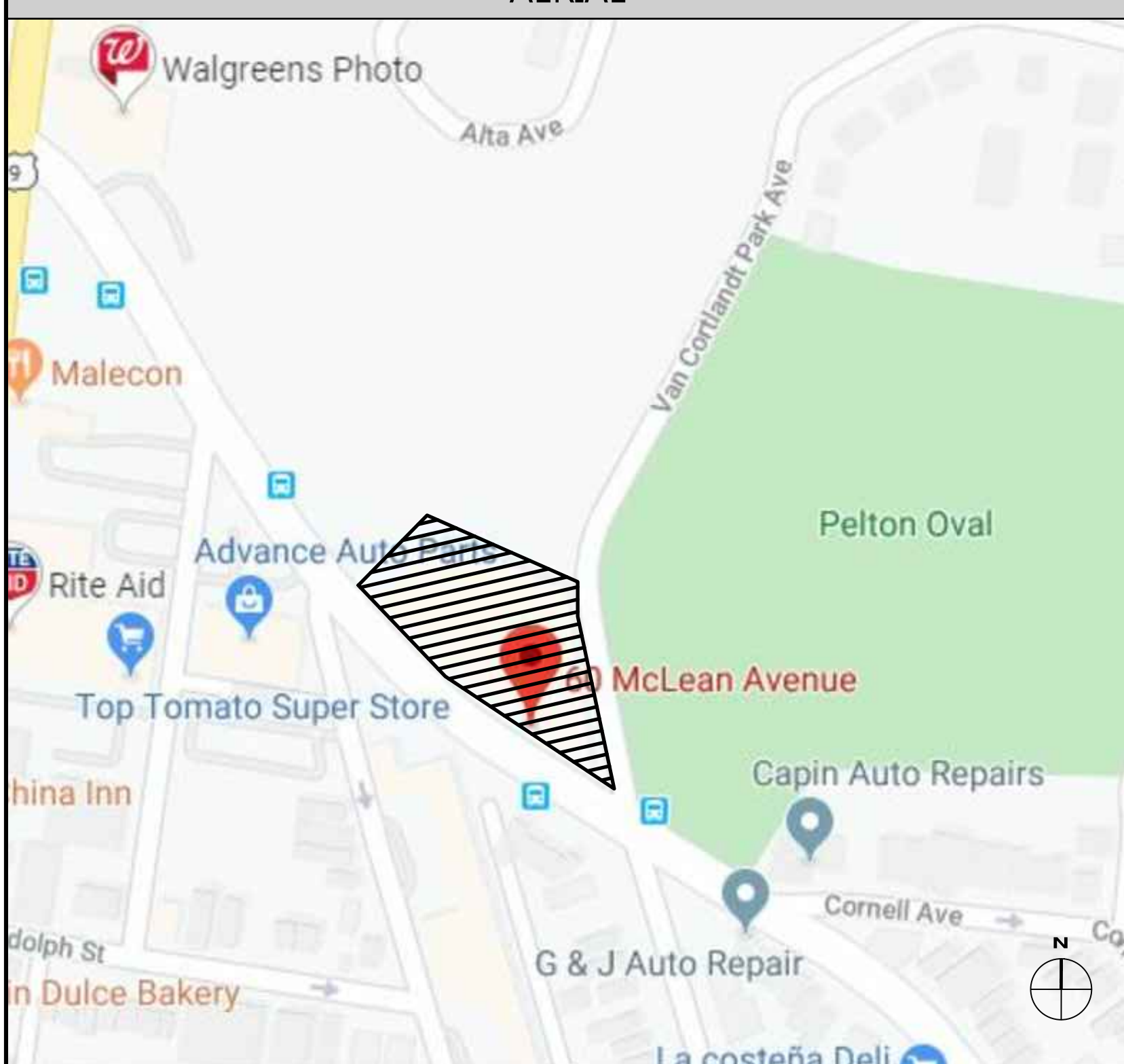
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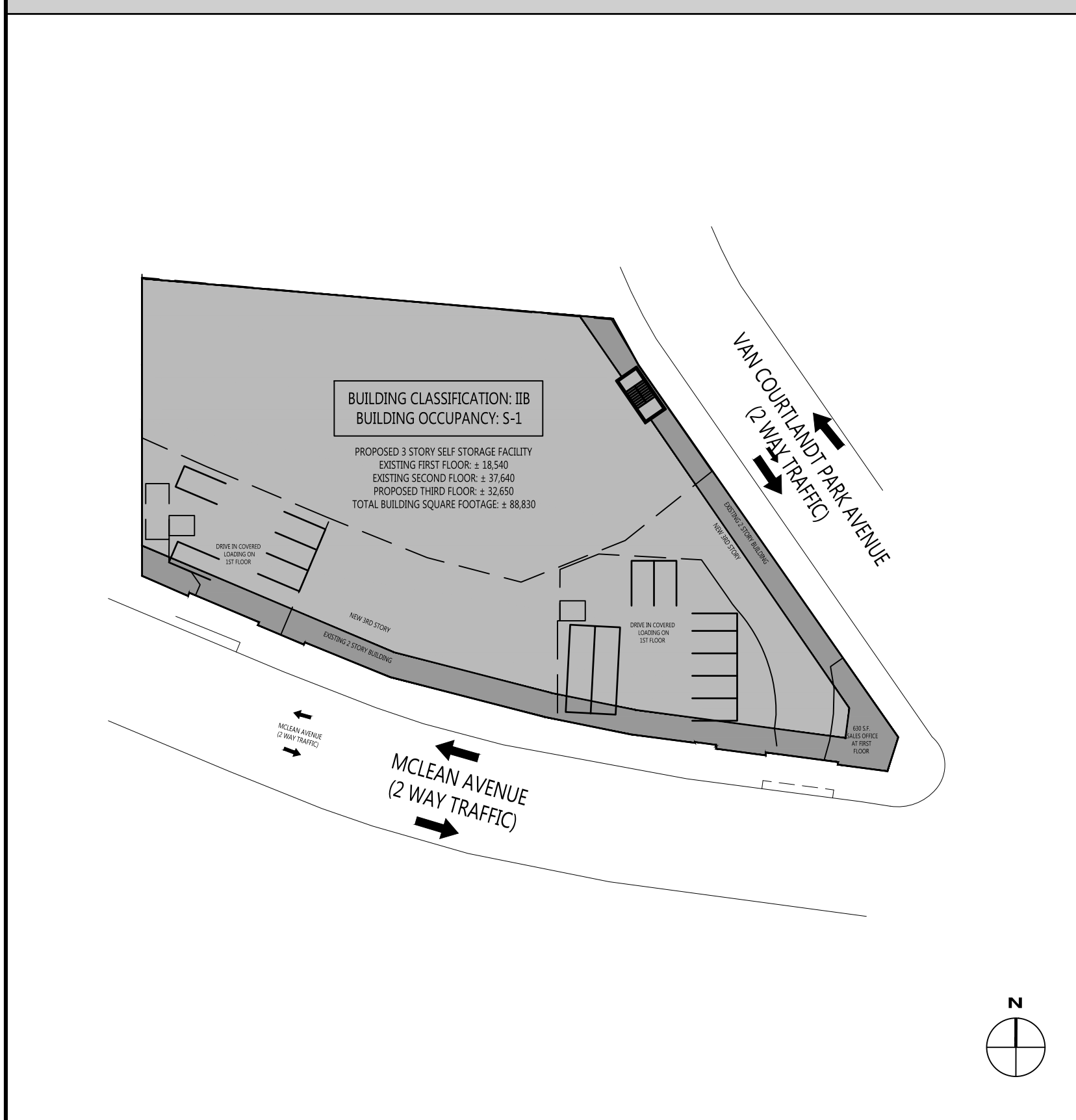
#### PERMIT EXPEDITOR

TOTAL PERMITS, LLC  
CONTACT: KEITH RANG  
1601 VETERANS MEMORIAL HIGHWAY SUITE 330  
ISLANDIA, NY 11749

### AERIAL



### PLOT PLAN



### DRAWING SHEET INDEX

ISSUE TO BID	ISSUE FOR PERMIT	75% ISSUANCE	50% ISSUANCE	ISSUE NAME	DATE	SHEET #	
•	•	•	•	T-001			TITLE SHEET
•	•	•	•	G-001			GENERAL NOTES
•	•	•	•	G-002			GENERAL NOTES
•	•	•	•	G-003			GENERAL NOTES
•	•	•	•	ASP-100			SITE PLAN
•	•	•	•	A-010			BUILDING CODE ANALYSIS
•	•	•	•	A-020			EGRESS PLANS
•	•	•	•	A-021			EGRESS PLANS
•	•	•	•	A-070			PARTITION TYPES
•	•	•	•	A-071			FIRE STOPPING DETAILS
•	•	•	•	A-080			DOOR AND WINDOW SCHEDULE
•	•	•	•	A-081			DOOR AND STOREFRONT JAMB AND SILL DETAILS
•	•	•	•	A-090			TYPICAL STORAGE DETAILS
•	•	•	•	A-091			TYPICAL STORAGE AND ADA DETAILS
•	•	•	•	A-092			TYPICAL JANUS PARTITION DETAILS
•	•	•	•	A-098			SLAB PLAN
•	•	•	•	A-099			SLAB PLAN
•	•	•	•	A-100			FIRST FLOOR CONSTRUCTION PLAN
•	•	•	•	A-101			FIRST FLOOR CONSTRUCTION PLAN
•	•	•	•	A-102			SECOND FLOOR CONSTRUCTION PLAN
•	•	•	•	A-103			SECOND FLOOR CONSTRUCTION PLAN
•	•	•	•	A-104			SECOND FLOOR LOCKER PLAN
•	•	•	•	A-105			SECOND FLOOR LOCKER PLAN
•	•	•	•	A-106			THIRD FLOOR CONSTRUCTION PLAN
•	•	•	•	A-107			THIRD FLOOR CONSTRUCTION PLAN
•	•	•	•	A-108			THIRD FLOOR LOCKER PLAN
•	•	•	•	A-109			THIRD FLOOR LOCKER PLAN
•	•	•	•	A-110			ROOF CONSTRUCTION PLAN
•	•	•	•	A-111			ROOF CONSTRUCTION PLAN
•	•	•	•	A-112			ROOF DETAILS
•	•	•	•	A-113			ENLARGED TOWER DETAILS
•	•	•	•	A-114			BLOW UP AT INTERIOR LOADING AREA #1
•	•	•	•	A-115			BLOW UP AT INTERIOR LOADING #2
•	•	•	•	A-120			SECURITY PLANS
•	•	•	•	A-200			EXTERIOR ELEVATIONS
•	•	•	•	A-201			EXTERIOR ELEVATIONS
•	•	•	•	A-202			EXTERIOR ELEVATIONS
•	•	•	•	A-300			BUILDING SECTIONS
•	•	•	•	A-310			ENLARGED STAIR PLANS AND SECTIONS
•	•	•	•	A-311			ENLARGED STAIR PLANS AND SECTIONS
•	•	•	•	A-312			ENLARGED STAIR PLANS AND SECTIONS
•	•	•	•	A-313			ENLARGED ELEVATOR PLANS AND SECTIONS
•	•	•	•	A-314			ENLARGED ELEVATOR PLANS AND SECTIONS
•	•	•	•	A-320			ENLARGED WALL SECTIONS
•	•	•	•	A-321			ENLARGED WALL SECTIONS
•	•	•	•	A-400			ENLARGED OFFICE PLANS
•	•	•	•	A-401			ENLARGED BATH AND BREAK ROOM PLANS AND ELEVATIONS
•	•	•	•	E-110			COMCHECK DRAWINGS
•	•	•	•	EN-111			COMCHECK

#### STRUCTURAL

•	•	•	•	S-001			NOTES, SCHEDULES AND DETAILS
•	•	•	•	S-002			SPECIFICATIONS, SCHEDULES AND DETAILS
•	•	•	•	S-003			DEMOLITION PLAN

### DRAWING SHEET INDEX

ISSUE TO BID	ISSUE FOR PERMIT	75% ISSUANCE	50% ISSUANCE	ISSUE NAME	DATE	SHEET #	
•	•	•	•	S-004			FIRST FLOOR PLAN
•	•	•	•	S-005			EXISTING UPPER LEVEL FRAMING AND FOUNDATION PLAN
•	•	•	•	S-006			THIRD FLOOR FRAMING PLAN
•	•	•	•	S-007			ROOF LEVEL FRAMING PLAN
•	•	•	•	S-008			TYPICAL SECTIONS AND DETAILS
•	•	•	•	S-009			TYPICAL SECTIONS AND DETAILS
•	•	•	•	S-010			TYPICAL SECTIONS AND DETAILS
•	•	•	•	S-011			TYPICAL SECTIONS AND DETAILS
•	•	•	•	S-012			SECTIONS AND DETAILS
•	•	•	•	S-013			SECTIONS AND DETAILS
•	•	•	•	S-014			SECTIONS AND DETAILS

#### MECHANICAL

•	•	•	•	M-001			LEGENDS, ABBREVIATIONS, SCHEDULES AND NOTES
•	•	•	•	M-002			LEGENDS, ABBREVIATIONS, SCHEDULES AND NOTES
•	•	•	•	M-101W			FIRST FLOOR WEST
•	•	•	•	M-101E			FIRST FLOOR EAST
•	•	•	•	M-102W			SECOND FLOOR WEST
•	•	•	•	M-102E			SECOND FLOOR EAST
•	•	•	•	M-103W			THIRD FLOOR WEST
•	•	•	•	M-103E			THIRD FLOOR EAST
•	•	•	•	M-104W			ROOF PLAN WEST
•	•	•	•	M-104E			ROOF PLAN EAST
•	•	•	•	M-401			MECHANICAL RISER
•	•	•	•	M-501			DETAILS
•	•	•	•	M-601			SPECIFICATIONS
•	•	•	•	M-602			SPECIFICATIONS

#### ELECTRICAL

•	•	•	•	E-001			ELECTRICAL SYMBOL LIST, NOTES AND ABBREVIATIONS
•	•	•	•	E-100			FIRST FLOOR ELECTRICAL POWER PLAN WEST
•	•	•	•	E-101			FIRST FLOOR ELECTRICAL POWER PLAN EAST
•	•	•	•	E-102			SECOND FLOOR ELECTRICAL PLAN WEST
•	•	•	•	E-103			SECOND FLOOR ELECTRICAL PLAN EAST
•	•	•	•	E-104			THIRD FLOOR ELECTRICAL POWER PLAN WEST
•	•	•	•	E-105			THIRD FLOOR ELECTRICAL POWER PLAN EAST
•	•	•	•	E-106			ROOF ELECTRICAL POWER PLAN WEST
•	•	•	•	E-107			ROOF ELECTRICAL POWER PLAN EAST
•	•	•	•	E-200			FIRST FLOOR ELECTRICAL LIGHTING PLAN WEST
•	•	•	•	E-201			FIRST FLOOR ELECTRICAL LIGHTING PLAN EAST
•	•	•	•	E-202			SECOND FLOOR ELECTRICAL LIGHTING PLAN WEST
•	•	•	•	E-203			SECOND FLOOR ELECTRICAL LIGHTING PLAN EAST
•	•	•	•	E-204			THIRD FLOOR ELECTRICAL LIGHTING PLAN WEST
•	•	•	•	E-205			THIRD FLOOR ELECTRICAL LIGHTING PLAN EAST
•	•	•	•	E-300			ELECTRICAL RISER DIAGRAM
•	•	•	•	E-301			ELECTRICAL PANEL SCHEDULES
•	•	•	•	E-302			ELECTRICAL PANEL SCHEDULES
•	•	•	•	E-400			ELECTRICAL DETAILS
•	•	•	•	E-500			ELECTRICAL SPECIFICATIONS
•	•	•	•	E-501			ELECTRICAL SPECIFICATIONS
•	•	•	•	E-502			ELECTRICAL SPECIFICATIONS

#### PLUMBING

•	•	•	•	P-001			LEGENDS, ABBREVIATIONS, SCHEDULES AND NOTES
•	•	•	•	P-100W			FOUNDATION PLAN WEST

### DRAWING SHEET INDEX

ISSUE TO BID	ISSUE FOR PERMIT	75% ISSUANCE	50% ISSUANCE	ISSUE NAME	DATE	SHEET #	
•	•	•	•	P-100E			FOUNDATION PLAN EAST
•	•	•	•	P-101W			FIRST FLOOR WEST
•	•	•	•	P-101E			FIRST FLOOR EAST
•	•	•	•	P-102W			SECOND FLOOR WEST
•	•	•	•	P-102E			SECOND FLOOR EAST
•	•	•	•	P-103W			THIRD FLOOR WEST
•	•	•	•	P-103E			THIRD FLOOR EAST
•	•	•	•	P-104			ROOF PLAN WEST
•	•	•	•	P-401			RISER DIAGRAMS
•	•	•	•	P-501			DETAILS
•	•	•	•	P-601			SPECIFICATIONS
•	•	•	•	P-602			SPECIFICATIONS

#### FIRE PROTECTION

•	•	•	•	FP-001			LEGENDS, ABBREVIATIONS, SCHEDULES AND NOTES
•	•	•	•	FP-101W			FIRST FLOOR WEST
•	•	•	•	FP-101E			FIRST FLOOR EAST
•	•	•	•	FP-102W			SECOND FLOOR WEST
•	•	•	•	FP-102E			SECOND FLOOR EAST
•	•	•	•	FP-103W			THIRD FLOOR UPPER WEST
•	•	•	•	FP-103E			THIRD FLOOR UPPER EAST
•	•	•	•	FP-103.1W			THIRD FLOOR LOWER WEST</



ABBREVIATIONS

@	AT
ACT.	ACTUAL
A.F.C.	ABOVE FINISHED CEILING
A.F.F.	ABOVE FINISHED FLOOR
ABA	AMERICAN INSTITUTE OF ARCHITECTS
ABE	AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
ASC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL, ALUM.	ALUMINUM
ALM.	ALARM
ALT.	ALTERNATE
AMP	AMPERE
APT.	APARTMENT
ARCH.	ARCHITECT
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING, & AIR CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AWG	AMERICAN WIRE GAUGE
BD.	BOARD
BL	BUILDING LINE
BLK	BLOCK
BM	BEAM
B.O.	BY OTHERS
BOT.	BOTTOM
BTU	BRITISH THERMAL UNIT
CAB.	CABINET
CEL., CLG.	CEILING
CER	CERAMIC
CFM	CUBIC FEET PER MINUTE
C.H.	CEILING HEIGHT
CL	CENTERLINE
CLKG	CAULKING
CLO	CLOSET
CLB	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CORR.	CORROSION
COVG	COVERING
CPT	CARPET
CSK	COUNTERSINK
CTR	CENTER
CU FT	CUBIC FEET
CU IN	CUBIC INCH
CU YD	CUBIC YARD
D	DEPTH
DB	DECIBEL
DBL	DOUBLE
DEPT	DEPARTMENT
DET., DTL.	DETAIL
D.F.	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG.	DIAGONAL
DIR., DIMEN.	DIMENSION
DIV.	DIVISION
DN	DOWN
DR(S)	DOOR(S)
DRWG., DWG.	DRAWING
EL.	ELEVATION
ELEV.	ELEVATOR
ELC.	ELECTRICAL
ENAM.	ENAMEL
ENGR.	ENGINEER
EQ.	EQUAL
EQUIP.	EQUIPMENT
EW	ELECTRIC WATER COOLER
EXH.	EXHAUST
EXG., EXST.	EXISTING
EXP.	EXPOSED
EXTR.	EXTRUDED
F.D.	FIRE DAMPER
FI	FULL HEIGHT
FIN.	FINISH
FL, FLA.	FLOOR
FT.	FOOT
FIG.	FIGURE
FRF.	FIREPROOF
FR.	FRONT
F.P.S.C.	FIREPROOF SELF CLOSING
FT. LB.	FOOT POUND
FTG.	FOOTING
GA.	GAUGE
GAL.	GALLON
GALV.	GALVANIZED
GC.	GENERAL CONTRACTOR
GL.	GLASS
GPM.	GALLONS PER MINUTE
GYP.	GYPSONUM
H. HGT.	HEIGHT
HWRE.	HARDWARE
H.M.	HOLLOW METAL
HOR.	HORIZONTAL
HR.	HOUR
H.R.	HANDRAIL
HW	HOT WATER
ID.	INSIDE DIAMETER
IN.	INCH
INCL.	INCLUDE/INCLUDING
INFO.	INFORMATION
INSUL.	INSULATE, INSULATING, INSULATION
INT.	INTERIOR
JAN.	JANITOR
KD	KNOCK DOWN
KO	KNOCK OUT
KW	KILOWATT
L	LENGTH
LAV.	LAVATORY
LB	POUND
LH	LEFT HAND
LHR	LEFT HAND REVERSE
LNL.	LINEAR
LT.	LIGHT
MANUF.	MANUFACTURER
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MED.	MEDIUM
MEZZ.	MEZZANINE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
N	NORTH
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NIC.	NOT IN CONTRACT
NO.	NUMBER
N.T.S.	NOT TO SCALE
OA	OVERALL
OAD	OVERALL DIMENSION
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OFF.	OFFICE
PA	PUBLIC ADDRESS
PCF	POUNDS PER CUBIC FOOT
PERF.	PERFORATED
PERM.	PERMANENT
PERP.	PERPENDICULAR
PH.	PHASE
PL LAM.	PLASTIC LAMINATE
PLMB.	PLUMBING
PLWD.	PLYWOOD
PNL.	PANEL
POL.	POLISHED
POS.	POSITIVE
PSF	POUND PER SQUARE FOOT
PSI	POUND PER SQUARE INCH
PTN.	PARTITION
PT.	PAINT
PTG.	PAINTING

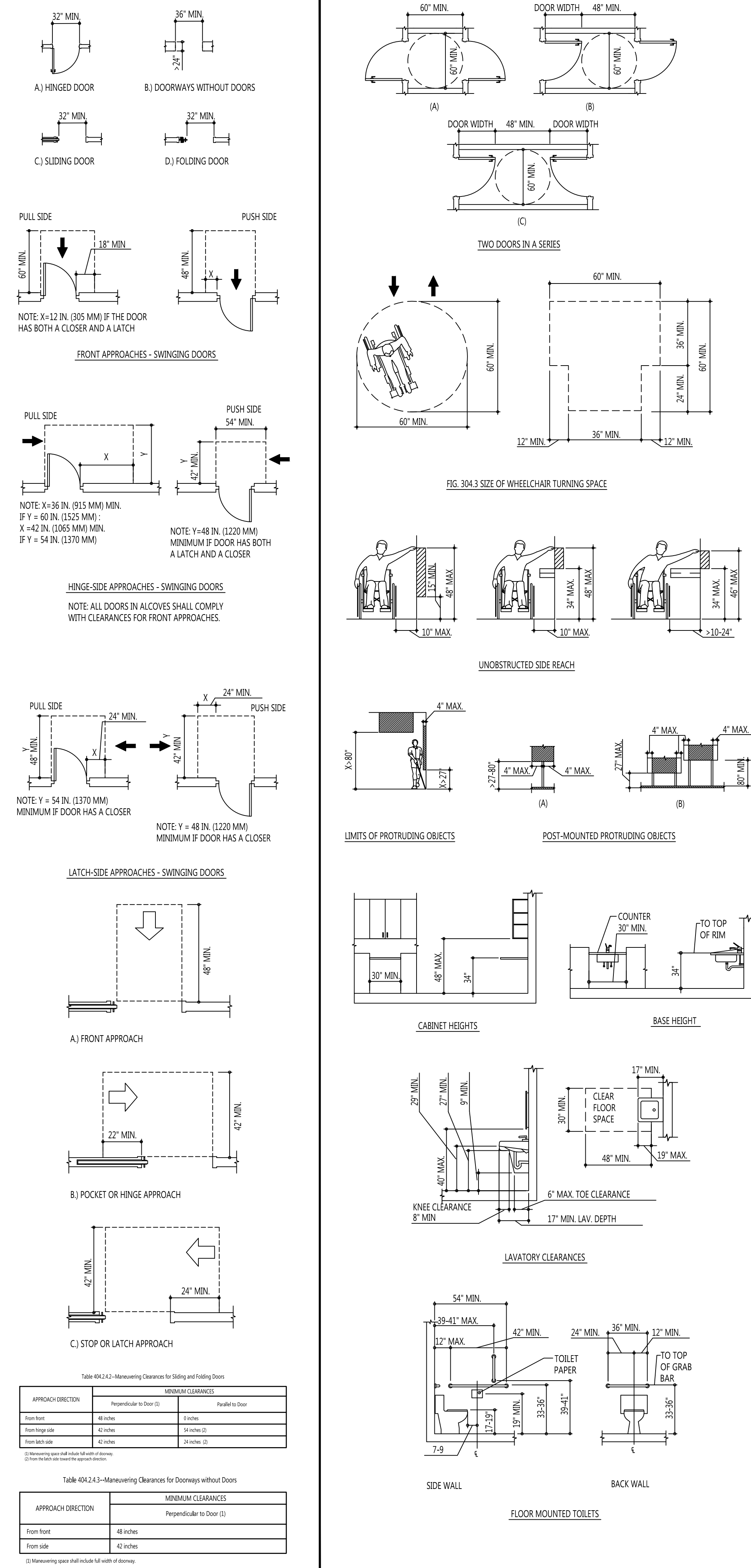
ABBREVIATIONS

PR.	PAIR
QUAL.	QUALITY
R	RADIUS
RECD.	RECEIVED
REC.P.	RECEPTACLE
REF.	REFRIGERATOR
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RQD	REQUIRED
RMS	ROOM(S)
S/S	STAINLESS STEEL
S.C.	SOLID CORE
SECT.	SECTION
SEP.	SEPARATE
SIM.	SIMILAR
SPEC(S)	SPECIFICATION(S)
SPKR.	SPEAKER
SPKLR.	SPEAKER
SQ.	SQUARE
SR.	SENIOR
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
SUPR.	SUPERINTENDENT
SUSP.	SUSPENDED
TC	TERRA COTTA
TEL.	TELEPHONE
TH, THK.	THICK/THICKNESS
TYP.	TYPICAL
U.L.	UNDERWRITER'S LABORATORIES
U.O.N.	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITE TILE
VERT.	VERTICAL
V.F.	VERIFY IN FIELD
VS.	VERSUS
VOL.	VOLUME
W	WIDTH
W	WITH
W.C.	WATER CLOSET
WCV	WALLCOVERING
WD	WOOD
W/O	WITHOUT
W.P.	WATERPROOF
WT.	WEIGHT
X-SECT	CROSS SECTION
YD	YARD

STANDARD SYMBOLS

	ELEVATION NUMBER
	ELEVATION TAG
	SHEET NUMBER
	SECTION NUMBER
	SHEET NUMBER
	DETAIL NUMBER
	DETAIL TAG
	SHEET NUMBER
	INT. ELEVATION NUMBER
	INTERIOR ELEVATION
	SHEET NUMBER
	REVISION NO.
	INDICATES ALIGNMENT
	ROOM TAG
	FINISH TAG
	DOOR TAG
	WINDOW TAG
	PARTITION TYPE

ACCESSIBILITY CLEARANCES















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FRANK G. RELF ARCHITECT, P.C.

[illegible]

ISSUE:		
#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT

CLIENT:  
SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

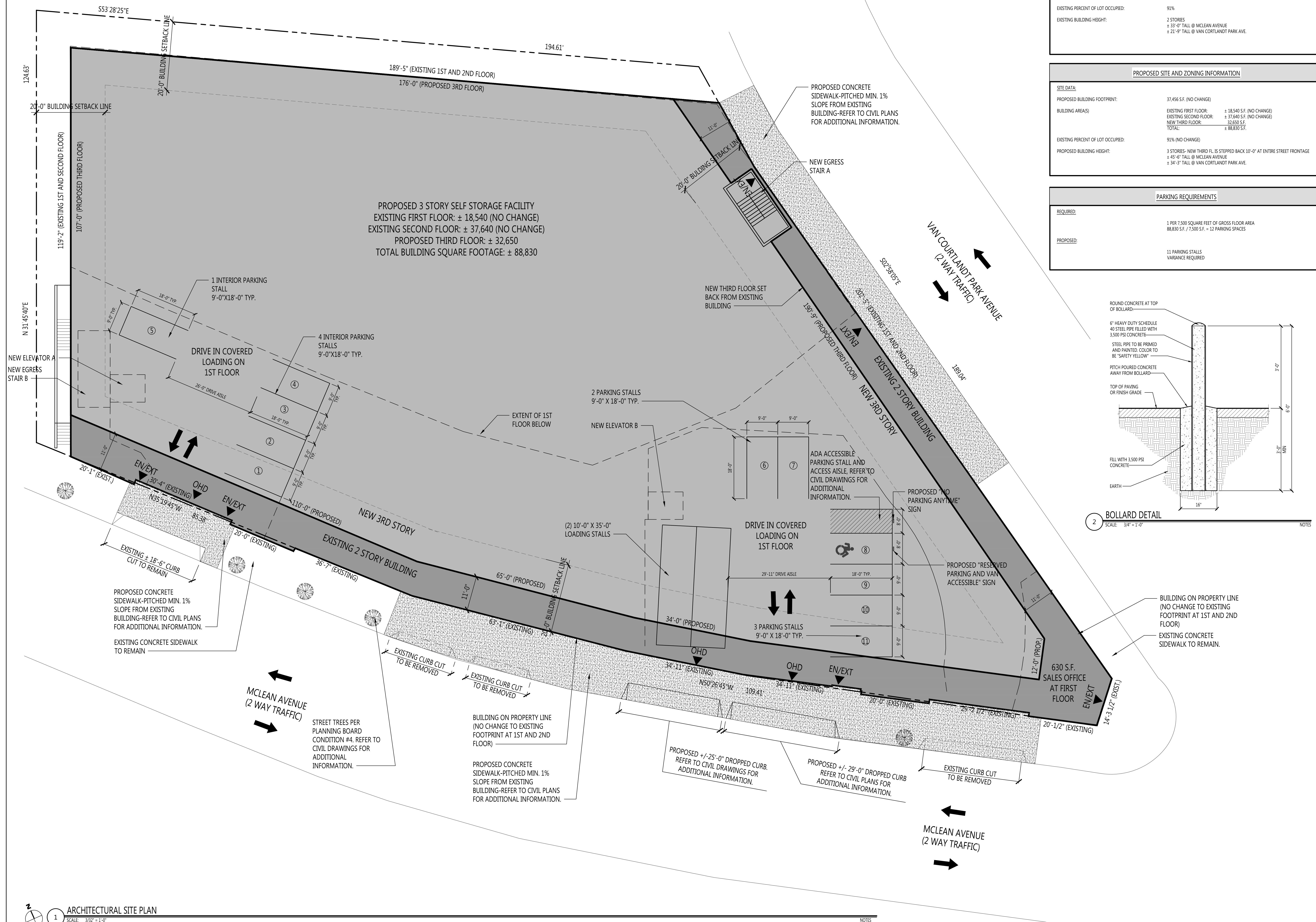
TITLE DRAWING:  
PROPOSED ARCHITECTURAL  
SITE PLAN

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
	DWG. No.:	

ASP-100

ALT	9
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DOB JOB NUMBER



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ARCHITECTURAL SITE PLAN

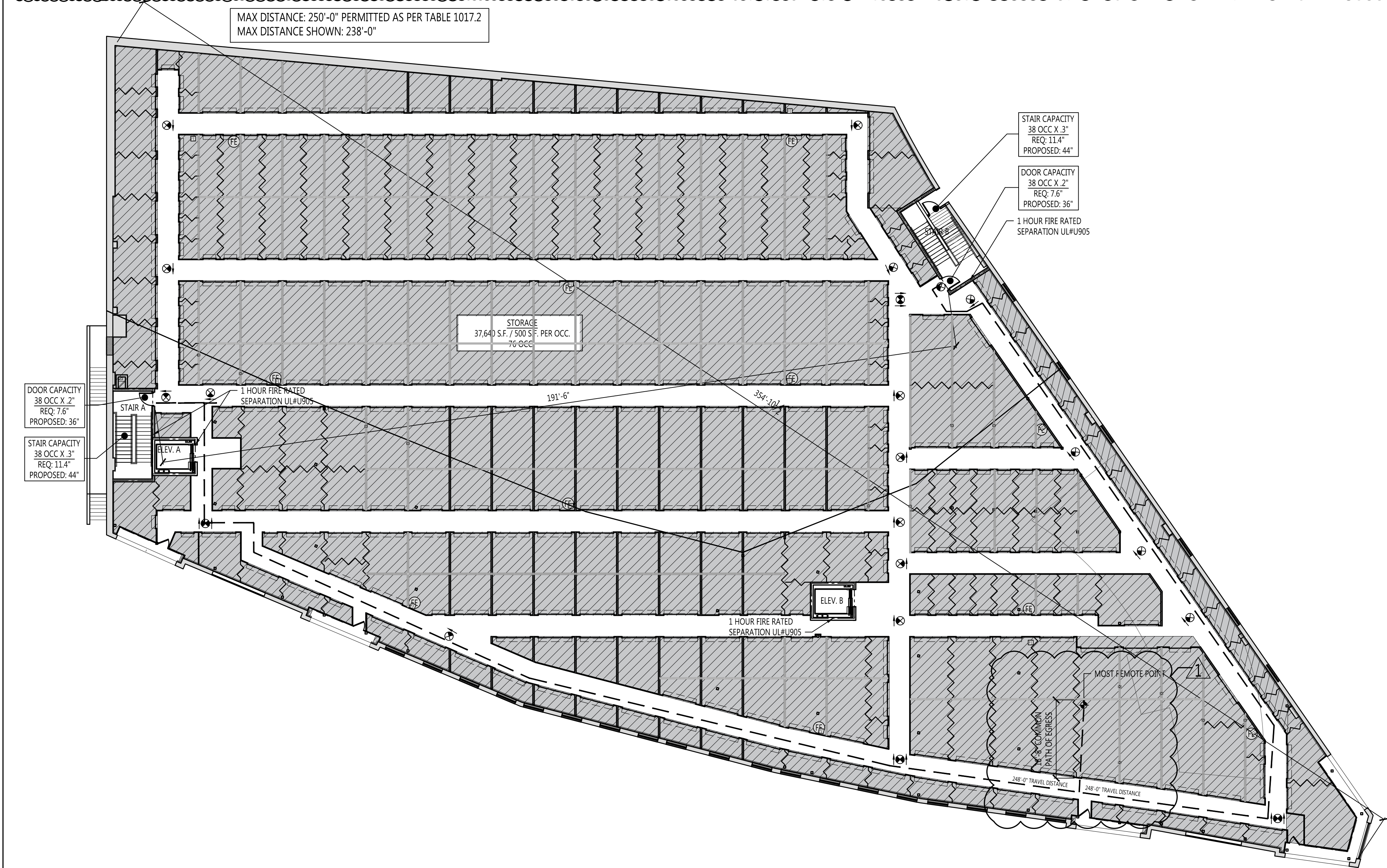
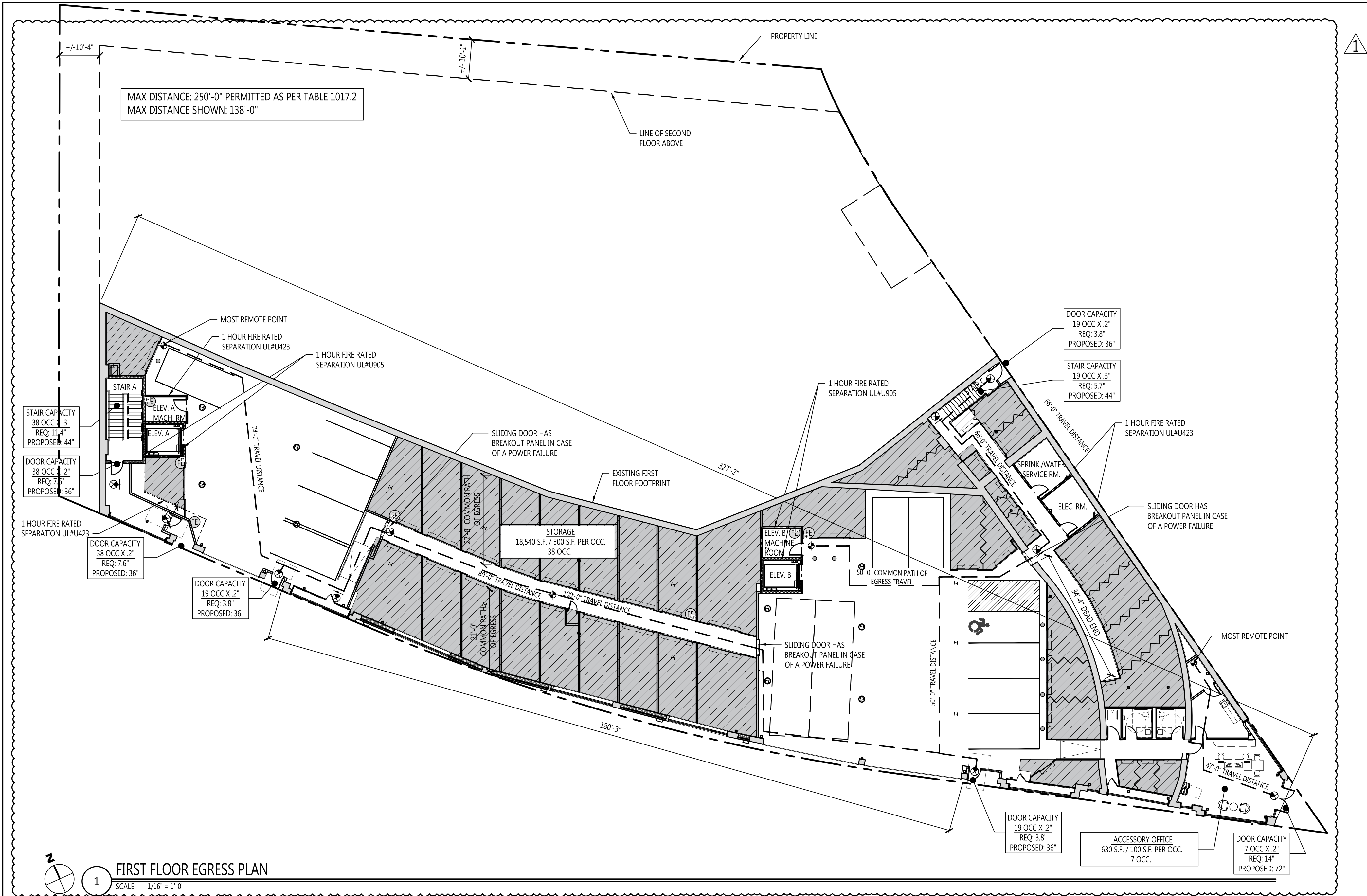
SCALE:  $3/32" = 1'-0"$

NOTES









EGRESS NOTES	
1. PROVIDE EMERGENCY EGRESS MAPS AT ALL ELEVATOR LOBBYS.	
2. PROVIDE "USE STAIR IN CASE OF FIRE" BY COMPLIANCE SIGNAGE, MODEL #IC FIRE-1-DN, LOCATE NEXT TO ELEVATOR CALL BUTTON AT EACH FLOOR.	
3. STAIRWAY DISCHARGE DOORS SHALL BE OPENABLE FROM THE EGRESS SIDE AND SHALL ONLY BE LOCKED FROM THE STAIR SIDE. WHERE RE-ENTRY IS NOT PERMITTED FROM A STAIR TO EVERY FLOOR, A SIGN THAT READS "NO RE-ENTRY FROM THIS STAIR" SHALL BE POSTED ON THE OCCUPIED SIDE OF THE STAIR DOOR AT EVERY FLOOR, IN ACCORDANCE WITH 1023.9 OF IBC 2015 IN COMPLIANCE WITH ICC A117.1.	
4. MAXIMUM TRAVEL DISTANCE TO A FIRE EXTINGUISHER SHALL BE 75 FEET.	
5. EGRESS DOORS THAT ARE OPERATED BY POWER SHALL BE CAPABLE OF BEING OPENED MANUALLY IN THE EVENT OF POWER FAILURE.	
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9. FLOOR IDENTIFICATION SIGN SHALL BE PROVIDED AT EACH FLOOR LANDING WITHIN THE STAIRWAY INSTALLED 5'-0" ABOVE THE LANDING IN A POSITION THAT IS READILY VISIBLE WHEN THE DOORS ARE IN THE OPEN AND CLOSED POSITIONS. SUCH SIGNAGE SHALL DESIGNATE THE FOLLOWING IN ACCORDANCE WITH 1023.9 OF THE IBC 2015.	
1. THE FLOOR LEVEL.	
2. THE TERMINUS OF THE TOP AND BOTTOM OF THE STAIRWAY.	
3. THE IDENTIFICATION OF THE STAIRWAY.	
4. THE AVAILABILITY OF ROOF ACCESS FROM THE ENCLOSURE FOR THE FIRE DEPARTMENT. THE SIGNAGE SHALL INCLUDE TACTILE CHARACTERS COMPLYING WITH ICC A117.1 AND MEET ALL REQUIREMENTS OF 1023.9.1 OF THE IBC 2015.	
10. GENERAL CONTRACTOR TO COORDINATE LOCATION OF LIGHTING WITH CEILING MOUNTED LIGHTING, EXITS, HVAC EQUIPMENT, ECT. VIEW OF EXIT SIGNS IS NOT TO BE OBSTRUCTED IN ANY DIRECTION. MOUNTING HEIGHT OF EXIT SIGNS IS NOT TO IMPEDE THE USE OF STORAGE UNITS.	
11. PROVIDE NECESSARY EXTERIOR SIGNAGE FOR F.D. CONNECTION.	
12. PROVIDE ADA "UNISEX" SIGNAGE AT BATHROOMS.	
13. PROVIDE SIGNAGE @ SPRINKLER, ELECTRICAL AND GAS ROOMS.	
14. PROVIDE SIGNAGE @ BREAKROOM, JANITOR CLOSET AND UTILITY ROOMS.	
15. PROVIDE WHITE VINYL STOREFRONT SIGN @ MAIN OFFICE ENTRY DOOR INDICATING: COMPANY NAME, FULL STREET ADDRESS, (TEL) XXX-XXX-XXXX, ACCESS HOURS: XXX AM TO XXXPM (DAILY), OFFICE HOURS: XXX AM TO XXXPM (DAILY).	
16. PROVIDE SIAMESE CONNECTION SIGNAGE. COORDINATE WITH FIRE MARSHALL.	
17. PROVIDE KNOX BOX, KNOX BOX SIGNAGE, COORDINATE LOCATION AS PER FIRE MARSHALL REQUEST.	
18. PROVIDE SIGNAGE FOR LOCATION OF FIRE ALARM PANEL.	

EGRESS LEGEND	
SYMBOL	DESCRIPTION
	MOST REMOTE POINT
	EMERGENCY EXIT SIGN
	DIRECTIONAL EMERGENCY EXIT SIGN
	1 HOUR FIRE RATED PARTITION
	EGRESS PATH
	RECESSED FIRE EXTINGUISHER. REFER TO DETAIL 6 ON A-090 FOR ADDITIONAL INFORMATION

OCCUPANCY SUMMARY	
FLOOR	OCCUPANTS
FIRST FLOOR - ACCESSORY OFFICE	10 OCCUPANTS
FIRST FLOOR - STORAGE	38 OCCUPANTS
SECOND FLOOR - STORAGE	76 OCCUPANTS
THIRD FLOOR - STORAGE	66 OCCUPANTS
TOTAL	190 OCCUPANTS

FR

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REVISIONS :	
#	DATE COMMENT
1	09/20/20 REVISIED PER DOB COMMENTS
2	2/19/21 REVISIED PER DOB COMMENTS
3	
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CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

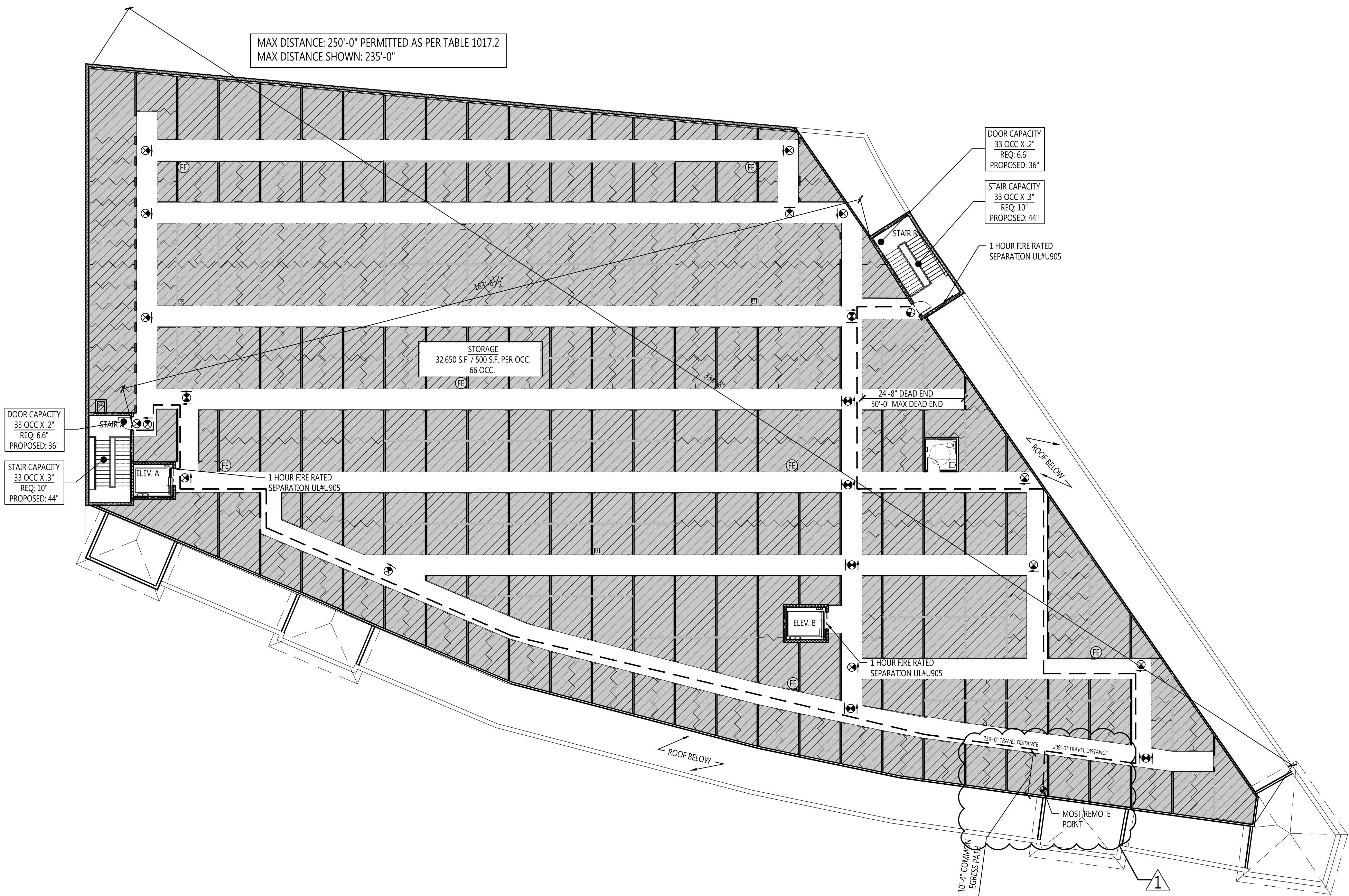
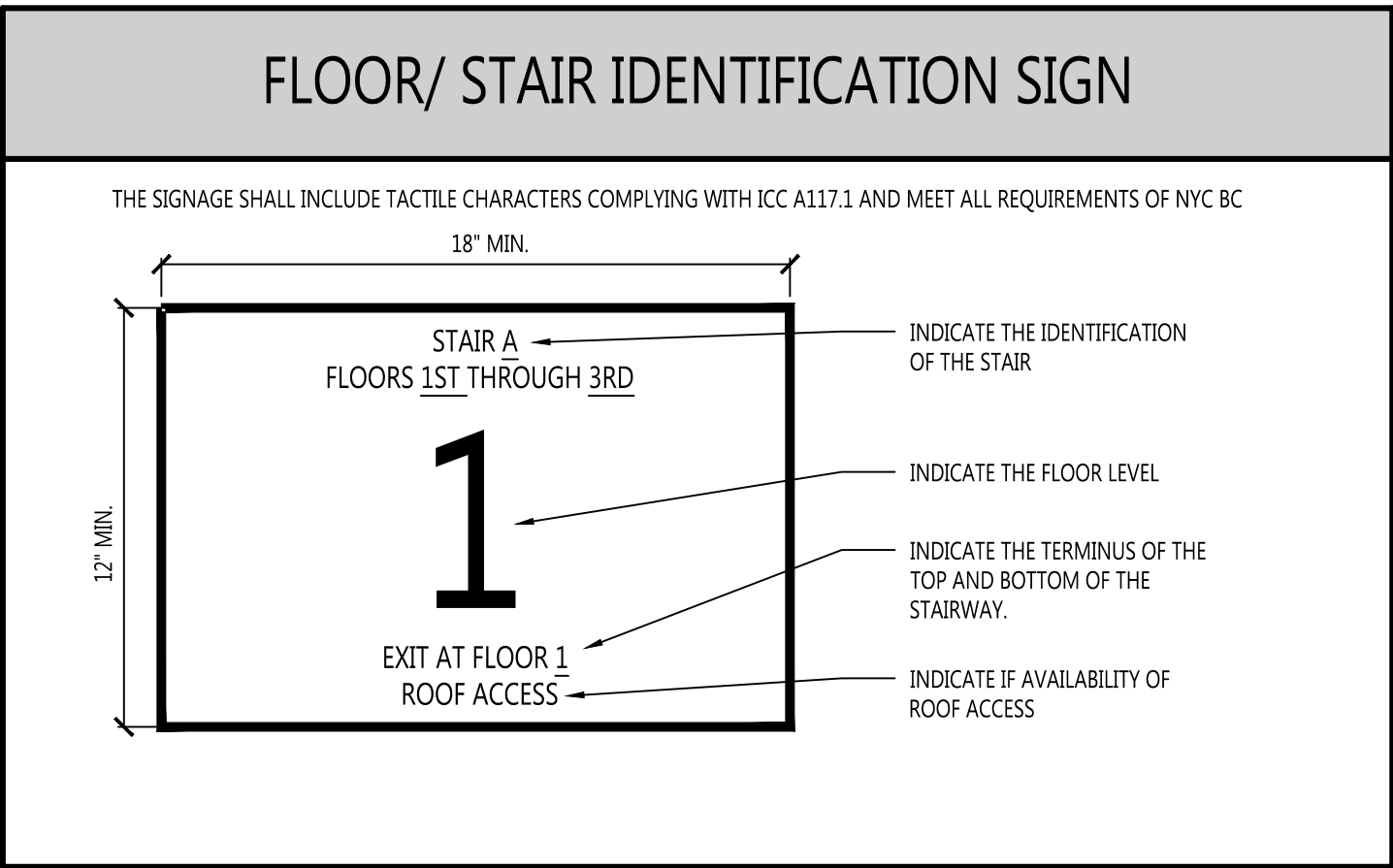
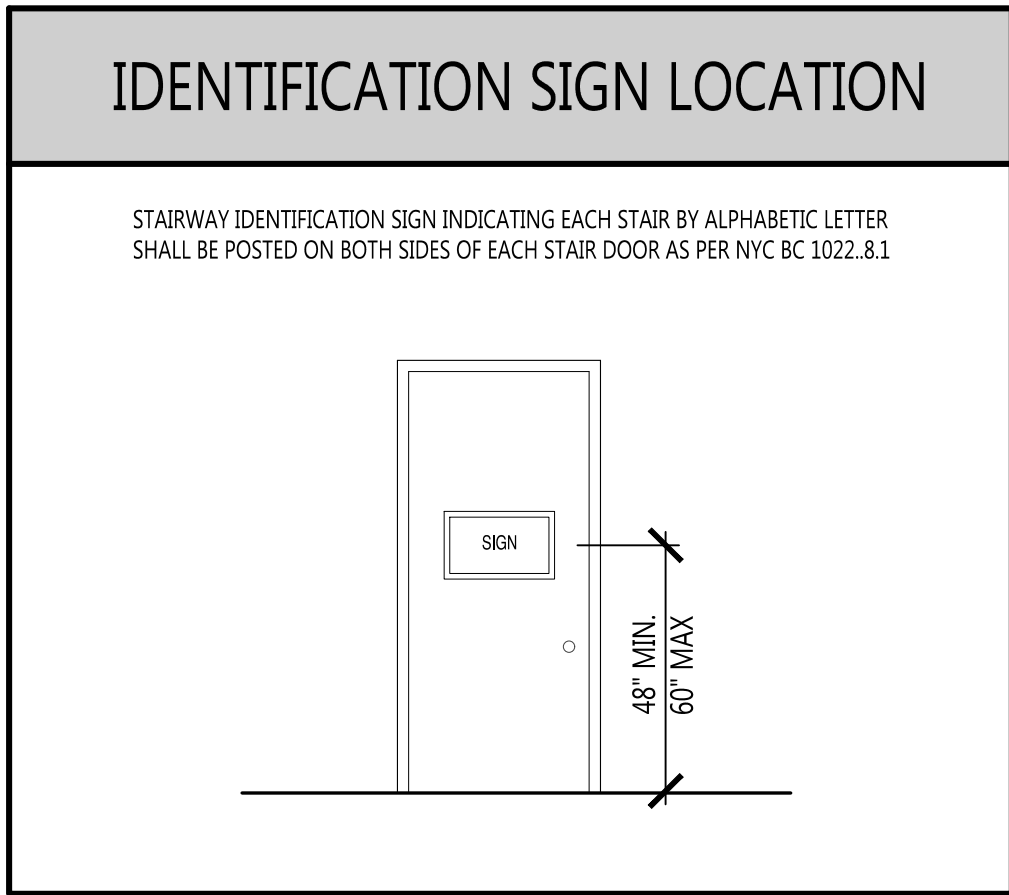
EGRESS PLANS

SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-020.00  
ALT OF XX

DOB JOB NUMBER:





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3. THE IDENTIFICATION OF THE STAIRWAY.	
4. THE AVAILABILITY OF ROOF ACCESS FROM THE ENCLOSURE FOR THE FIRE DEPARTMENT. THE SIGNAGE SHALL INCLUDE TACTILE CHARACTERS COMPLYING WITH ICC A117.1 AND MEET ALL REQUIREMENTS OF 1023.9.1 OF THE IBC 2015.	
10. GENERAL CONTRACTOR TO COORDINATE LOCATION OF LIGHTING WITH CEILING MOUNTED LIGHTING, EXITS, HVAC EQUIPMENT, ECT. VIEW OF EXIT SIGNS IS NOT TO BE OBSTRUCTED IN ANY DIRECTION. MOUNTING HEIGHT OF EXIT SIGNS IS NOT TO IMPEDE THE USE OF STORAGE UNITS.	
11. PROVIDE NECESSARY EXTERIOR SIGNAGE FOR F.D. CONNECTION.	
12. PROVIDE ADA "UNISEX" SIGNAGE AT BATHROOMS.	
13. PROVIDE SIGNAGE @ SPRINKLER, ELECTRICAL AND GAS ROOMS.	
14. PROVIDE SIGNAGE @ BREAKROOM, JANITOR CLOSET AND UTILITY ROOMS.	
15. PROVIDE WHITE VINYL STOREFRONT SIGN @ MAIN OFFICE ENTRY DOOR INDICATING: COMPANY NAME, FULL STREET ADDRESS, (TEL) XXX-XXX-XXXX, ACCESS HOURS: XXX AM TO XXXPM (DAILY), OFFICE HOURS: XXX AM TO XXXPM (DAILY).	
16. PROVIDE SIAMESE CONNECTION SIGNAGE. COORDINATE WITH FIRE MARSHALL.	
17. PROVIDE KNOX BOX, KNOX BOX SIGNAGE, COORDINATE LOCATION AS PER FIRE MARSHALL REQUEST.	
18. PROVIDE SIGNAGE FOR LOCATION OF FIRE ALARM PANEL.	

EGRESS LEGEND	
SYMBOL	DESCRIPTION
	MOST REMOTE POINT
	EMERGENCY EXIT SIGN
	DIRECTIONAL EMERGENCY EXIT SIGN
	1 HOUR FIRE RATED PARTITION
	EGRESS PATH
	RECESSED FIRE EXTINGUISHER. REFER TO DETAIL 6 ON A-090 FOR ADDITIONAL INFORMATION

OCCUPANCY SUMMARY	
FLOOR	OCCUPANTS
FIRST FLOOR - ACCESSORY OFFICE	10 OCCUPANTS
FIRST FLOOR - STORAGE	38 OCCUPANTS
SECOND FLOOR - STORAGE	76 OCCUPANTS
THIRD FLOOR - STORAGE	66 OCCUPANTS
TOTAL	190 OCCUPANTS



CONSULTANTS:

**Terry W. Wall, Jr., P.E., S.E.**  
**Consulting Structural Engineering**  
1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

MEP CONSULTANT:

**GAP ENGINEERING, P.C.**  
**3 COLBY COURT**  
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FRANK G. RELF ARCHITECT, P.C.

REVISIONS :	
#	DATE COMMENT
1	09/20/20 REVISIED PER DOB COMMENTS
2	2/18/21 REVISIED PER DOB COMMENTS
3	
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CLIENT:

**SNL YONKERS LLC**  
**3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042**

PROJECT:

**YONKERS SELF STORAGE**  
**60 MCLEAN AVENUE**  
**YONKERS, NY 10705**

TITLE DRAWING:

**EGRESS PLANS**

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
	DWG. No.:	A-021.00
	ALT	OF XX


DOB JOB NUMBER:







**Terry W. Wall, Jr., P.E., S.E.**  
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REVISIONS :

ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

[illegible]

CLIENT: SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

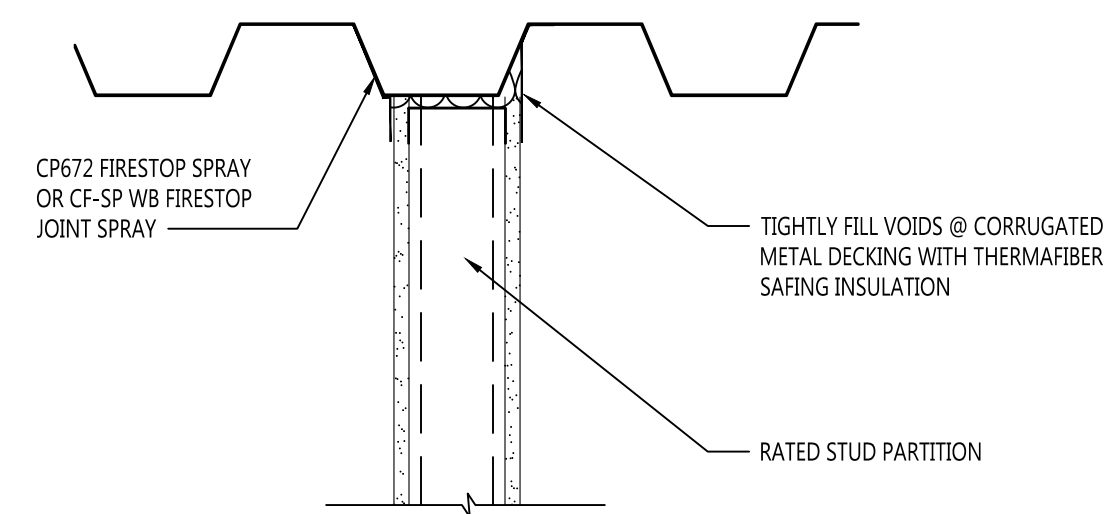
TITLE DRAWING:

FIRESTOPPING DETAILS

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
	DWG. No.:	

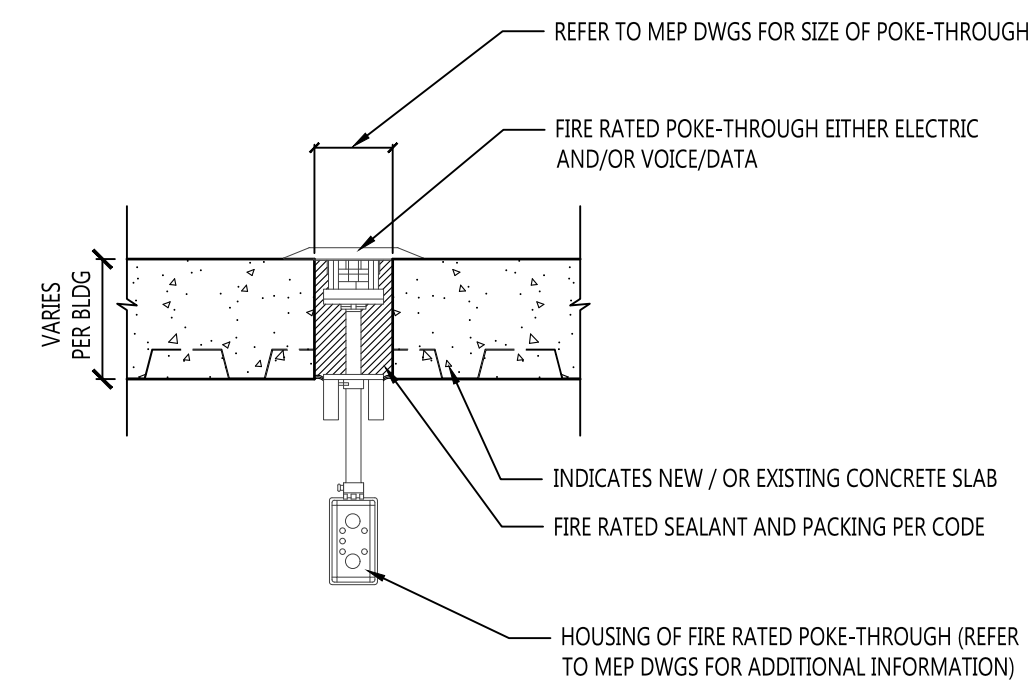
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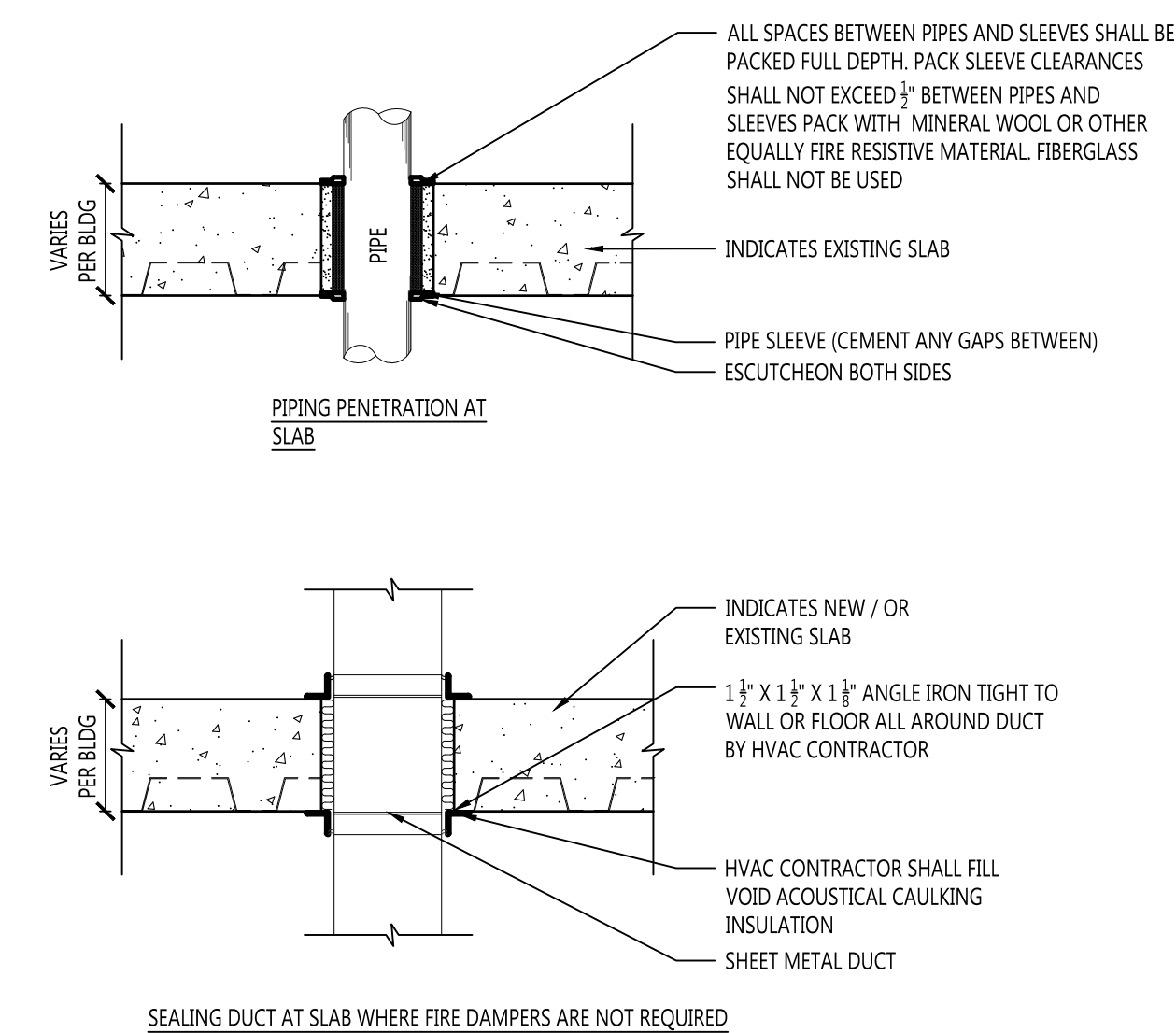


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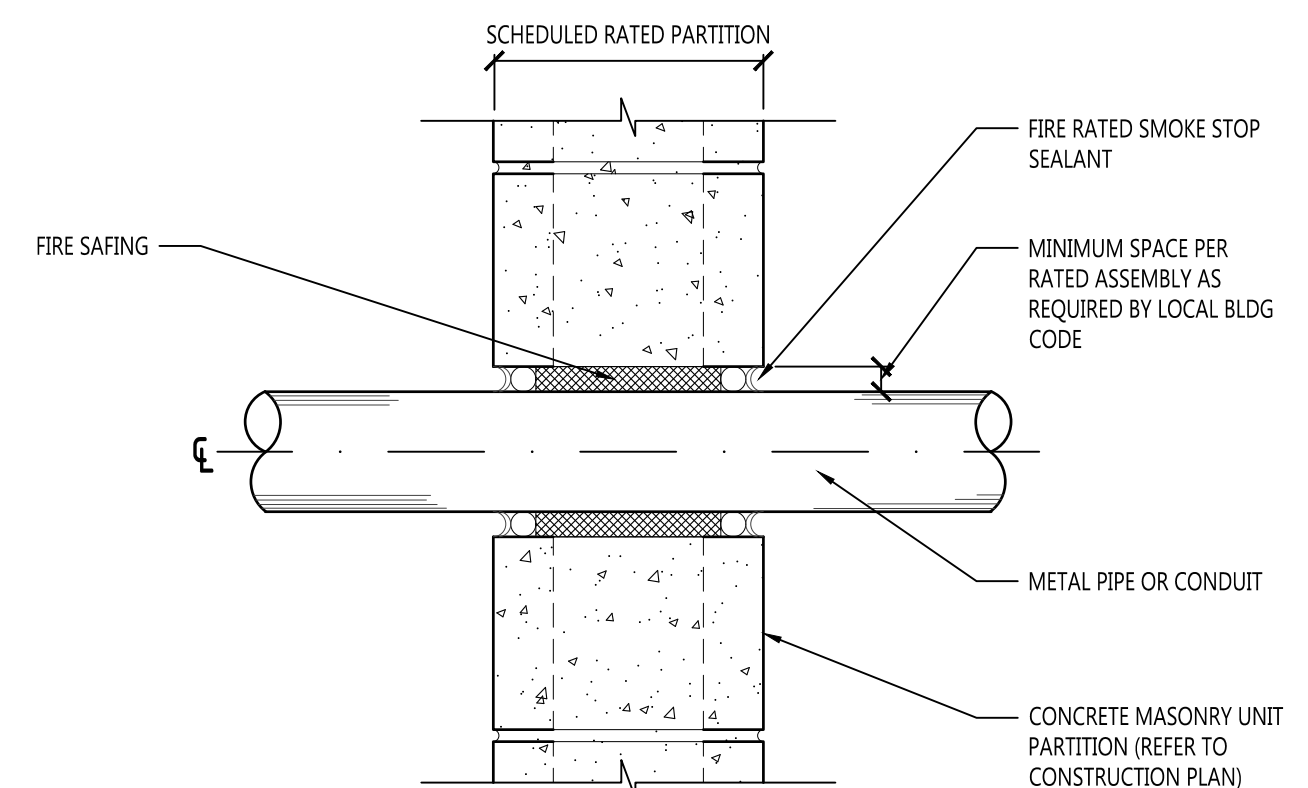
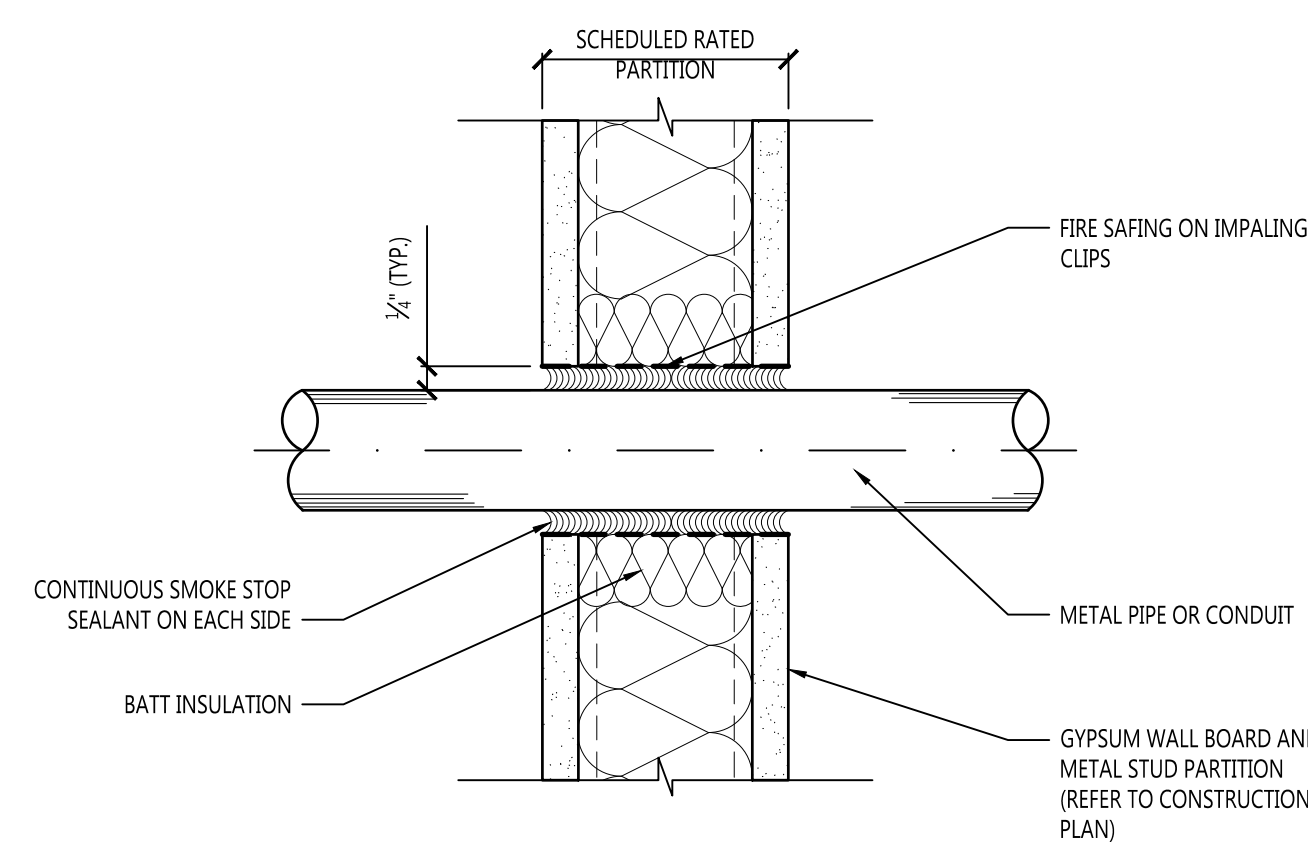
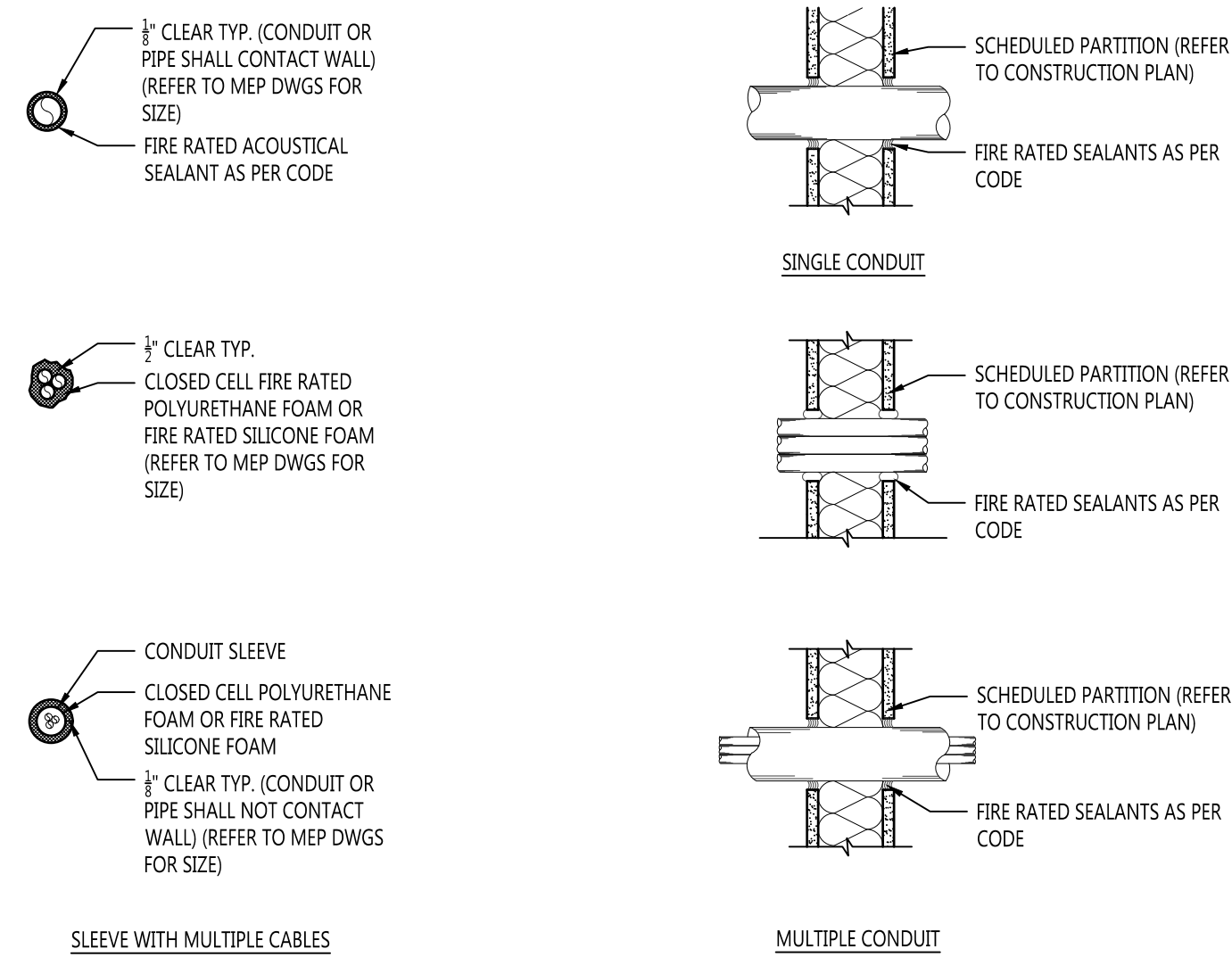
**NOTE:**  
CONDUITS REQUIRED TO BE NEAREST PARTITION TO  
ACCOMMODATE CABLES TO TENANT SPACE ABOVE.



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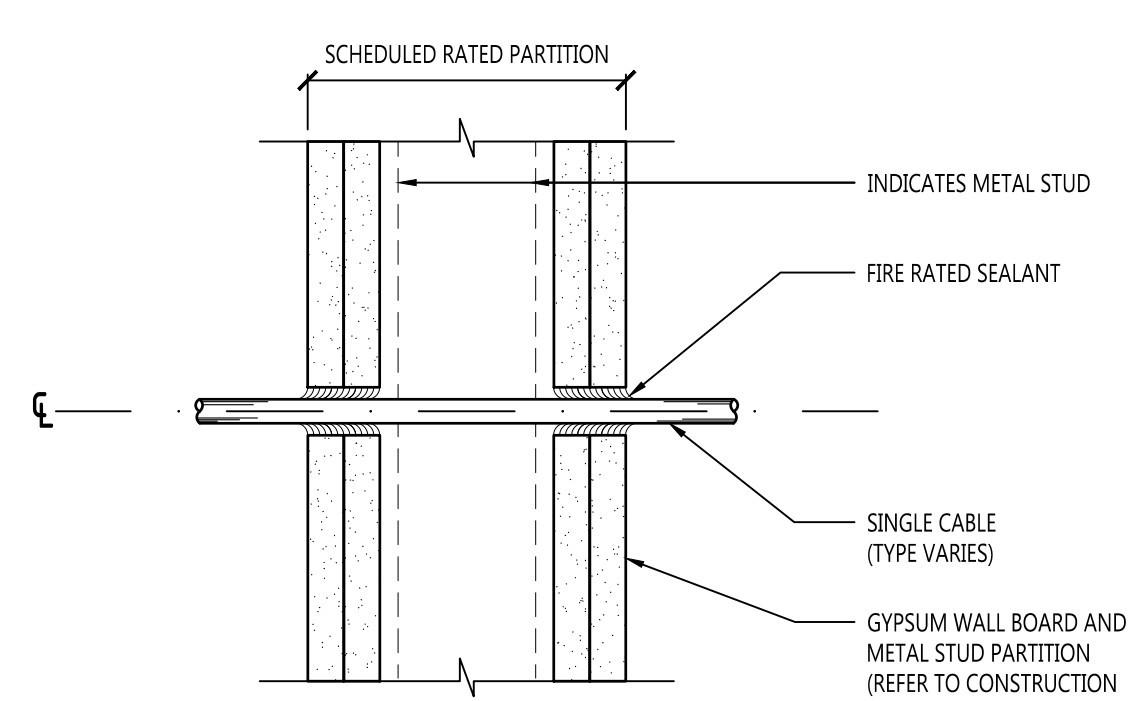
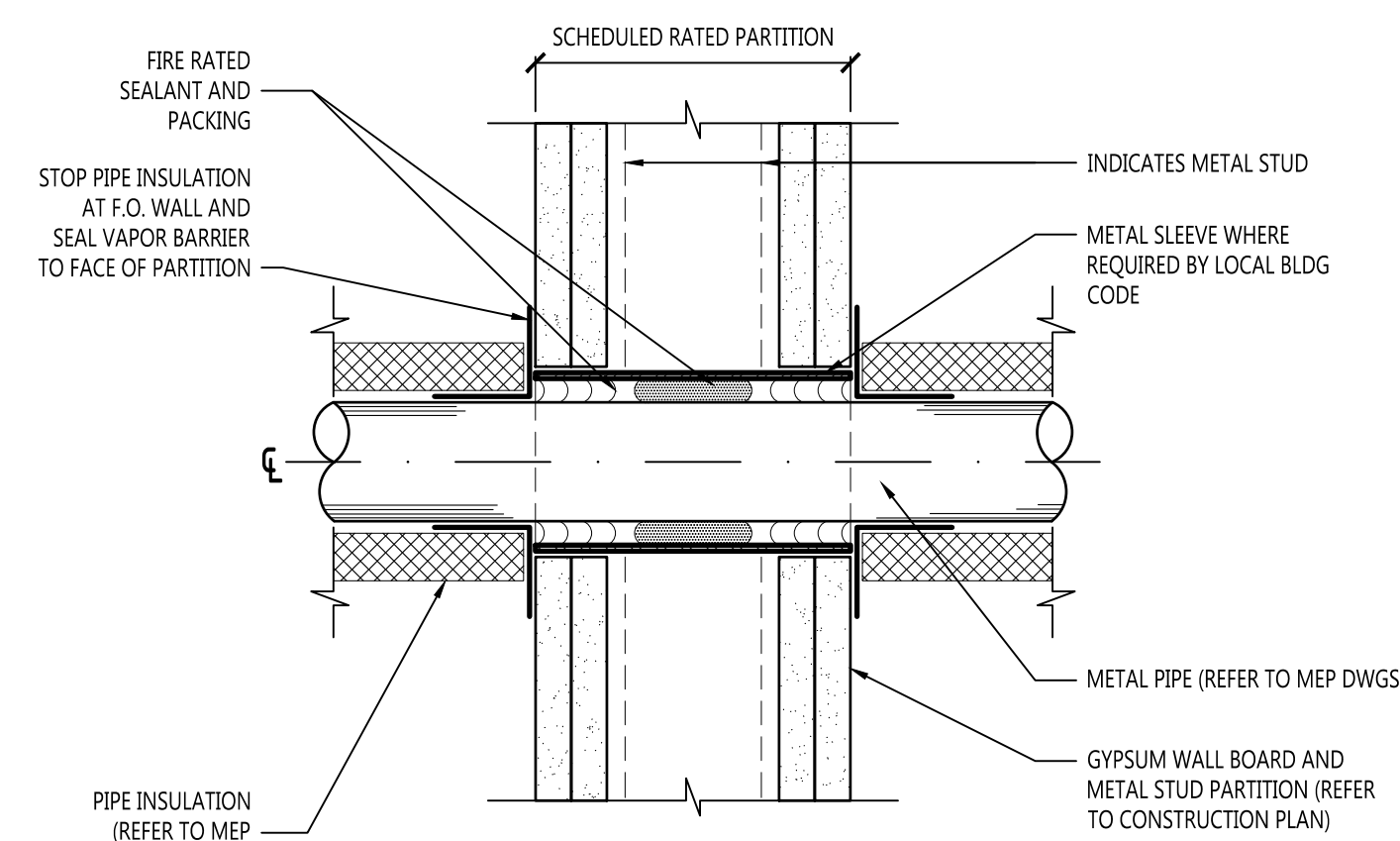
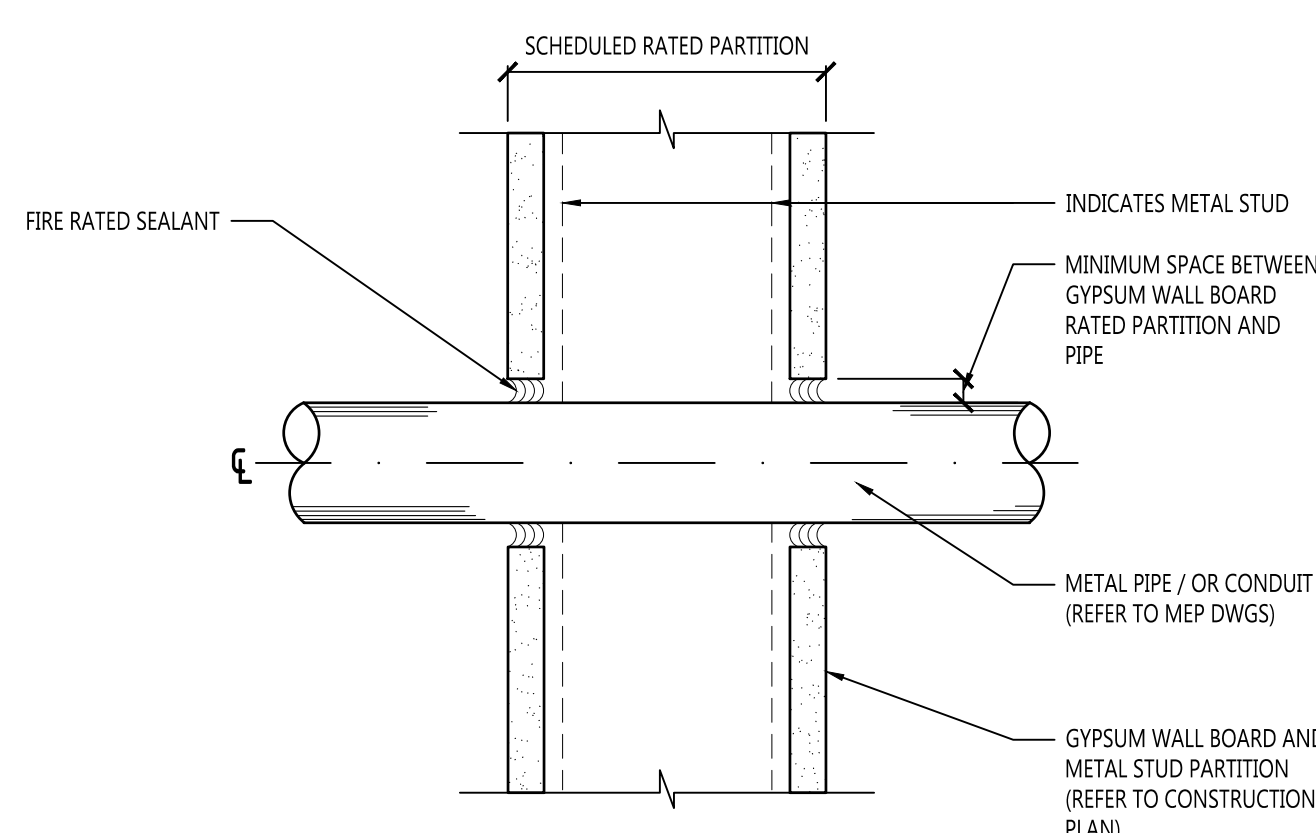


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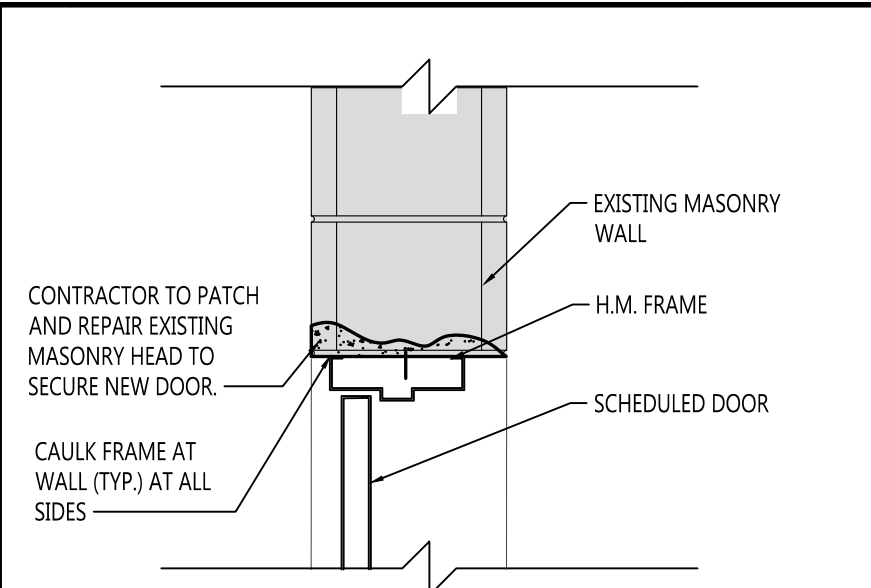


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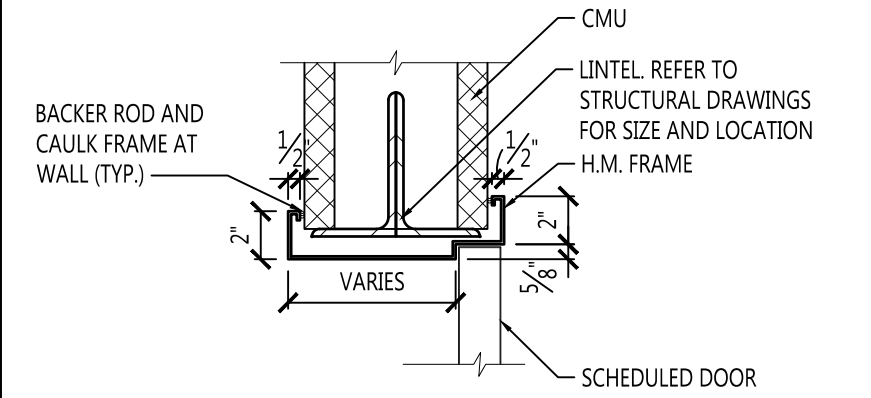
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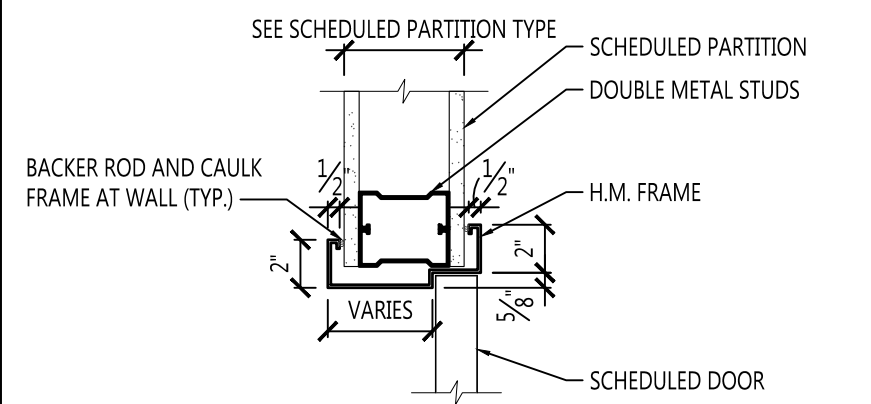
SCALE:  
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H3/J3 DOOR HEAD AT EXISTING MASONRY OPENING SCALE: 3"=1'-0"



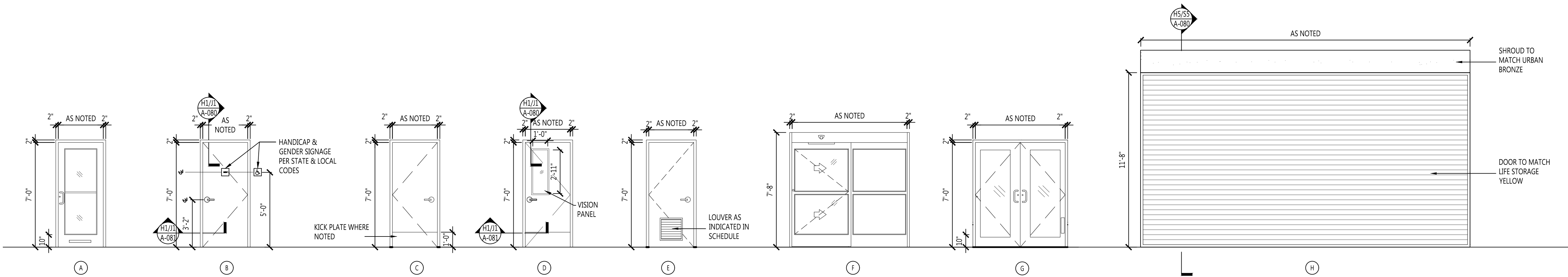
H2/J2 HOLLOW METAL SINGLE RABBETED FRAME WITH CMU AT HEAD AND JAMB DETAIL SCALE: 3"=1'-0"



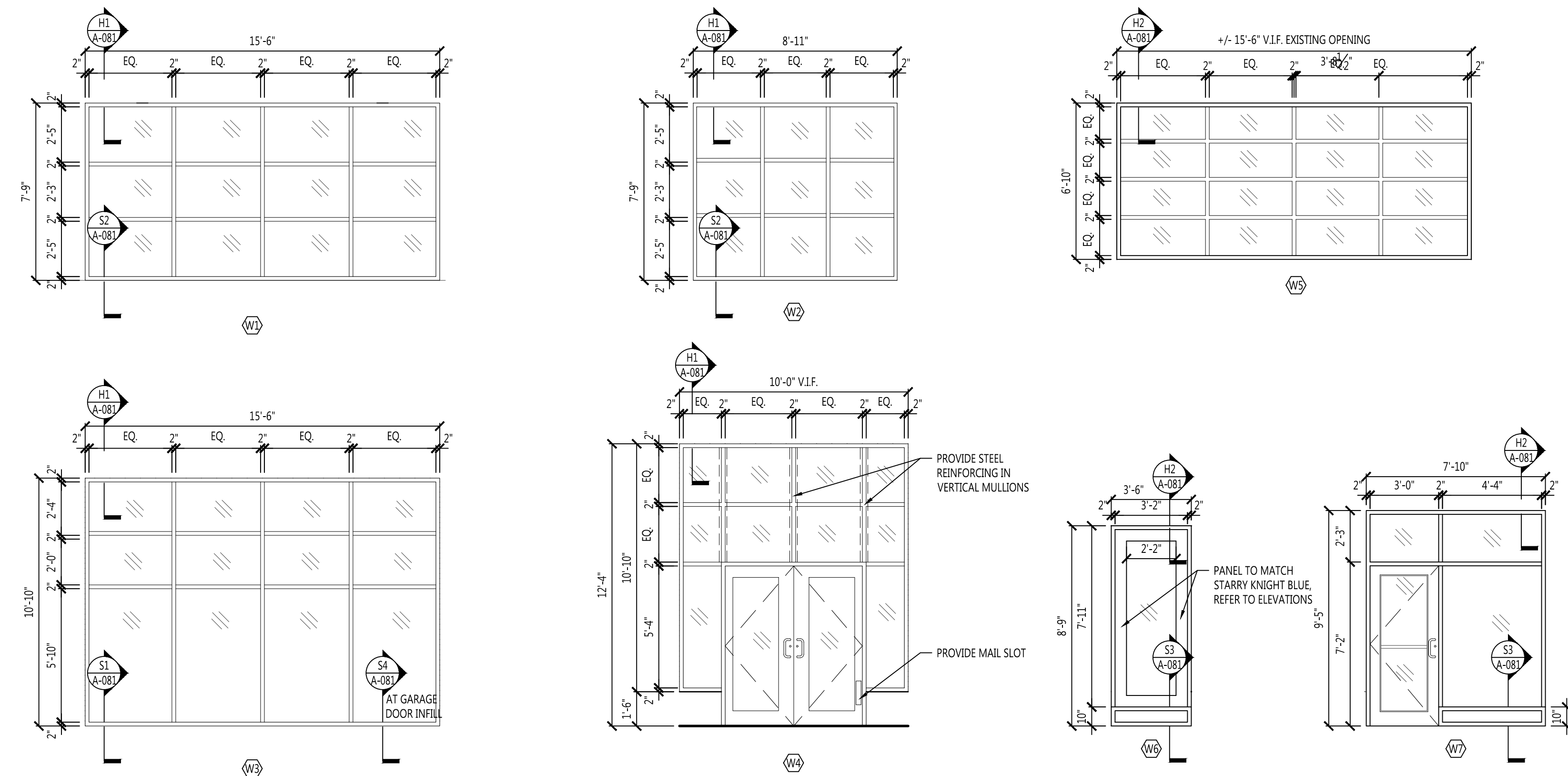
H1/J1 HOLLOW METAL SINGLE RABBETED FRAME WITH (1) LAYER GYP BD EACH SIDE AT HEAD AND JAMB DETAIL SCALE: 3"=1'-0"

STOREFRONT SCHEDULE								
TYPE	LOCATION	DESCRIPTION	OPENING SIZE	GLASS TYPE	U-FACTOR	SHGC	AIR LEAKAGE	NOTES
W1	EXTERIOR	ALUMINUM FRAMED STOREFRONT SYSTEM	7'-9" X 15'-6"	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W2	EXTERIOR		7'-9" X 8'-11"	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W3	EXTERIOR		10'-10" X 15'-6"	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W4	EXTERIOR		12'-4" X 10'-0" V.I.F.	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W5	EXTERIOR		6'-10" X 15'-6" V.I.F.	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W6	EXTERIOR		8'-9" X 3'-6" V.I.F.	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
W7	EXTERIOR		9'-5" X 7'-10" V.I.F.	TEMPERED	.34	.35	< 0.04 cfm/s.f.	SEE BELOW
1. TUBULITE T140000 FRAME COLOR TO BE WHITE. STOREFRONT GRILLES SHALL BE URBAN BRONZE								
2. ALL GLAZING TO BE LOW "E" CLEAR TEMPERED GLASS								
3. GLASS								
4. AIR GAP								
5. GLASS								
3. ENTRANCE DOORS MANUFACTURED BY YKK								
4. COORDINATE JAMB, SILL AND HEAD DETAIL DEPENDING ON STOREFRONT LOCATION.								
BUILDING ENVELOPE SEALING NOTES								
S2.4.2 STOREFRONT GLAZING AND COMMERCIAL ENTRANCE DOORS								
STOREFRONT GLAZING AND COMMERCIAL GLAZED SWINGING ENTRANCE DOORS SHALL BE TESTED FOR AIR LEAKAGE AT 1.57 LBS/SQ. FT. (PSF) (75 PA) IN ACCORDANCE WITH ASTM E 283. FOR STOREFRONT GLAZING, THE MAX. AIR LEAKAGE RATE SHALL BE 0.3 (CFM/FT <sup>2</sup> ) (5.5 M <sup>3</sup> /H X M <sup>2</sup> ) OF PENETRATION AREA. FOR COMMERCIAL GLAZED ENTRANCE DOORS THE MAX. AIR LEAKAGE RATE SHALL BE 1.00 (CFM/FT <sup>2</sup> ) (21.8 M <sup>3</sup> /H X M <sup>2</sup> ) OF DOOR AREA WHEN TESTED IN ACCORDANCE WITH ASTM E 283.								
THE FOLLOWING AREAS OF THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER-STOPPED TO MINIMIZE AIR LEAKAGE. SEE SHEET A-081 FOR DETAILS AND ADDITIONAL INFORMATION.								
A. JOINTS AROUND FENESTRATION AND DOOR FRAMES								
B. JUNCTIONS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AT BUILDING CORNERS, BETWEEN WALLS AND STRUCTURAL WALLS AND FLOORS OR ROOFS, AND BETWEEN WALLS AND ROOF OR WALL PANELS								
C. OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH ROOFS, WALLS AND FLOORS.								
D. SITE BUILT FENESTRATION AND DOORS.								
E. BUILDING ASSEMBLIES USED AS DUCTS OR PLENUMS								
F. JOINTS, SEAMS, AND PENETRATIONS OF VAPOR RETARDERS.								
G. ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.								
ALL JOINTS AND PENETRATIONS ARE CAULKED, GASKETED OR COVERED WITH MOISTURE VAPOR PERMEABLE WRAPPING MATERIALS INSTALLED IN ACCORDANCE WITH ECC S2.4 (AIR LEAKAGE (MANDATORY)) AND MANUFACTURERS INSTALLATION INSTRUCTIONS. ALL WINDOWS & DOOR ASSEMBLIES AND DAMPERS IN OUTDOOR AIR INTAKES AND EXHAUST OPENINGS CERTIFIED AS MEETING LEAKAGE REQUIREMENTS. PER THE INSPECTIONS OF ALL PENETRATIONS IN BUILDING ENVELOPE TO BE PERFORMED TO CONFIRM PENETRATIONS ARE SEALED IN COMPLIANCE WITH CODE. INSPECTIONS INCLUDE OUTDOOR INTAKE AND EXHAUST DAMPERS IF REQUIRED AND RECESSED LIGHTING SEALS WHERE LIGHTING IS IN THE BUILDING ENVELOPE								

DOOR SCHEDULE																	
GENERAL CONTRACTOR SHALL VERIFY ALL OPENINGS, DOORS AND HARDWARE AND REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT AND OWNER'S REPRESENTATIVE.																	
#	LOCATION	SIZE			OPERATION	DOOR			FRAME		FIRE RATING LABEL	HARDWARE SET	JAMB, HEAD, SILL DETAIL	U-FACTOR	SHGC	DESCRIPTION	
		THICKNESS	WIDTH	HEIGHT		TYPE	MATERIAL	FINISH	MATERIAL	FINISH							
1	ASLE TO STAIRS	1-3/4"	3'-0"	7'-0"	SWING	C	H.M.	PAINT	H.M.	PAINT	B	8	H2/J2-A-080				
2	EXTERIOR EGRESS	1-3/4"	3'-0"	7'-0"	SWING	C	H.M.	PAINT	H.M.	PAINT	--	1	H3/J3-A-080	0.36000			
3	INTERIOR LOADING AREA	PER MAN.	8'-0" PACKAGE WIDTH	7'-0"	SURFACE MOUNTED SLIDE	F	ALUM.	ANODIZED ALUM.	ALUM.	ANODIZED ALUM.	--	9		0.77000	0.21000	SEE NOTE #6	
4	ELECTRICAL ROOM	1-3/4"	3'-0"	7'-0"	SWING	D	H.M.	PAINT	H.M.	PAINT	B	2	H1/J1-A-080			PROVIDE 61DGD-FR14X14 FIRE RATED LOUVERS BY NAILOR	
5	1T. ROOM	0'-1 3/4"	3'-0"	7'-0"	SWING	D	H.M.	PAINT	H.M.	PAINT	--	4	H1/J1-A-080				
6	SPRINKLER/WATER SERVICE ROOM	1-3/4"	3'-0"	7'-0"	SWING	C	H.M.	PAINT	H.M.	PAINT	B	4	H1/J1-A-080				
7	OFFICE ENTRY	1-3/4"	6'-0"	7'-0"	DOUBLE SWING	G	ALUM.	URBAN BRONZE	ALUM.	URBAN BRONZE	--	5					
8	CORRIDOR TO OFFICE	1-3/4"	3'-0"	7'-0"	SWING	A	ALUM.	ANODIZED ALUM.	ALUM.	ANODIZED ALUM.	--	6	H2/J2-A-080				
9	H.C. TOILET	1-3/4"	3'-0"	7'-0"	SWING	B	H.M.	PAINT	H.M.	PAINT	--	7	H1/J1-A-080				
10	JANITOR CLOSET	1-3/4"	3'-0"	7'-0"	SWING	C	H.M.	PAINT	H.M.	PAINT	--	4	H1/J1-A-080				
11	BREAKROOM	1-3/4"	3'-0"	7'-0"	SWING	D	H.M.	PAINT	H.M.	PAINT	--	6	H1/J1-A-080				
12	MACHINE ROOM "A"	1-3/4"	3'-0"	7'-0"	SWING	E	H.M.	PAINT	H.M.	PAINT	B	4	H1/J1-A-080			PROVIDE 61DGD-FR14X14 FIRE RATED LOUVERS BY NAILOR	
13	MACHINE ROOM "B"	1-3/4"	3'-0"	7'-0"	SWING	E	H.M.	PAINT	H.M.	PAINT	B	4	H1/J1-A-080			PROVIDE 61DGD-FR14X14 FIRE RATED LOUVERS BY NAILOR	
14	EXTERIOR LOADING AREA #1	PER MAN.	15'-6" V.I.F.	12'-0"	SURFACE MOUNTED ROLLING	H	H.M.	PAINT	H.M.	PAINT	--	3	H5/S5-A-081	0.20000		SEE NOTE # 12	
15	EXTERIOR LOADING AREA #2	PER MAN.	24'-9" V.I.F.	12'-0"	SURFACE MOUNTED ROLLING	H	H.M.	PAINT	H.M.	PAINT	--	3	H5/S5-A-081	0.20000		SEE NOTE # 12	
16	EXTERIOR DOORS AT MCLEAN AVE.	1-3/4"	3'-0"	7'-0"	SWING	C	ALUM.	ANODIZED ALUM.	ALUM.	ANODIZED ALUM.	--	1	H3/J3-A-080				
17	EXTERIOR EGRESS DOOR AT MCLEAN AVE.	1-3/4"	3'-0"	7'-0"	SWING	C	ALUM.	ANODIZED ALUM.	ALUM.	ANODIZED ALUM.	--	1	H3/J3-A080				
ALL EXTERIOR DOORS ARE TO HAVE A U FACTOR OF .31 AND ALL DOORS WITH GLAZING ARE TO HAVE AN SHGC OF .82 U.N.O.																	
NOTES: 1. ALL CUSTOMER SWING DOORS SHALL HAVE STAINLESS STEEL KICK PLATES ON "PUSH" SIDE OF DOOR. 2. ALL EXTERIOR DOORS, DOORS BETWEEN STORAGE AND OFFICE, AND DOORS BETWEEN CONDITIONED AND NON CONDITIONED SPACES SHALL RECEIVE WEATHER STRIPPING ON ALL 4 SIDES AND BE INSULATED WITH POLY-URETHANE FOAM. 3. ALL HARDWARE SHALL MEET UL RATINGS PER CODE. 4. GENERAL CONTRACTOR TO PROVIDE THE FOLLOWING: GRAND MASTER KEY TO OPEN ALL DOORS ON SITE. MASTER KEY FOR THE OFFICE. KEY TO UTILITY DOOR AND REMAINDER OF SITE DOORS, TUMBLER TYPE HARDWARE OR EQUAL. 5. PRIME AND PAINT ALL INTERIOR SWING DOORS AND FRAMES TO MATCH STARRY NIGHT BLUE U.N.O. PRIME AND PAINT ALL EXTERIOR SWING DOORS AND FRAMES- REFER TO EXTERIOR ELEVATIONS FOR COLORS. 6. SLIDING ACCESS DOOR TO BE STANLEY DURAGLIDE 2000 SURFACE MOUNTED SINGLE SLIDE IN CLASS II CLEAR ANODIZED FINISH. DOOR SHALL HAVE FULL BREAK OUT IN CASE OF AN EMERGENCY. DOOR TO HAVE SURFACE APPLIED THRESHOLD. DOORS TO HAVE PROVISIONS FOR KEYPAD ACCESS. 7. FIRE RATING: A LABEL: 3 HOURS B LABEL: 90 MINUTES C LABEL: 45 MINUTES 8. ALL HOLLOW METAL DOORS TO HAVE WELDED STEEL FRAMES. FRAMES TO BE 14 GAUGE GALVANIZED STEEL DOORS TO BE 16 GA. GALVANIZED STEEL. 9. ALL EXTERIOR HOLLOW METAL DOORS AND FRAMES TO BE GALVANIZED. 10. ALL COMMERCIAL HARDWARE SHALL MEET ADA ANS1 ACCESSIBILITY REQUIREMENTS. 11. ALL DOORS IN MASONRY ARE TO HAVE THEIR FRAMES FILLED/GROUTED SOLID. IF REQUIRED, RUN CONDUIT FOR KEYPAD PRIOR TO FILLING. 12. OVERHEAD DOOR TO BE UNITED STEEL PRODUCTS MODEL 500. DOOR TO BE FACE MOUNTED ON EXTERIOR. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.																	



1 DOOR ELEVATION TYPES SCALE: 1/4" = 1'-0"



2 STOREFRONT ELEVATION TYPES SCALE: 1/4" = 1'-0"

DOOR HARDWARE SCHEDULE					
SET	LOCATION	DESCRIPTION			
SET #1	EXTERIOR EGRESS	3 HINGE 1 FIRE EXIT HARDWARE 1 SURFACE CLOSER 1 CUSH SHOE SUPPORT 1 KICK PLATE 1 SET SEALS 1 DOOR SWEEP 1 THRESHOLD	5881 4.5 X 4.5 NRP 98-86-F 4040XP CUSH TBWMS 4040XP-30 8400 10"X1 1/2" LDW BAE 7055A C627A 423HD	630 626 689 689 630 7055A CL NGP CL NGP	IVE VON LCN LCN IVE NGP CL NGP
		INSTALL WEATHERSTRIP BEFORE CLOSER. DO NOT NOTCH WEATHER STRIP AROUND CLOSER BRACKET. EXTERIOR DOOR ONLY			
SET #2	ELECTRICAL ROOM DOOR	3 HINGE 1 STOREROOM LOCK 1 SURFACE CLOSER 1 CUSH SHOE SUPPORT 3 SILENCER 1 FIRE EXIT HARDWARE	5881 4.5 X 4.5 NRP NDB8XP RND 4040XP SHCUSH 4040XP-30 5864 98-86-F	632 626 689 689 630 626	IVE SCH LCN LCN IVE VON
SET #3	OVERHEAD GARAGE DOOR	DOOR TO HAVE INTERNAL MOTOR WITH SHROUD. PROVIDE DUAL PHOTO MONITOR EYE. PROVIDE 2 SETS OF PUSH BUTTON DOORS. CONTROL PER DOOR- 1 IN LOADING BAY, 1 IN SALES OFFICE			
		REMAINING HARDWARE BY DOOR MFG.			
SET #4	EQUIPMENT ROOMS	3 HINGE 1 STOREROOM LOCK 1 SURFACE CLOSER 1 CUSH SHOE SUPPORT 3 SILENCER	5881 4.5 X 4.5 NRP NDB8XP RND 4040XP SHCUSH 4040XP-30 5864	632 626 689 689 630	IVE SCH LCN LCN IVE
SET #5	RETAIL ENTRANCE	1 CONT HINGE 1 DEADBOLT 1 MORTISE CYLINDER 2 INDICATOR 1 DEADBOLT LEVER 1 PUSH/PULL BAR 1 SURFACE CLOSER 1 MOUNTING PLATE 1 PERIMETER SEALS 1 DOOR SWEEP 1 THRESHOLD	112HD MS1851 20-001 114 4069 4550 9190-10" STD 4021 MC TBWMS 4010-18 DOOR MFG STD DOOR MFG STD DOOR MFG STD	628 628 626 628 628 630 689 689 AL AL	IVE ADA SCH ADA ADA IVE LCN LCN -
		3 HINGE 1 LOCK SET 1 KICK PLATE 1 WALL STOP 3 SILENCER	3881 4.5X4.5 AL10S SAT 8400 10" 1-1/2" LDW BAE WS407CCV 5864	652 626 630 630 630	IVE SCH IVE IVE IVE
SET #7	TOILETS IN-SWING	3 HINGE 1 PRIVACY SET 1 KICK PLATE 1 WALL STOP 1 SEAL 1 DOOR SWEEP 1 THRESHOLD	3881 4.5 X 4.5 NRP AL10S SAT 8400 10" 1-1/2" LDW BAE WS407CCV 7055A 200NA 423HD	630 619 630 630 CL CL AL	IVE SCH IVE IVE NGP CL NGP
SET #8	ASLE TO STAIR (SELF-CLOSING)	3 HINGE 1 FIRE EXIT HARDWARE 1 SURFACE CLOSER 1 CUSH SHOE SUPPORT 1 KICK PLATE 1 DOOR SWEEP 1 THRESHOLD	5881 4.5 X 4.5 NRP 98-86-F 4040XP CUSH TBWMS 4040XP-30 8400 10" X 1-1/2" LDW BAE 200NA 423HD	630 626 689 689 630 CL AL	IVE VON LCN LCN IVE CL NGP
SET #9	SLIDING ACCESS DOOR	1 ELECTRONIC KEYPAD	KP2000EM	628	SCE
REMAINING HARDWARE BY DOOR MFG. ACCESS BY KEYPAD. USER PRESENTS PINCODE. LEVER IS RELEASED. SLIDING DOOR OPENS. DOOR TO HAVE FULL BREAKOUT IN CASE OF EMERGENCY.					

NOTES:  
1. PROVIDE TWO (2) SETS OF HARDWARE FOR ALL DOUBLE SWING DOORS  
2. ALL DOORS INTO STAIR TOWERS FROM ASLE ARE TO HAVE DOOR ALARMS TIED INTO SECURITY SYSTEM. ALARM TO SOUND AT DOOR LOCATIONS AND WITHIN SALES OFFICE.  
3. DOOR HARDWARE SHALL BE VERIFIED BY CONTRACTOR AND SUBMITTED TO ARCHITECT FOR REVIEW BEFORE PURCHASING.



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MEP CONSULTANT:

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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

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ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT





CONSULTANTS:

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FRANK G. RELF ARCHITECT, P.C.

[illegible]

ISSUE:

[illegible]

CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

## DOOR AND STOREFRONT JAMB AND SILL DETAILS

SEAL &amp; SIGNATURE

DATE: 6/13/18

PROJECT No.	18014
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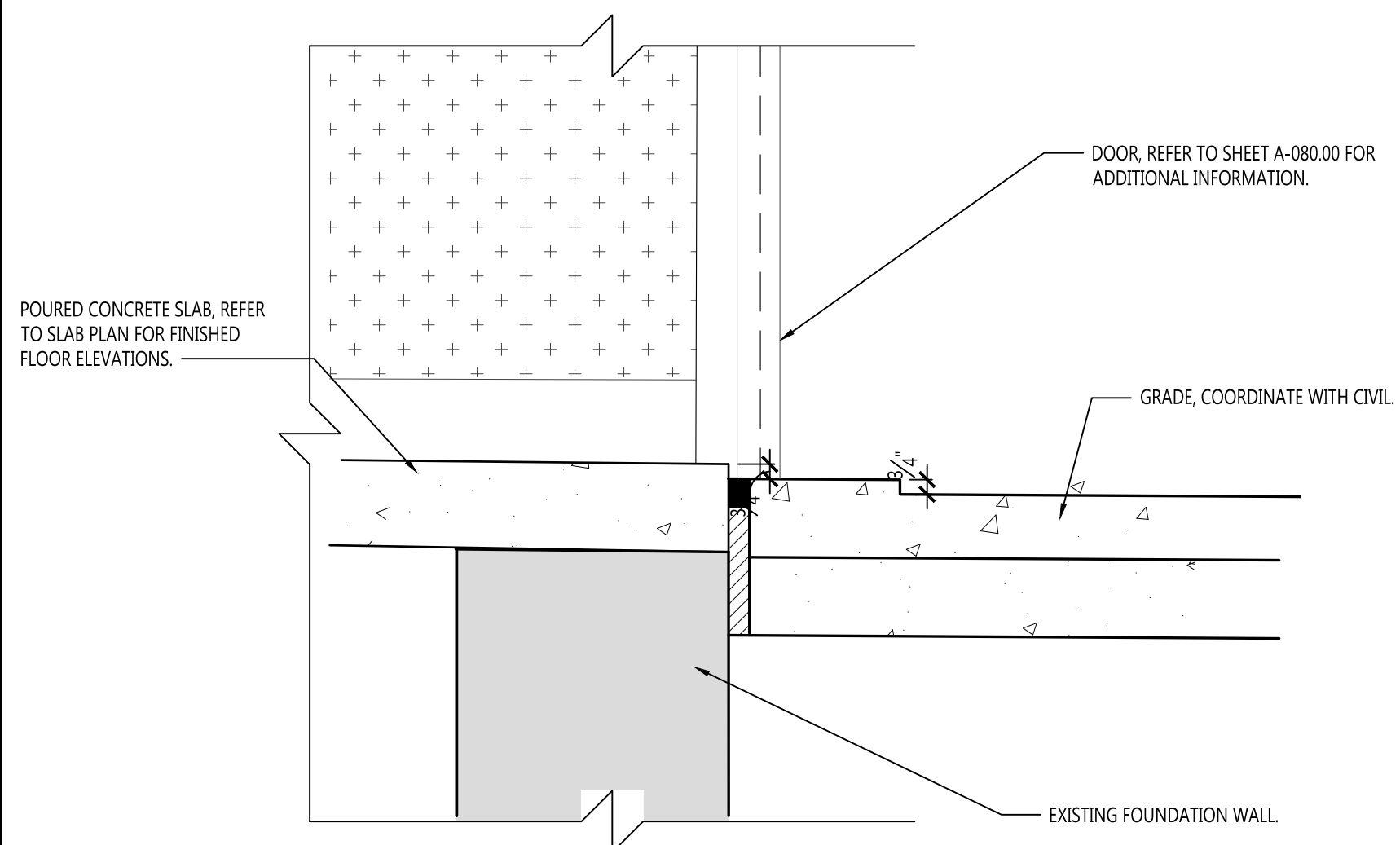
DRAWING BY: J.R.

CHK BY:	J.N.
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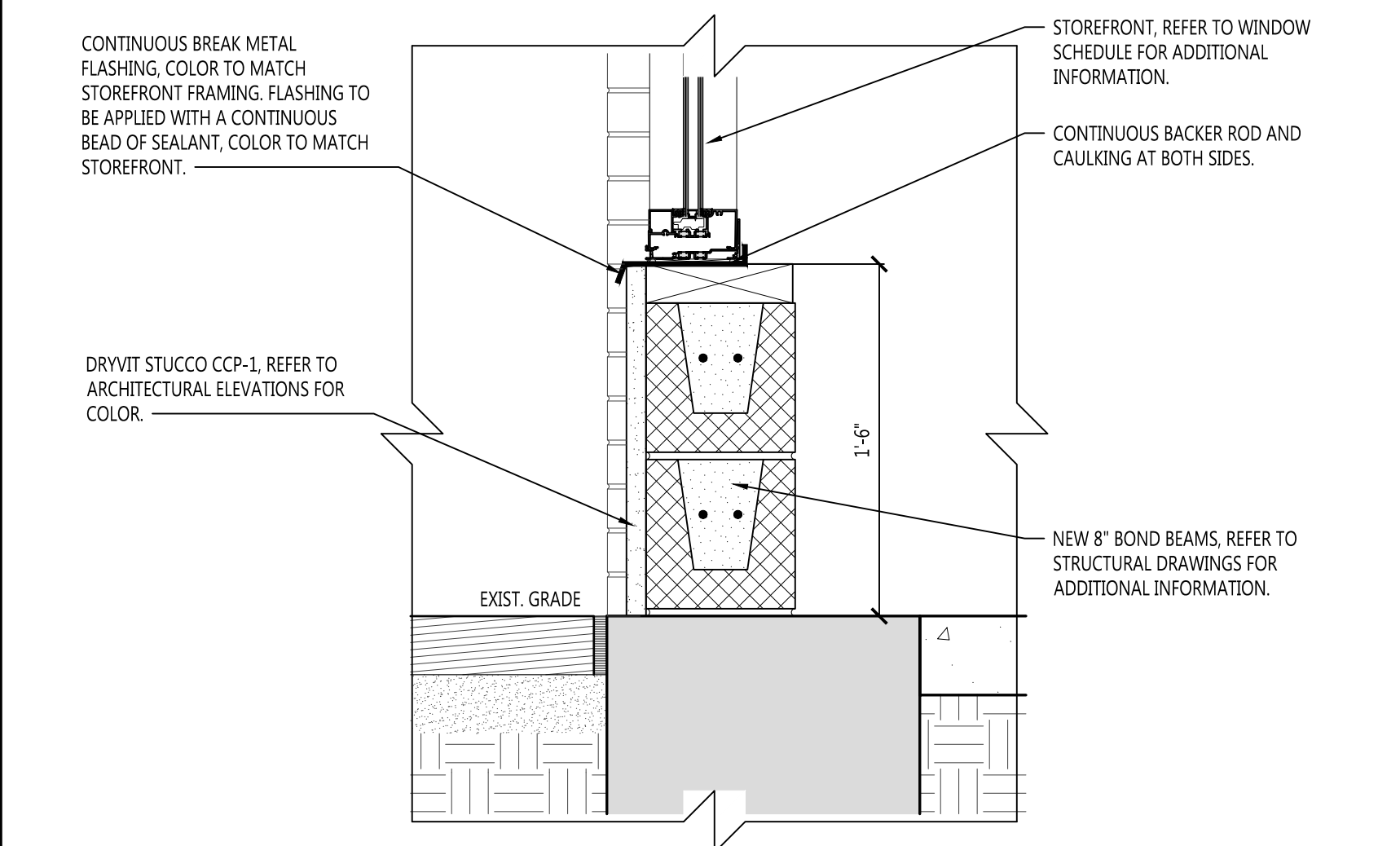
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ALT	11 OF 104
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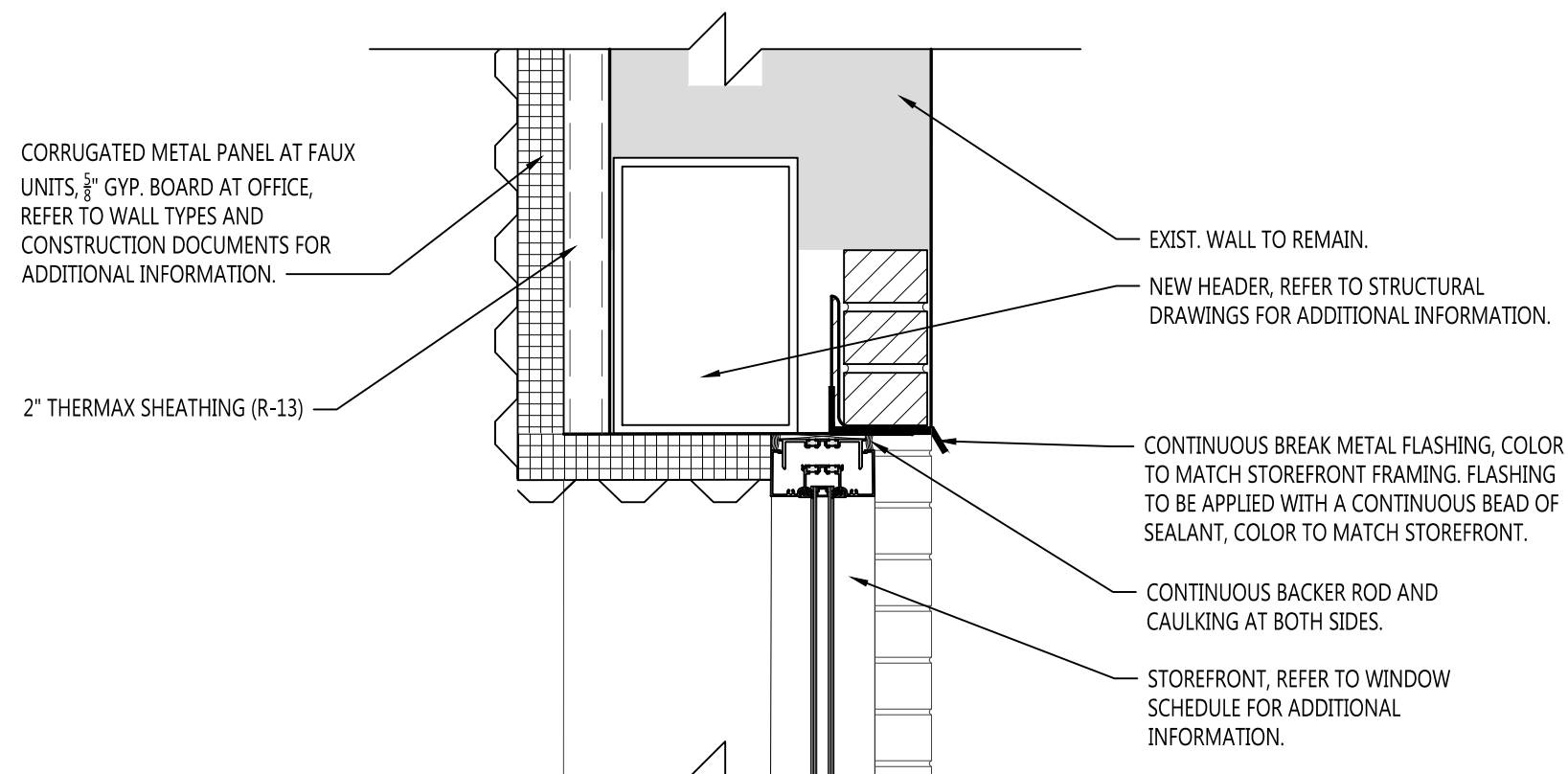
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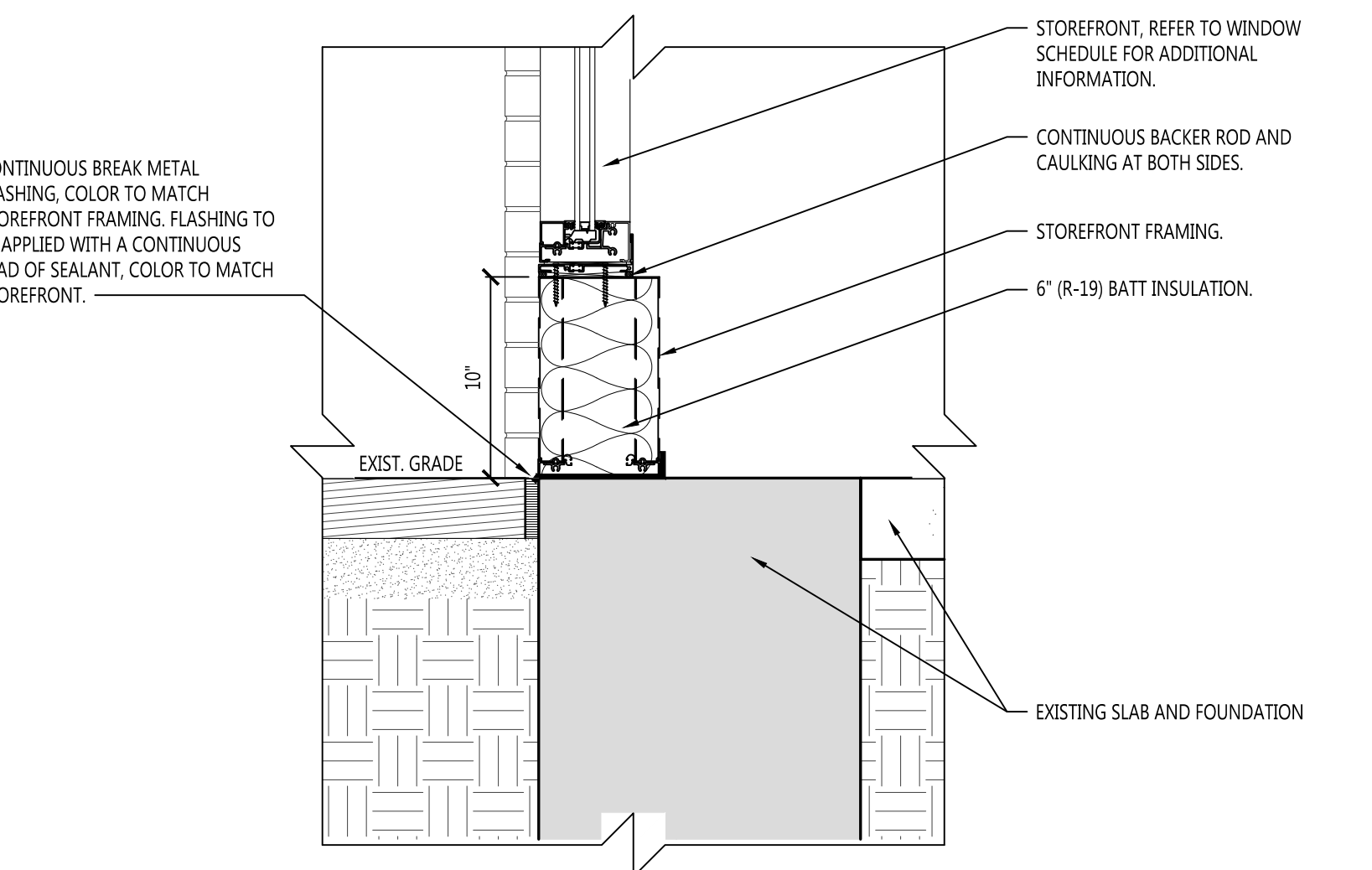
H5/S5 STOREFRONT SILL DETAIL AT BLOCK INFILL SCALE: 1 1/2"=1'-0"



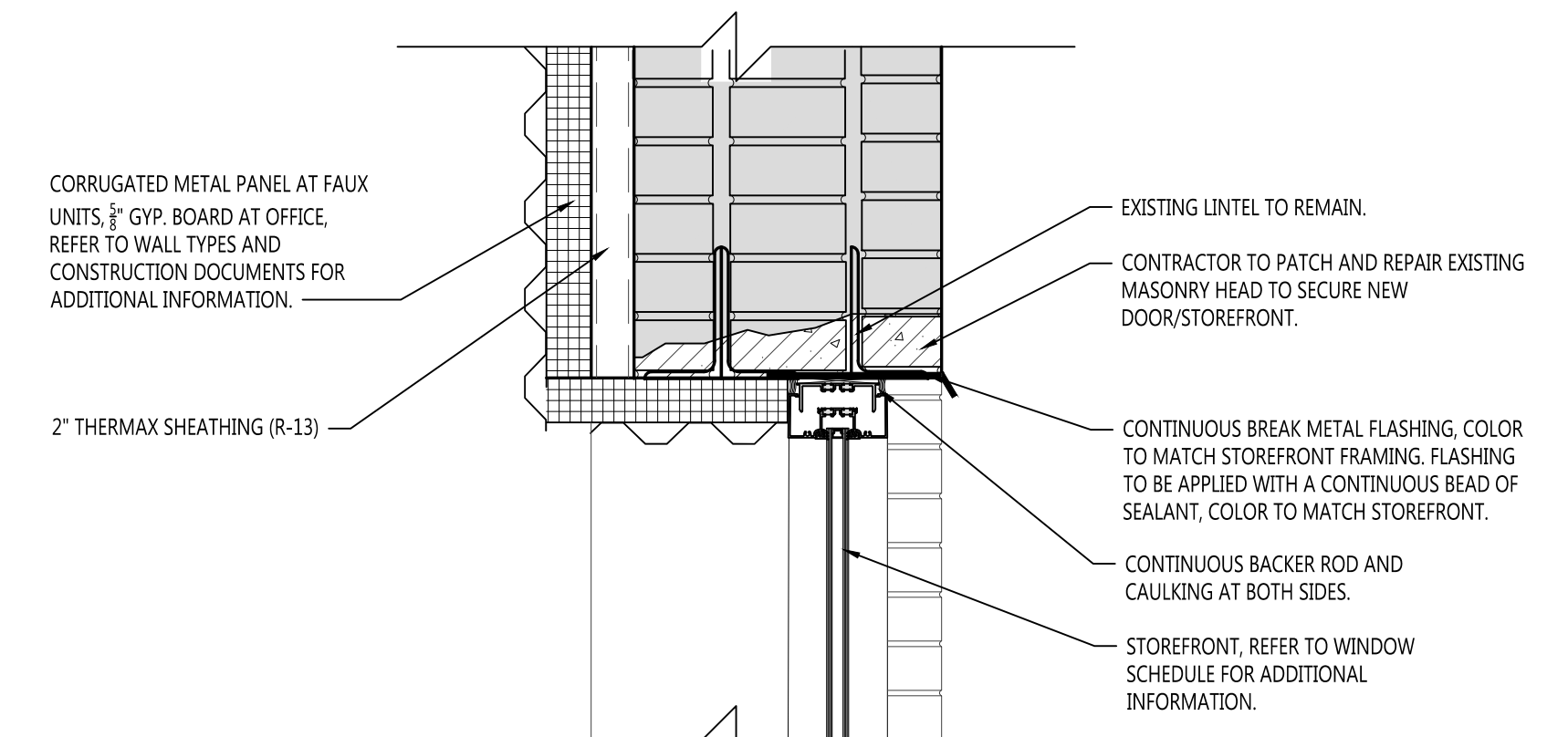
S4	STOREFRONT SILL DETAIL AT BLOCK INFILL	SCALE: 1 1/2"=1'-0"
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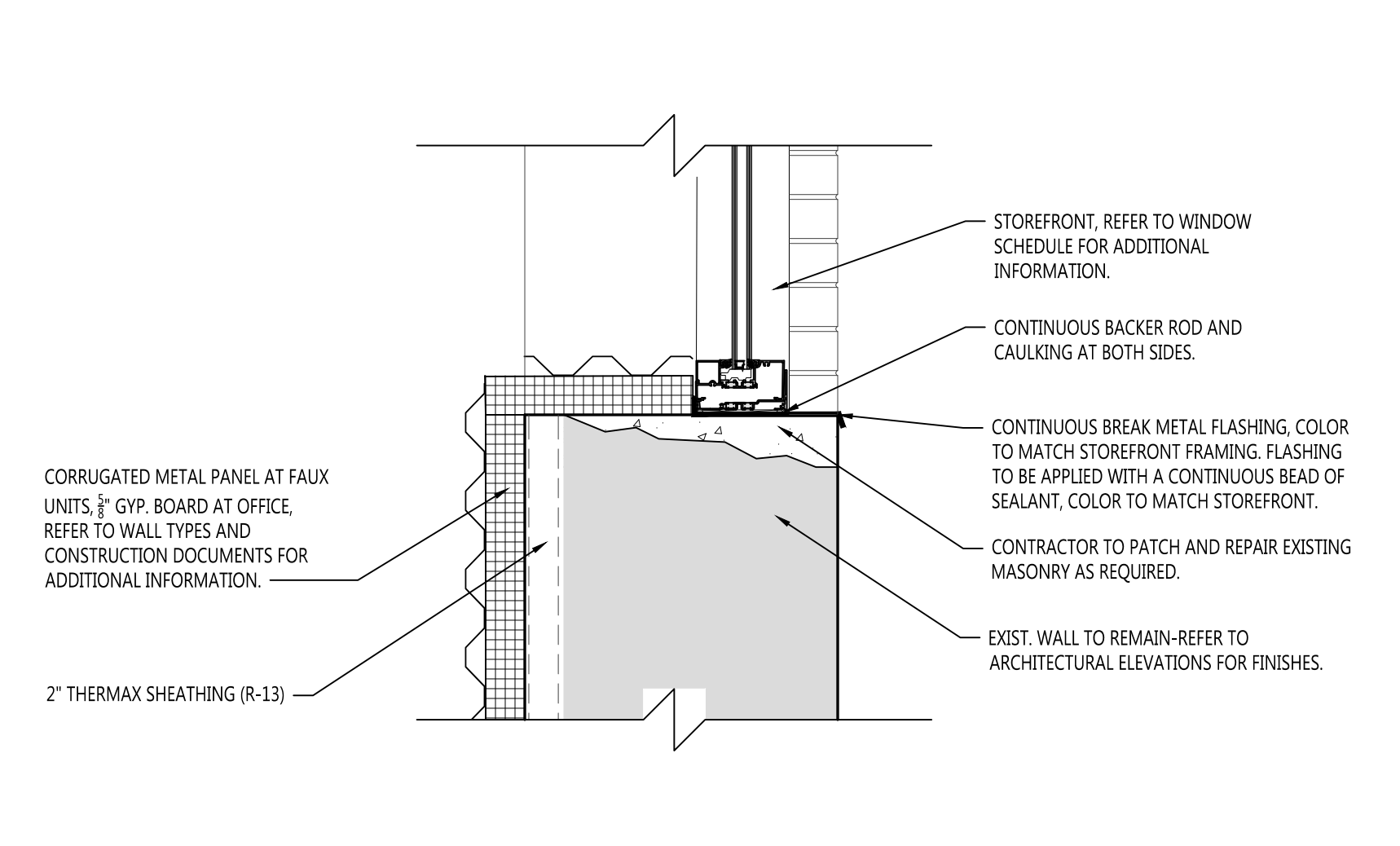
H3 HEAD DETAIL AT EXISTING OPENINGS AT SECOND FLOOR SCALE: 1 1/2"=1'-0"



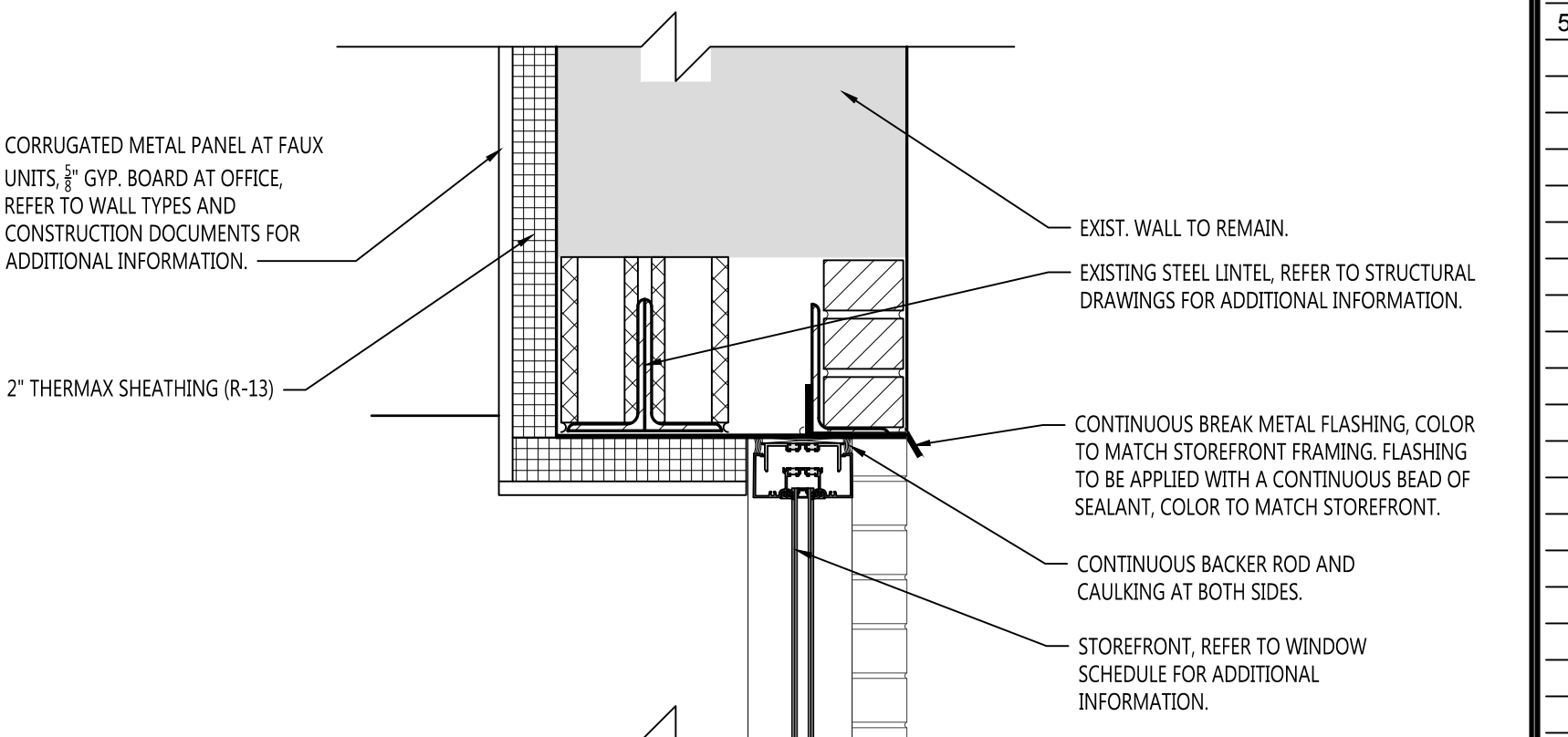
53 STOREFRONT SILL DETAIL SCALE: 1 1/2"=1'-0"



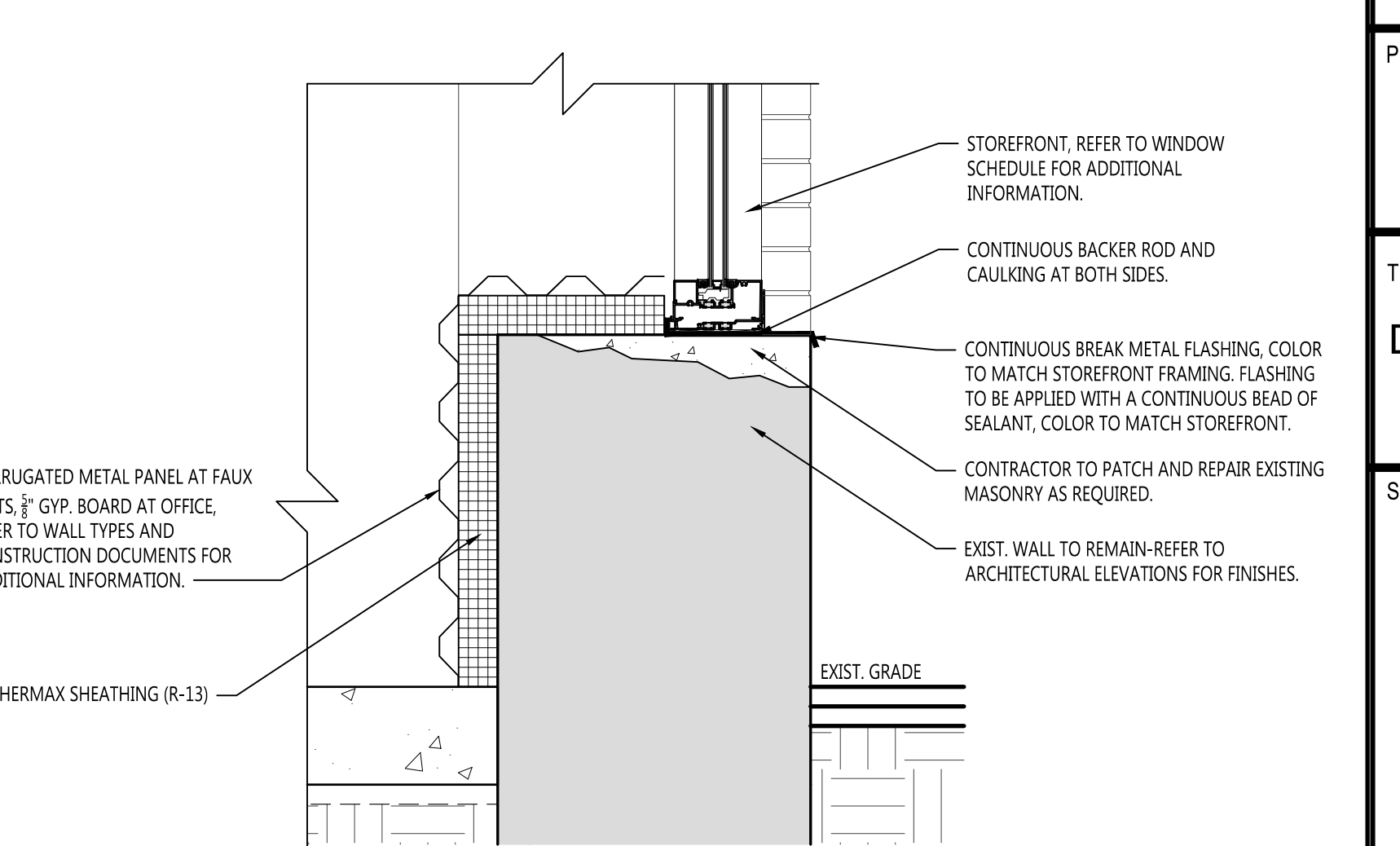
H2	HEAD DETAIL AT EXISTING OPENINGS	SCALE: 1 1/2"=1'-0"
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S2 STOREFRONT SILL DETAIL AT SECOND FLOOR SCALE: 1 1/2"=1'-0"

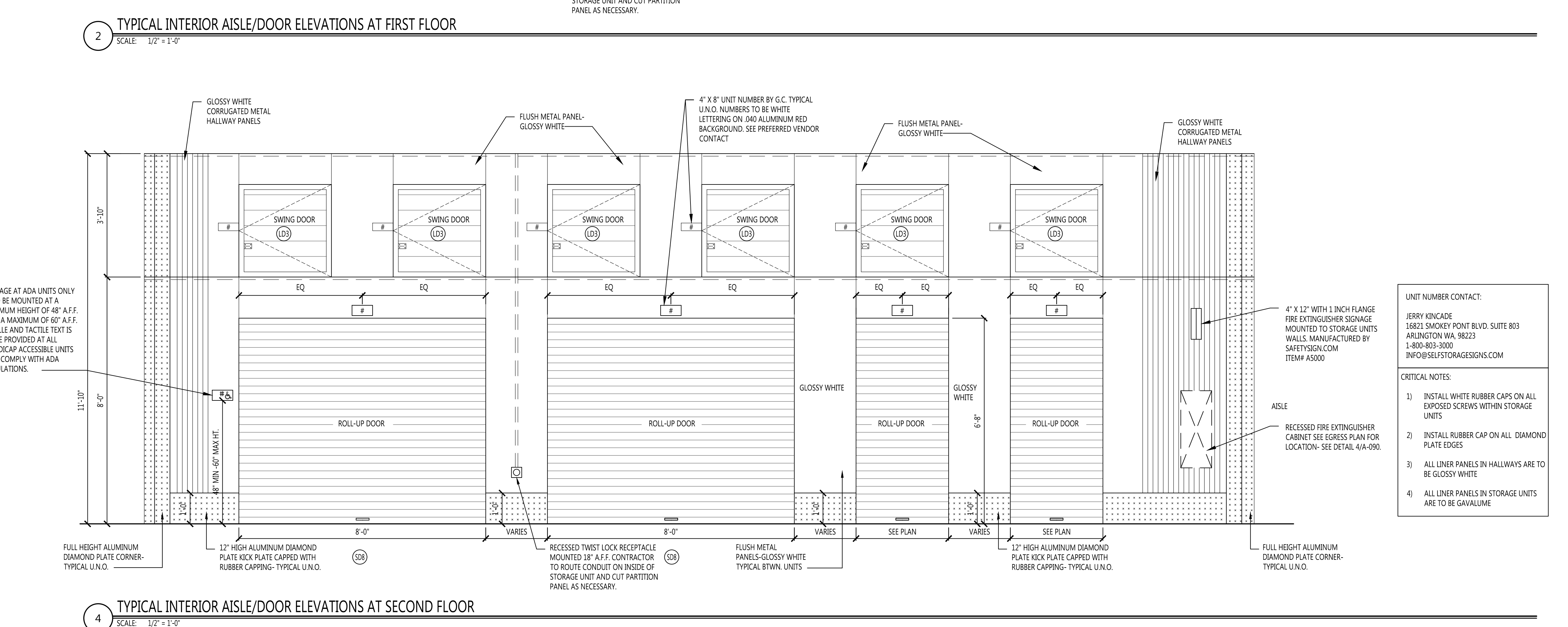
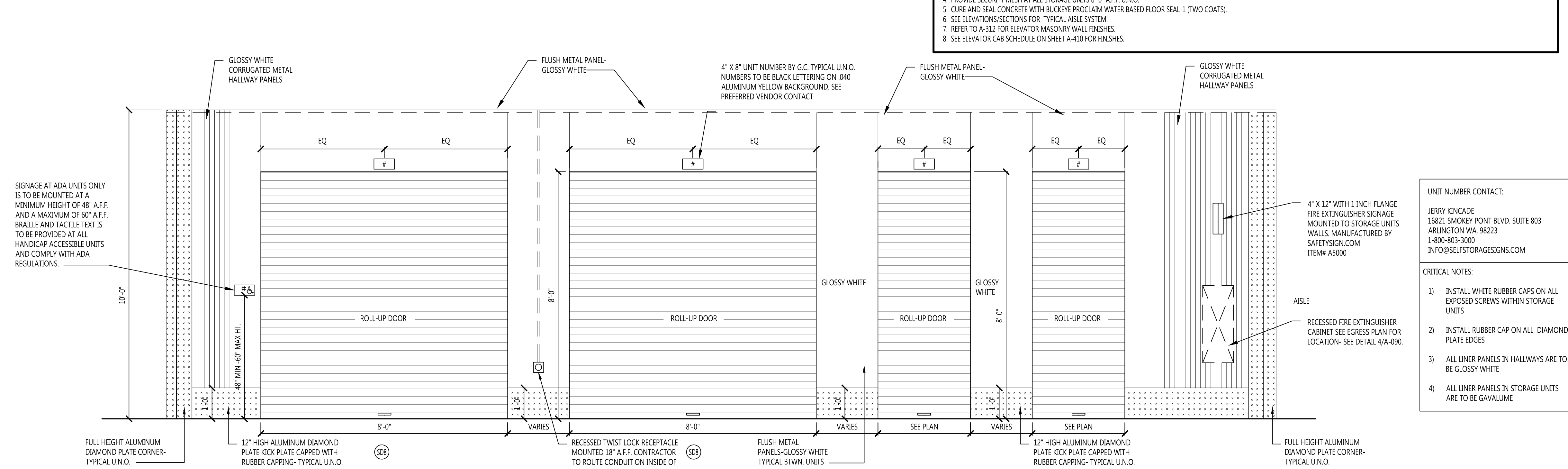
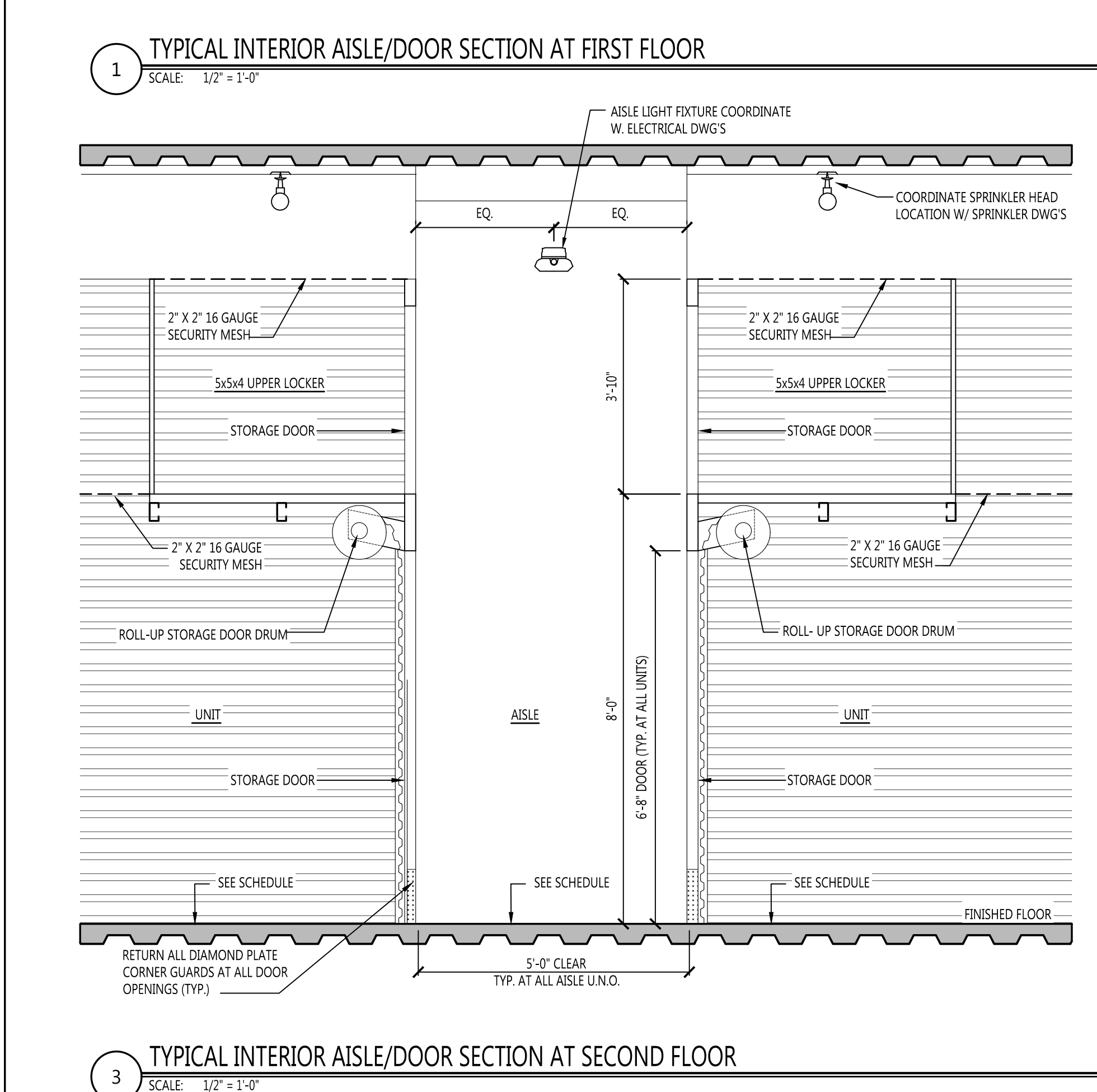
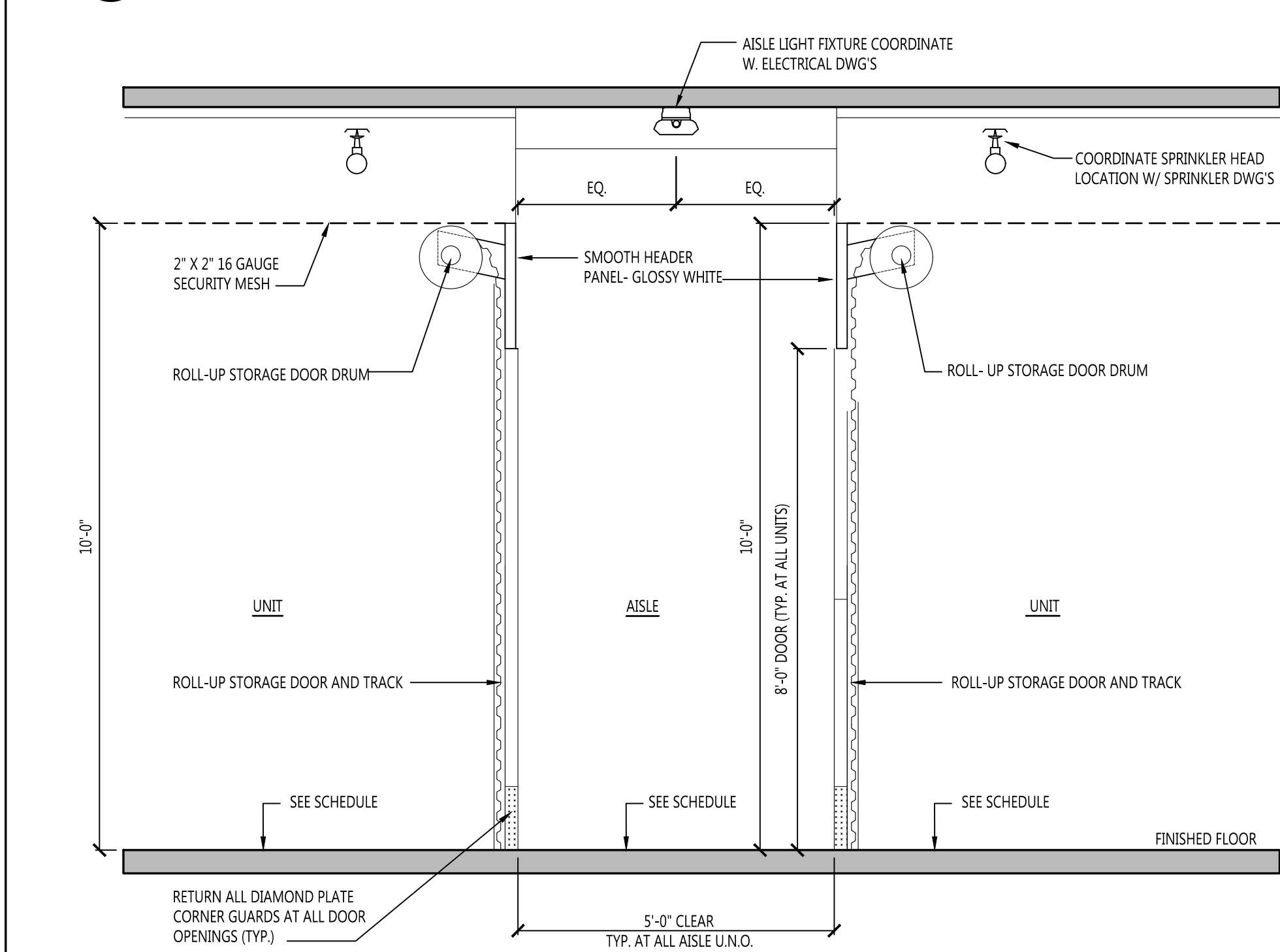
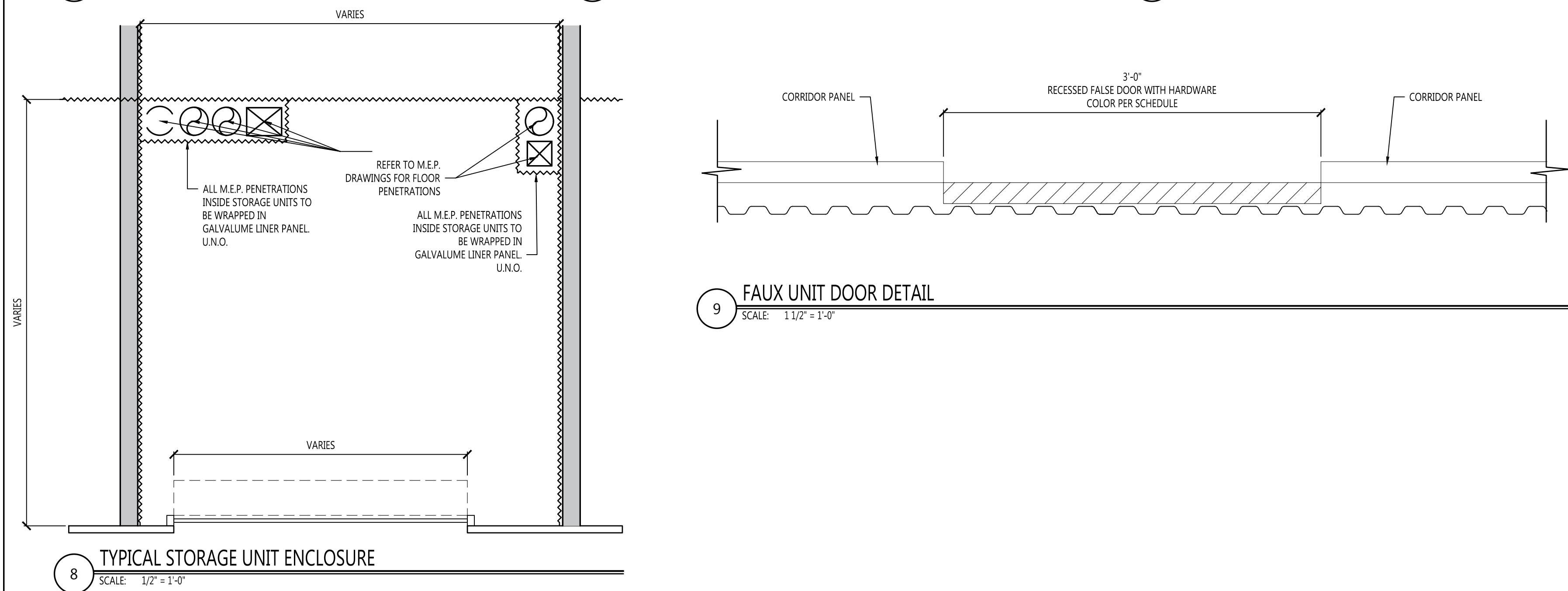
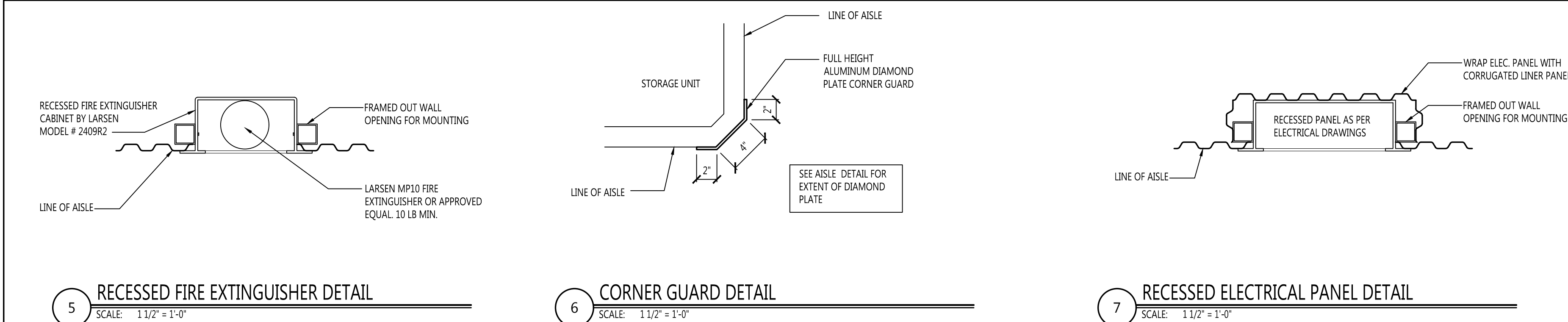


HEAD DETAIL AT NEW/ENLARGED OPENINGS



STOREFRONT SILL DETAIL AT GRADE





STORAGE DOOR HARDWARE		
ROOM	LOCATION	REMARKS
SET #1	STORAGE SWING DOORS	GOLD CHATEAU CYLINDER LATCH STANDARD HINGES REMOVABLE CORE
SET #2	STORAGE COIL DOORS	GOLD CHATEAU CYLINDER LATCH 2 GOLD LIFT HANDLES TENSION ADJUSTER VINYL ASTRAGAL INSIDE DOOR STOP

SELF STORAGE ADA REQUIREMENTS	
	SYMBOL INDICATED ADA ACCESSIBLE UNITS. REFER TO PLANS FOR LOCATIONS
1. A DOOR PULL MUST BE INSTALLED ON DOOR FACE NO LOWER THAN 15" AND NO HIGHER THAN 48" FROM THE FLOOR. 2. ALL SWING DOORS ARE TO OPEN 180 DEGREES. 3. A DOOR PULL MUST BE INSTALLED ON THE BOTTOM BAR OF THE DOOR AND HANG BETWEEN 15" AND 48" OFF FLOOR WHEN DOOR IS FULLY OPENED. 4. DOOR MUST BE TENSIONED TO 5 POUNDS OF FORCE MAXIMUM TO OPEN DOOR. 5. ALL UNITS ARE ACCESSIBLE BY ELEVATOR.	
NOTE: ALL DOOR PULLS TO HAVE A LOOP LARGE ENOUGH TO FIT A FIRST THROUGH	
NUMBER OF ADA COMPLIANT UNITS REQUIRED: UNITS IN FACILITY: 201 UNITS AND OVER MIN. NUMBER OF REQUIRED ACCESSIBLE UNITS: 10 UNITS PLUS 2 PERCENT OF TOTAL NUMBER OF UNITS OVER 200 CALCULATION: 1818 STORAGE UNITS 1818 ÷ 200 = 9.09 × 10 = 90.90 = 91 + 10 = 101 REQUIRED ADA COMPLIANT UNITS PROVIDE 43 ADA COMPLIANT UNITS	

STORAGE DOOR SCHEDULE							
GENERAL CONTRACTOR SHALL VERIFY ALL OPENINGS, DOORS AND HARDWARE AND REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT AND GENERAL CONTRACTOR							
TAG	LOCATION	SIZE		OPERATION	DOOR		REMARKS
		WIDTH	HEIGHT		MATERIAL	FINISH	
(SD1)	INT. STORAGE UNITS	3'-0"	8'-0" ON FIRST 6'-8" ON 2ND AND 3RD	ROLL UP/COIL	LT. GA. MTL.	UB YELLOW	NOTE: FIRST FLOOR DOORS ONLY TO BE 8'-0" TALL
(LD3)	INT. STORAGE UNITS	3'-0"	3'-0"	SWING	LT. GA. MTL.	UB YELLOW	
(SD5)	INT. STORAGE UNITS	5'-0"	8'-0" ON FIRST 6'-8" ON 2ND AND 3RD	ROLL UP/COIL	LT. GA. MTL.	UB YELLOW	NOTE: FIRST FLOOR DOORS ONLY TO BE 8'-0" TALL
(SD6)	INT. STORAGE UNITS	6'-0"	8'-0" ON FIRST 6'-8" ON 2ND AND 3RD	ROLL UP/COIL	LT. GA. MTL.	UB YELLOW	NOTE: FIRST FLOOR DOORS ONLY TO BE 8'-0" TALL
(SD3A)	MOCK UNIT ACCESS	3'-0"	6'-8"	SWING	LT. GA. MTL.	UB YELLOW	
(SD8)	INT. STORAGE UNITS	8'-0"	8'-0" ON FIRST 6'-8" ON 2ND AND 3RD	ROLL UP/COIL	LT. GA. MTL.	UB YELLOW	NOTE: FIRST FLOOR DOORS ONLY TO BE 8'-0" TALL
(DD)	MOCK UNITS	3'-0"	6'-8"	FIXED	LT. GA. MTL.	UB YELLOW	

NOTES:  
 1. MANUFACTURER IS RESPONSIBLE FOR PROPER DELIVERY OF UNDAMAGED DOORS TO THE SITE. CONTRACTOR IS NOT TO ACCEPT DAMAGED DOORS.  
 2. ALL SWING DOORS ARE TO OPEN 180 DEGREES.  
 3. ALL ROLL UP STORAGE TO BE JANUS MODEL 650 OR APPROVED EQUAL.  
 4. ALL SWING STORAGE DOORS TO BE JANUS CORA DOOR OR EQUAL.

STORAGE AREA FINISH SCHEDULE				
ROOM	FLOOR	WALLS AND TRIM	CEILING	REMARKS
ELEVATOR LOBBY	CPT-1	SEE NOTE #7	NOTE #1, #3	N/A
BASE		NOTE #1, #3		
WALL		NOTE #1, #3		
MAT.		NOTE #1, #3		
REMARKS				NOTE #7, #8
ASELES	CPT-1	SEE NOTE #6	SEE NOTE #6	N/A
STORAGE UNITS	CONC. NOTE #5	SEE NOTE #6	N/A	NOTE #4
STAIRS	METAL STAMPED LANDINGS	SEE NOTE #3	NOTE #1	N/A
ELECTRICAL ROOM & SPRINKLER ROOM	CONC. - NOTE #5	SEE NOTE #3	NOTE #1	N/A
LOADING AREAS	SIKA-ELASTIC 715 TOP COAT	SEE NOTE #3	NOTE #1, #3	N/A

NOTES:  
 1. PRIME AND PAINT ALL MASONRY AND GYP. BOARD WALLS PT-5 THAT ARE EXPOSED OR VISIBLE FROM AISLES, LOADING AND ENTRY AREAS U.N.O. INTERIOR STAIR CMU WALLS SHALL NOT BE PAINTED  
 2. PROVIDE GALVANIZED CORRUGATED METAL SHEATHING ON ALL DRYWALL THAT IS EXPOSED INSIDE THE STORAGE UNIT OR WITHIN THE STORAGE AREA.  
 3. PROVIDE 48" TALL MIRRORRED ALUMINUM DIAMOND PLATE WAINSCOT @ GYP. BD./ CORRUGATED PANELS ARE USED AT STORAGE SIDE.  
 4. PROVIDE SECURITY MESH AT ALL STORAGE UNITS 8'-0" A.F.F. U.N.O.  
 5. CURE AND SEAL CONCRETE WITH BUCKEYE PROCLAIM WATER BASED FLOOR SEAL-1 (TWO COATS).  
 6. SEE ELEVATIONS/SECTIONS FOR TYPICAL AISLE SYSTEM.  
 7. REFER TO A-312 FOR ELEVATOR MASONRY WALL FINISHES.  
 8. SEE ELEVATOR CAB SCHEDULE ON SHEET A-410 FOR FINISHES.

UNIT NUMBER CONTACT:  
 JERRY KINCADE  
 16821 SMOKEY PONT BLVD. SUITE 803  
 ARLINGTON WA 98223  
 1-800-803-3000  
 INFO@SELFSTORAGEDESIGNS.COM

CRITICAL NOTES:  
 1) INSTALL WHITE RUBBER CAPS ON ALL EXPOSED SCREWS WITHIN STORAGE UNITS  
 2) INSTALL RUBBER CAP ON ALL DIAMOND PLATE EDGES  
 3) ALL LINER PANELS IN HALLWAYS ARE TO BE GLOSSY WHITE  
 4) ALL LINER PANELS IN STORAGE UNITS ARE TO BE GALVALUME

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**FRANK G. RELF ARCHITECT, P.C.**

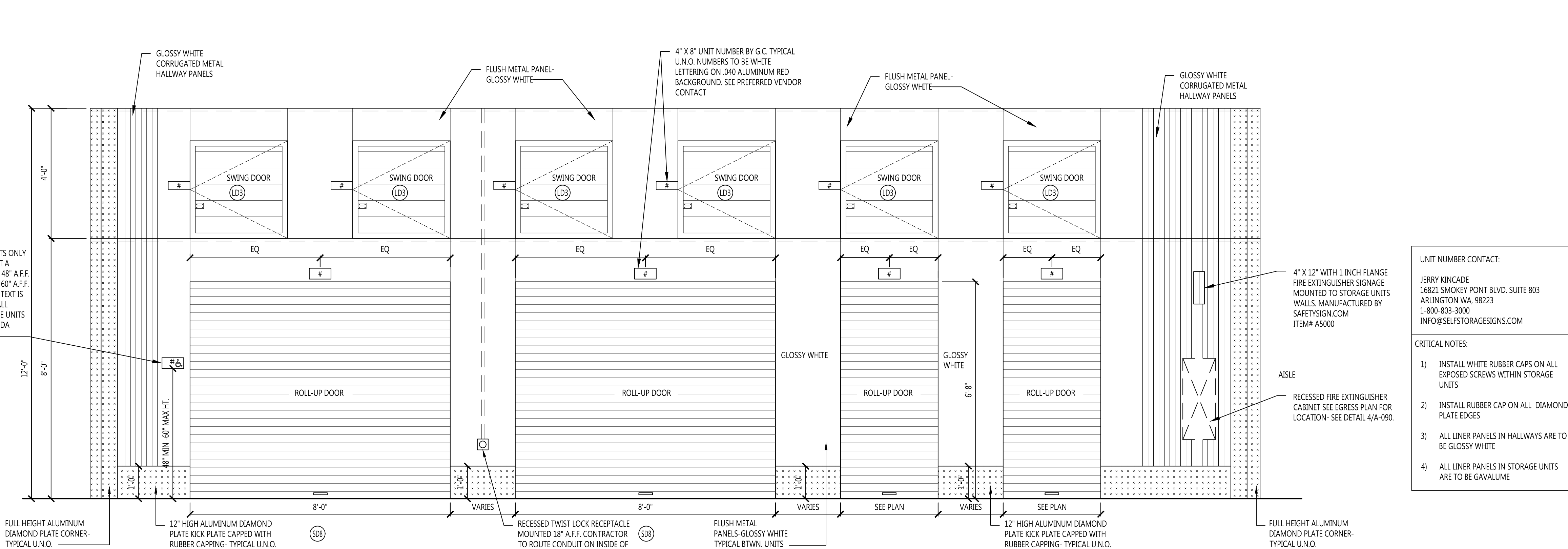
REVISIONS :		
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CLIENT:  
**SNL YONKERS LLC**  
 3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:  
**YONKERS SELF STORAGE**  
 60 MCLEAN AVENUE  
 YONKERS, NY 10705

TITLE DRAWING:	
<b>TYPICAL STORAGE DETAILS</b>	
SEAL & SIGNATURE	DATE: 6/13/18
	PROJECT No. 18014
	DRAWING BY: J.R.
	CHK BY: J.N.
	DWG. No.: A-090.00
	ALT
	OF XX
DOB JOB NUMBER:	





(2) SCALE:  $1/2" = 1'-0"$



The image contains three technical diagrams of a door system, each with accessibility annotations:

- SWING DOOR FRONT ELEVATION:** Shows a standard swing door. Annotations include:
  - SLIDE LATCH:** Located on the door edge.
  - ACCESSIBILITY SIGN:** A sign with a wheelchair icon and the word "ACCESSIBLE", mounted 60" high.
  - GRASPABLE HANDLE:** A handle with a loop, mounted 9" from the bottom edge.
- OPEN ROLL-UP DOOR FRONT ELEVATION:** Shows the door fully open and rolled up. Annotations include:
  - LOOPED PULL ROPE:** A rope with a loop, labeled "48" A.F.F. MAX." (Above Finished Floor Maximum).
  - ACCESSIBILITY SIGN:** Mounted 48" maximum high.
- CLOSED ROLL-UP DOOR FRONT ELEVATION:** Shows the door closed and rolled up. Annotations include:
  - SLIDE LATCH:** Located on the door edge.
  - ACCESSIBILITY SIGN:** Mounted 60" high.
  - GRASPABLE HANDLE:** A handle with a loop, mounted 9" from the bottom edge.
  - LOOP VELCRO SEWN TO STRAP:** A strap with a loop, labeled "32" FF" (Finish Floor).
  - HOOK VELCRO TO FRAME:** A hook on the frame, labeled "15" MIN." (Minimum).
  - CENTER OF DOOR:** Indicated by a vertical line.

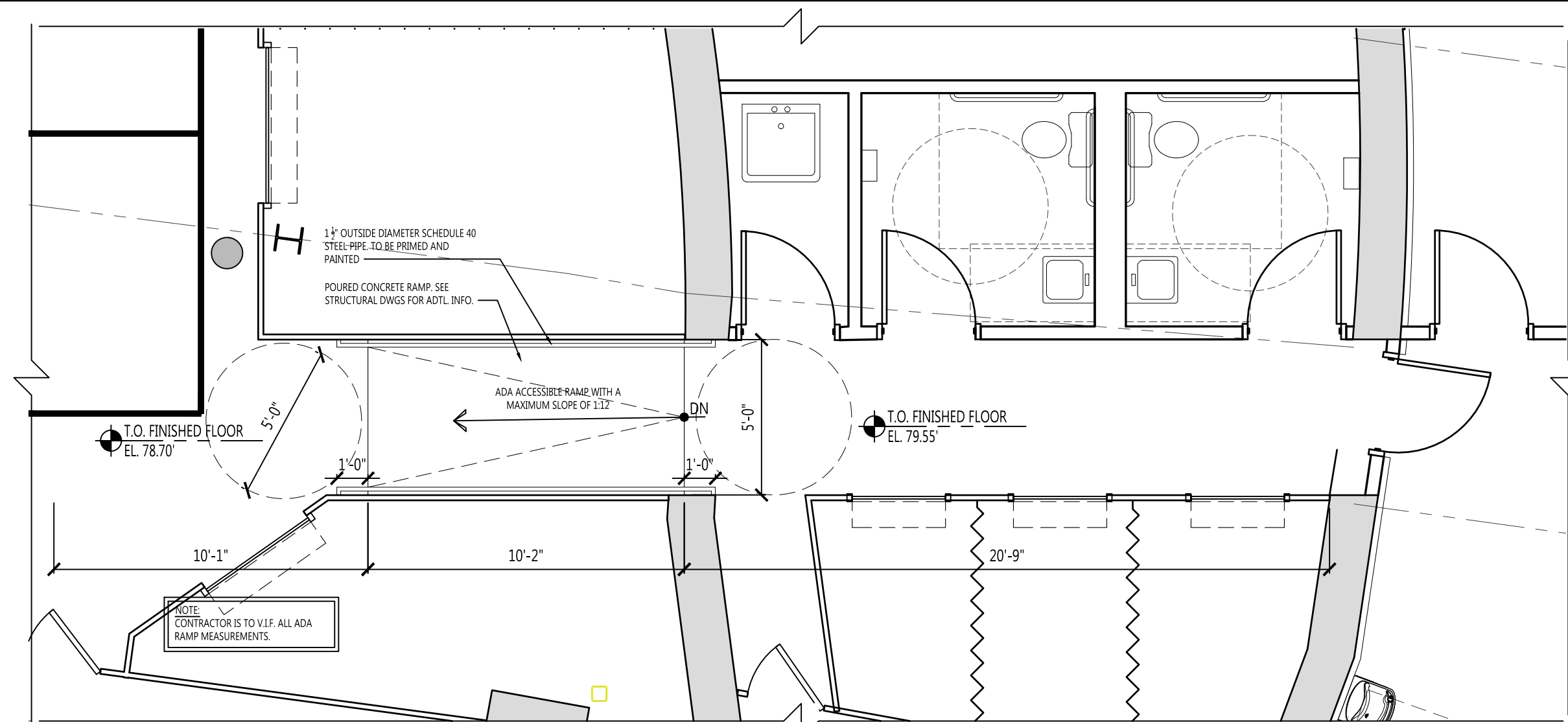
(3) SCALE: 1/2" = 1'-0"

TYPICAL ITEMS REQUIRED FOR SWING DOOR UNIT

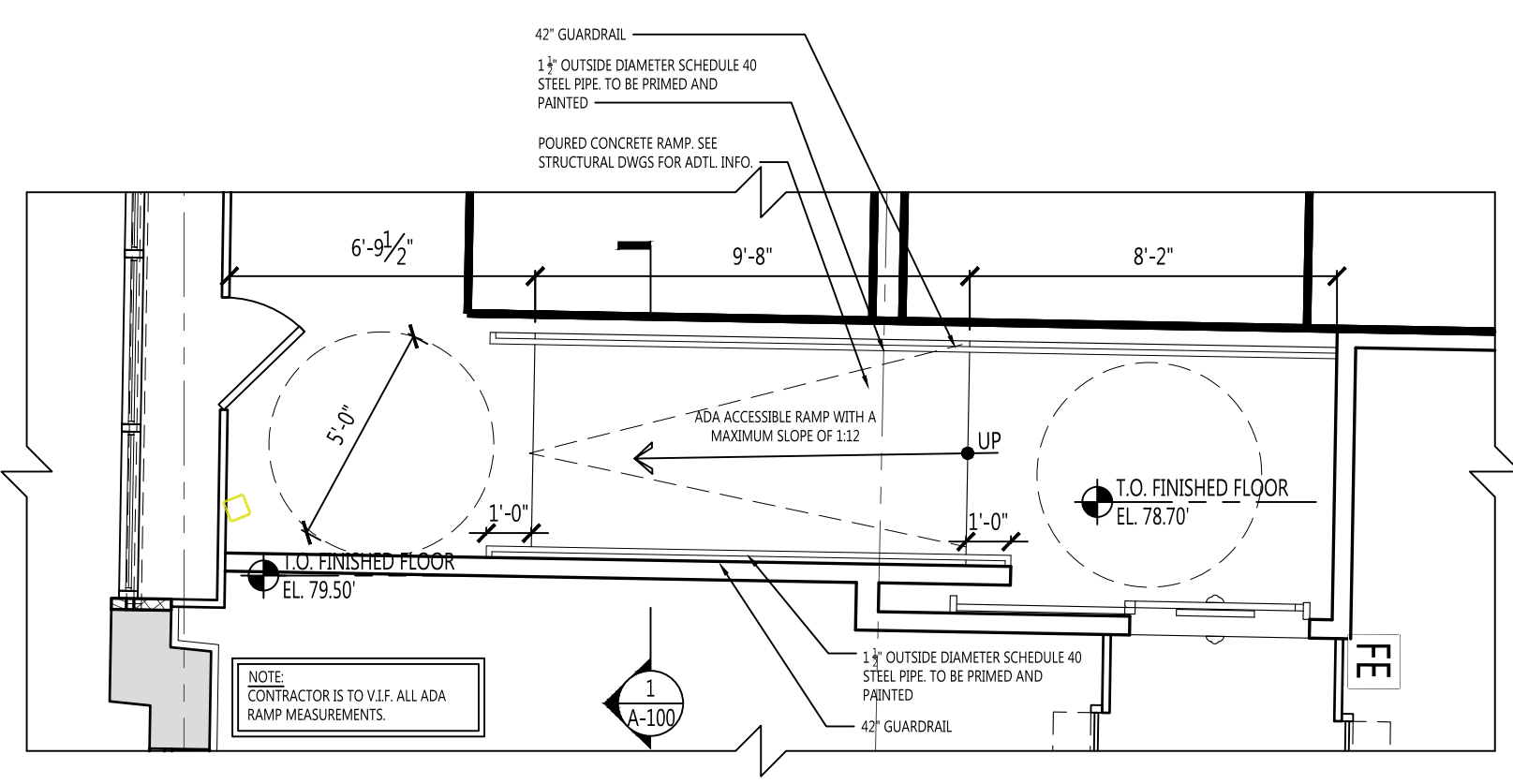
- 8" NYLON STRAP WITH 'S' HOOK FOR LATCH SLIDE.
- ACCESSIBILITY SIGN .



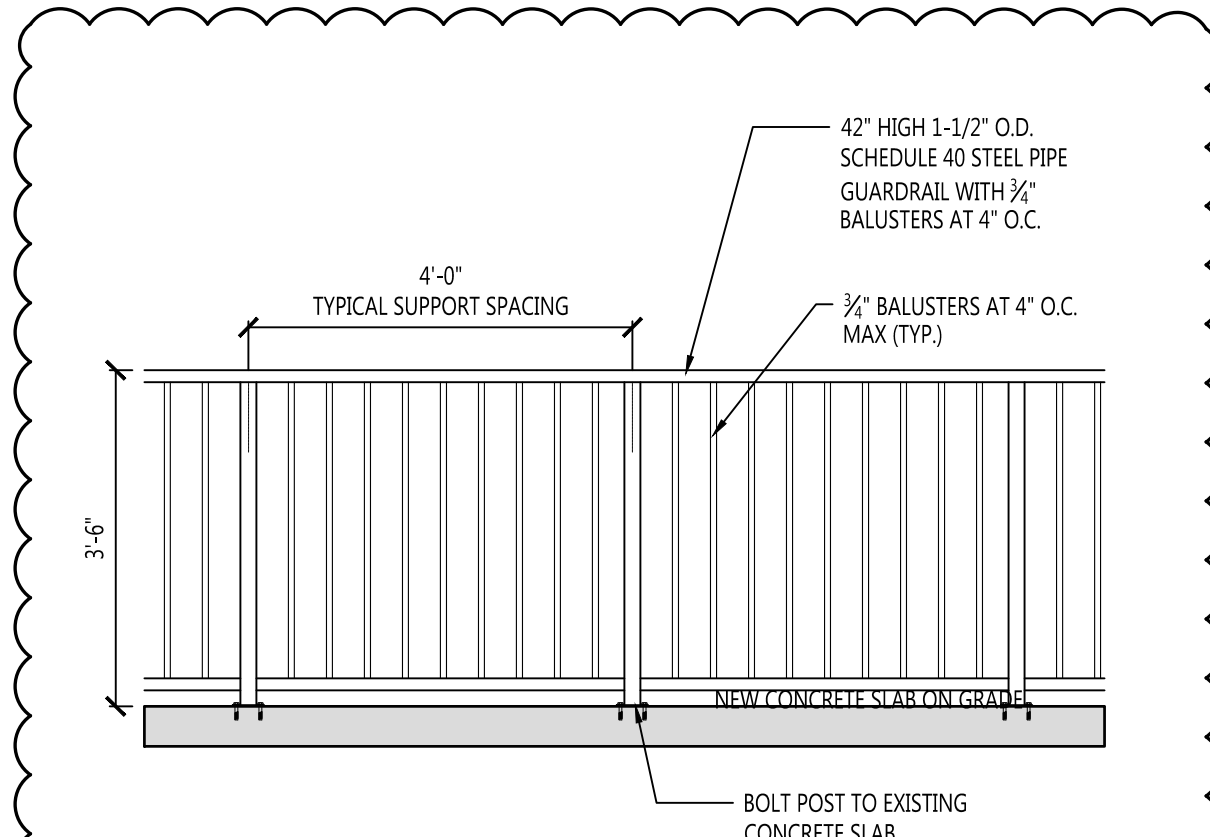




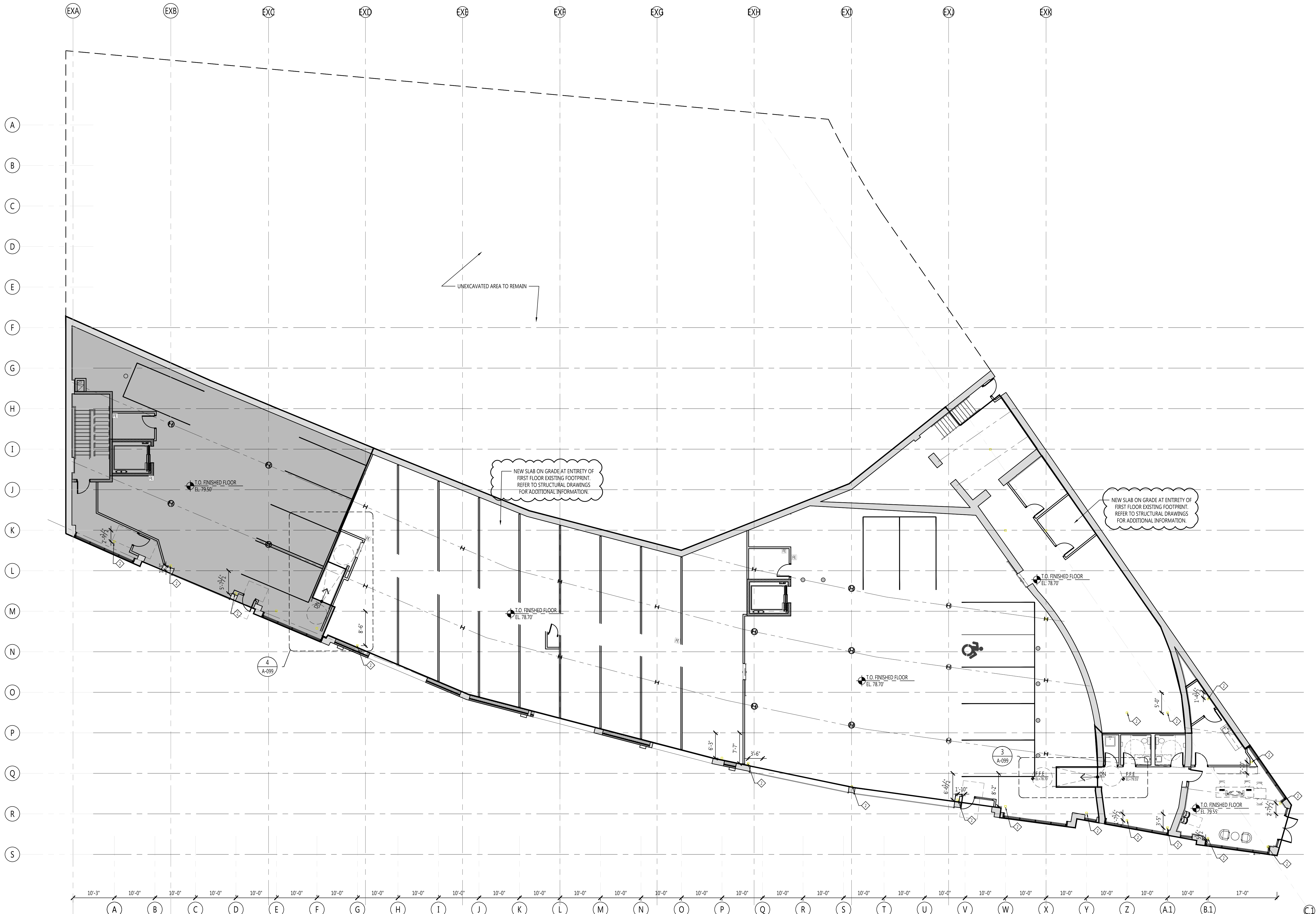
2 RAMP AT EAST LOADING AREA  
SCALE: 1/4" = 1'-0"



3 RAMP AT WEST LOADING AREA  
SCALE: 1/4" = 1'-0"



4 DETAIL OF RAILING AT NEW SLAB ON GRADE  
SCALE: 1/2" = 1'-0"



1 FIRST FLOOR SLAB AND COLUMN LOCATION PLAN  
SCALE: 3/32" = 1'-0"

## GENERAL NOTES

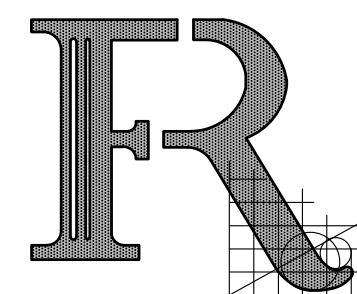
- ALL DIMENSIONS TO BE VERIFIED IN FIELD. TYPICAL.
- ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL STORAGE AISLES ARE TO BE 5'-0" MINIMUM WIDTH (U.N.O.).
- SEE SHEET A-990 FOR STORAGE AND LOADING AREA FINISHES.
- COORDINATE ALL SHAFT LOCATIONS AND SIZES WITH MEP AND STRUCTURAL.
- ALL PIPING, DUCTWORK, SPRINKLER LINES, STEEL COLUMNS, ETC. RUNNING WITHIN A STORAGE UNIT SHALL BE PROTECTED WITH CORRUGATED METAL PROVIDED BY THE GC.

## KEYED CONSTRUCTION NOTES

TAG #	REMARKS
1	CONCRETE FILLED STEEL BOLLARD. REFER TO DETAIL 2/A-100 FOR ADDITIONAL INFORMATION.
2	NEW STEEL TUBE COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3	INFILL EXISTING OPENING WITH NEW CMU BLOCK AND BRICK VENEER TO MATCH EXISTING.
4	EXISTING LOADING AREA COLUMNS AT LOADING AREA TO BE CONCRETE ENCASED 5'-0" A.F.F. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
5	HATCHED AREA INDICATES LIMITS OF INSULATED AREA UNDER SECOND FLOOR DECK REFER TO DETAIL 3/A-100 FOR ADDITIONAL INFORMATION.
6	INFILL EXISTING OPENING WITH NEW METAL STUDS AND STUCCO. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION.
7	WRAP ALL COLUMNS VISIBLE FROM EXTERIOR WINDOWS WITH LINER PANEL.
8	EXISTING LOADING AREA COLUMNS AND CONCRETE ENCASEMENT TO REMAIN.

## SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	EXISTING CMU WALL TO REMAIN
	EXISTING COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW AISLE PARTITIONS (WALL TYPE S1)
	NEW STORAGE UNIT INTERIOR PARTITIONS (WALL TYPE S2)
	LOAD BEARING WALL PARTITION LOCATED ALONG COLUMN LINES (WALL TYPE S4)
	NEW GYP. BOARD / METAL STUD PARTITION. PRIME AND PAINT PER SCHEDULE
	NEW CMU WALL INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
	NEW STORAGE UNIT SWING DOOR
	NEW HOLLOW METAL SWING DOOR
	RECESSED FIRE EXTINGUISHER CABINET. REFER TO SHEET A-990 FOR ADDITIONAL INFORMATION.
	ADA ACCESSIBLE UNIT. REFER TO SHEET A-990 FOR ADDITIONAL INFORMATION.
	SHADED AREA REPRESENTS UNDISTURBED AREA TO REMAIN.
	HATCHED AREA REPRESENTS NEW CONCRETE SLAB AND METAL DECK INFILL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.



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## REVISIONS:

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1	2/18/21	REVISED PER DOB COMMENTS
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200, LAKE SUCCESS, NY, 11042

## PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

## TITLE DRAWING:

FIRST FLOOR SLAB PLAN

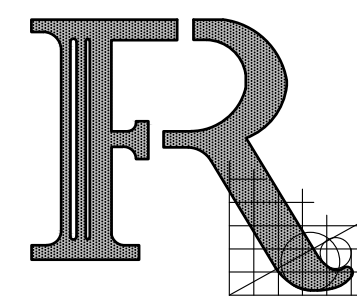
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ALT OF XX

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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

#	DATE	COMMENT
1	2/18/21	REVISED PER DOB COMMENTS
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ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
SECOND FLOOR SLAB PLAN

SEAL & SIGNATURE  
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

A-099.00

ALT OF XX

DOB JOB NUMBER:

## GENERAL NOTES

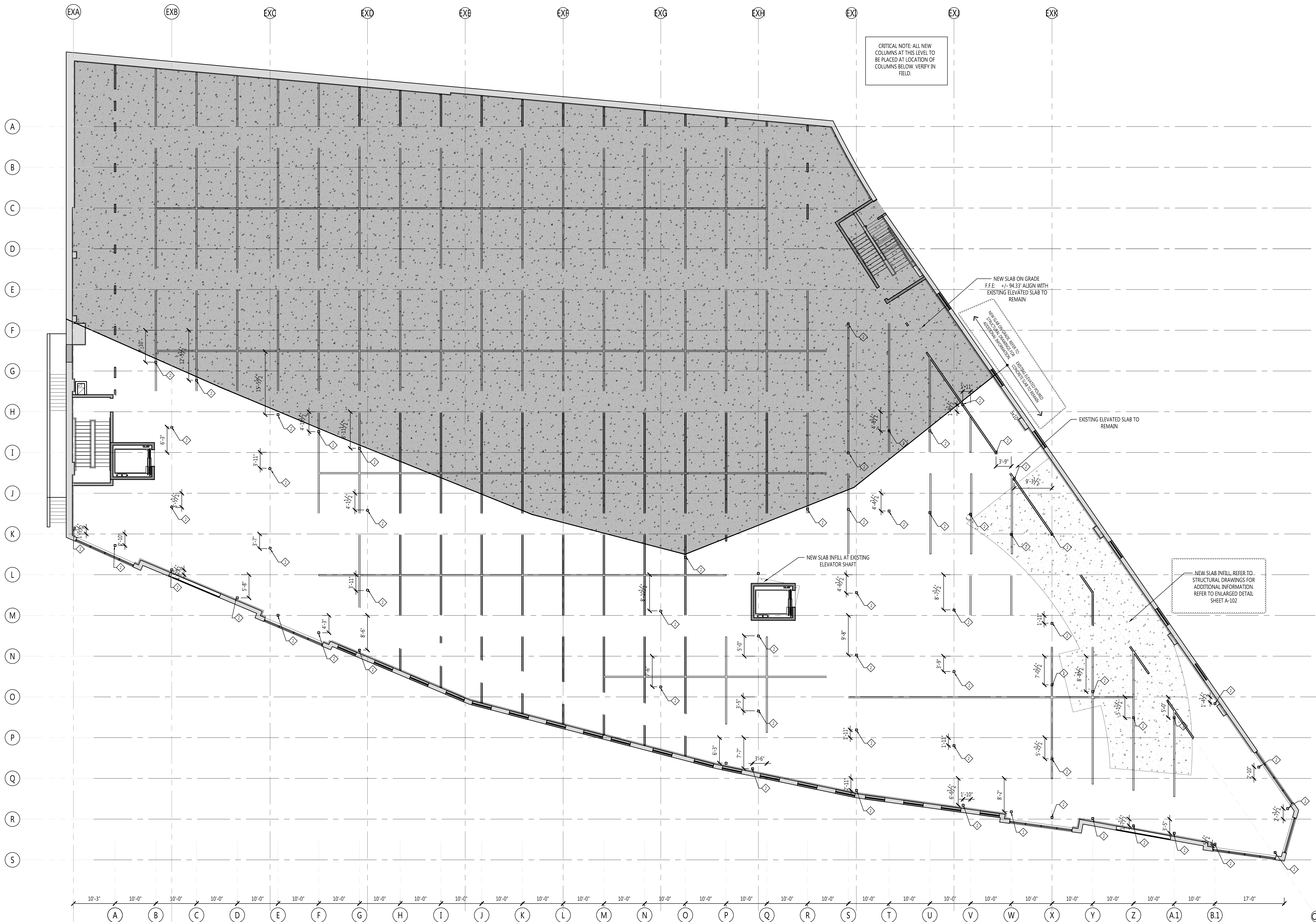
- ALL DIMENSIONS TO BE VERIFIED IN FIELD. TYPICAL.
- ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL STORAGE AISLES ARE TO BE 5'-0" MINIMUM WIDTH (U.N.O.).
- SEE SHEET A-090 FOR STORAGE AND LOADING AREA FINISHES.
- COORDINATE ALL SHAFT LOCATIONS AND SIZES WITH MEP AND STRUCTURAL.
- ALL PIPING, DUCTWORK, SPRINKLER LINES, STEEL COLUMNS, ETC. RUNNING WITHIN A STORAGE UNIT SHALL BE PROTECTED WITH CORRUGATED METAL PROVIDED BY THE GC.

## KEYED CONSTRUCTION NOTES

TAG #	REMARKS
1	CONCRETE FILLED STEEL BOLLARD. REFER TO DETAIL 2/A-100 FOR ADDITIONAL INFORMATION.
2	NEW STEEL TUBE COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3	INFILL EXISTING OPENING WITH NEW CMU BLOCK AND BRICK VENEER TO MATCH EXISTING.
4	EXISTING LOADING AREA COLUMNS AT LOADING AREA TO BE CONCRETE ENCASED 5'-0" A.F.F. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
5	HATCHED AREA INDICATES LIMITS OF INSULATED AREA UNDER SECOND FLOOR DECK REFER TO DETAIL 3/A-100 FOR ADDITIONAL INFORMATION.
6	INFILL EXISTING OPENING WITH NEW METAL STUDS AND STUCCO. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION.
7	WRAP ALL COLUMNS VISIBLE FROM EXTERIOR WINDOWS WITH LINER PANEL.
8	EXISTING LOADING AREA COLUMNS AND CONCRETE ENCASEMENT TO REMAIN.

## SYMBOLS LEGEND

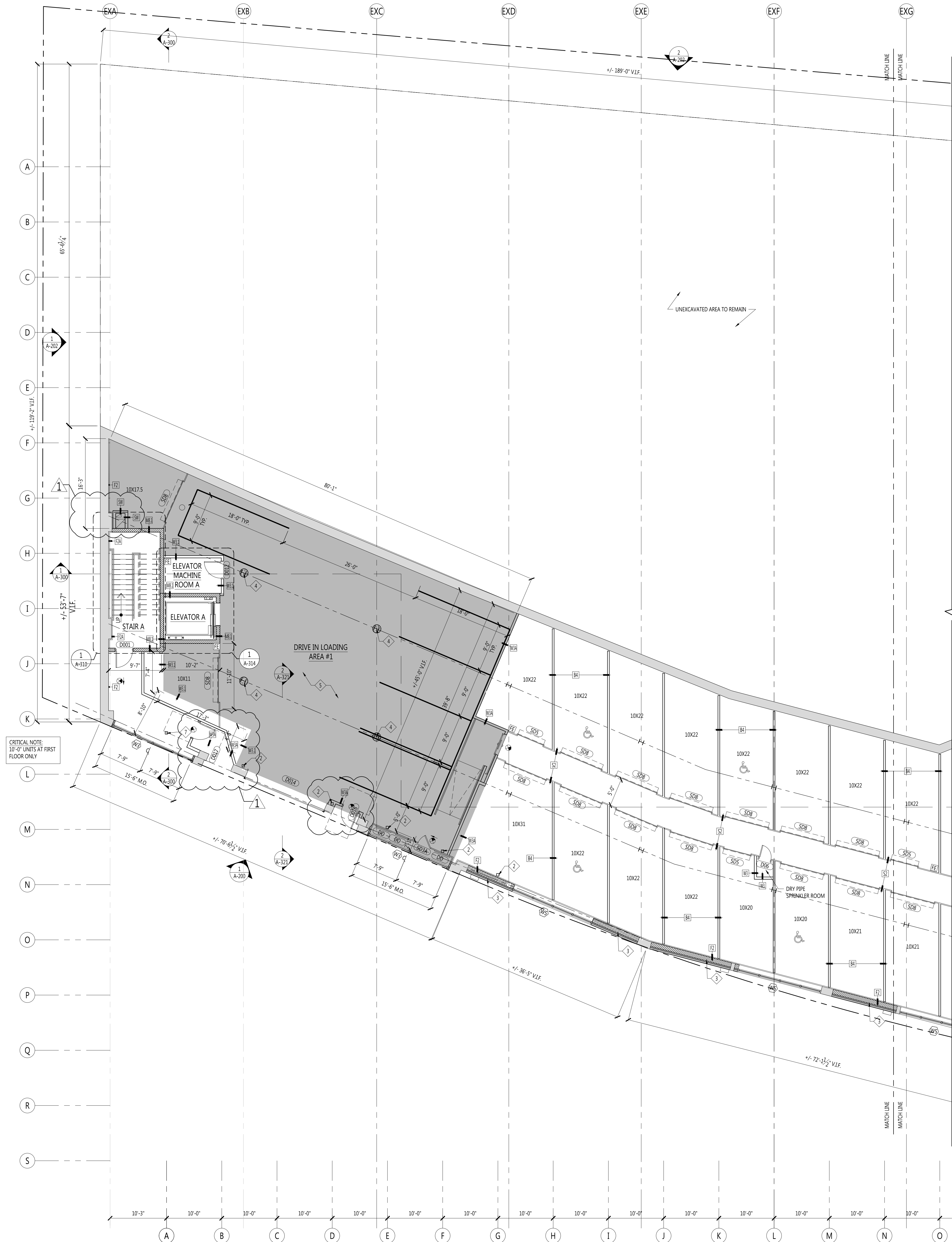
SYMBOL	DESCRIPTION
	EXISTING CMU WALL TO REMAIN
	EXISTING COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW AISLE PARTITIONS (WALL TYPE S1)
	NEW STORAGE UNIT INTERIOR PARTITIONS (WALL TYPE S2)
	LOAD BEARING WALL PARTITION LOCATED ALONG COLUMN LINES (WALL TYPE S4)
	NEW GYP. BOARD / METAL STUD PARTITION. PRIME AND PAINT PER SCHEDULE
	NEW CMU WALL INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
	NEW STORAGE UNIT SWING DOOR
	NEW HOLLOW METAL SWING DOOR
	RECESSED FIRE EXTINGUISHER CABINET. REFER TO SHEET A-090 FOR ADDITIONAL INFORMATION.
	ADA ACCESSIBLE UNIT. REFER TO SHEET A-090 FOR ADDITIONAL INFORMATION.
	SHADED AREA REPRESENTS UNEXCAVATED AREA TO REMAIN.
	HATCHED AREA REPRESENTS NEW CONCRETE SLAB AND METAL DECK INFILL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.



1 SECOND FLOOR SLAB AND COLUMN LOCATION PLAN

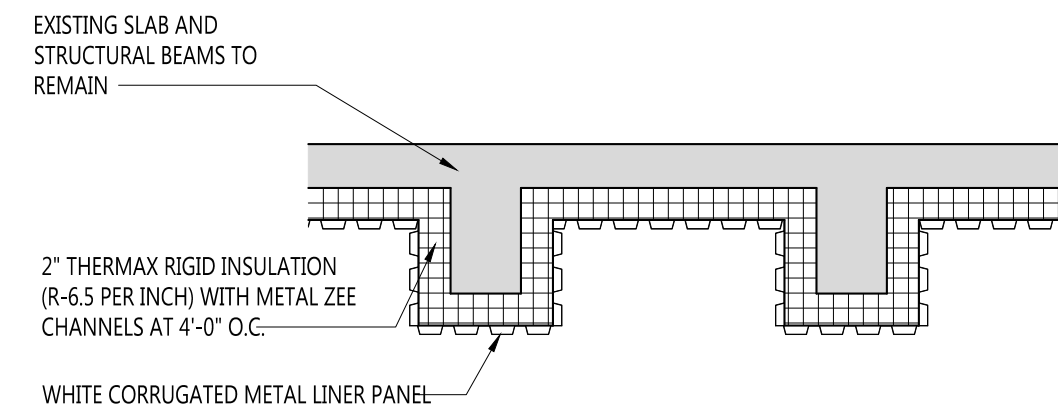
SCALE: 3/32" = 1'-0"



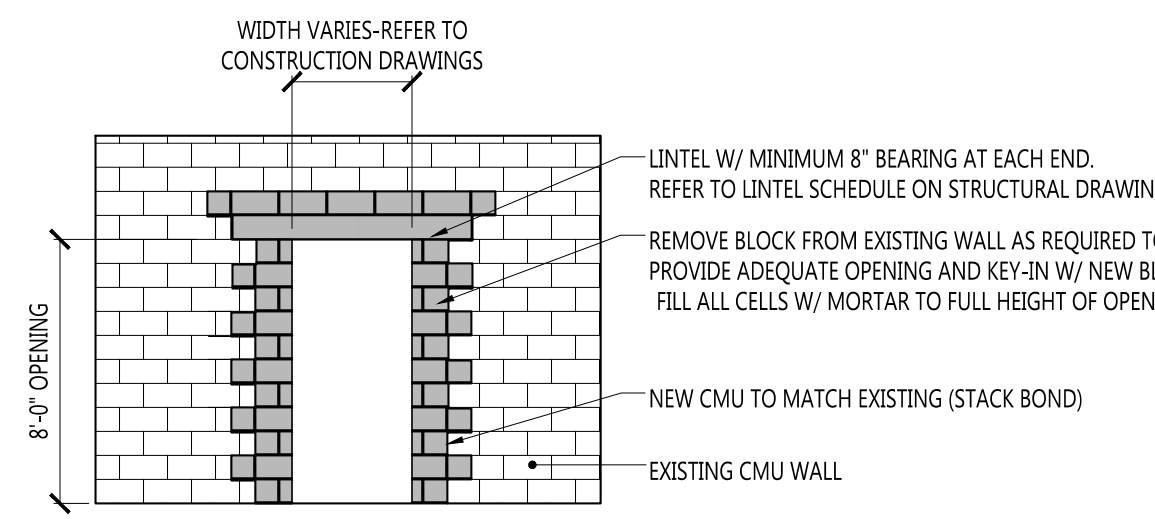


1 PARTIAL FIRST FLOOR PLAN-AREA "A"  
SCALE: 1/8" = 1'-0"

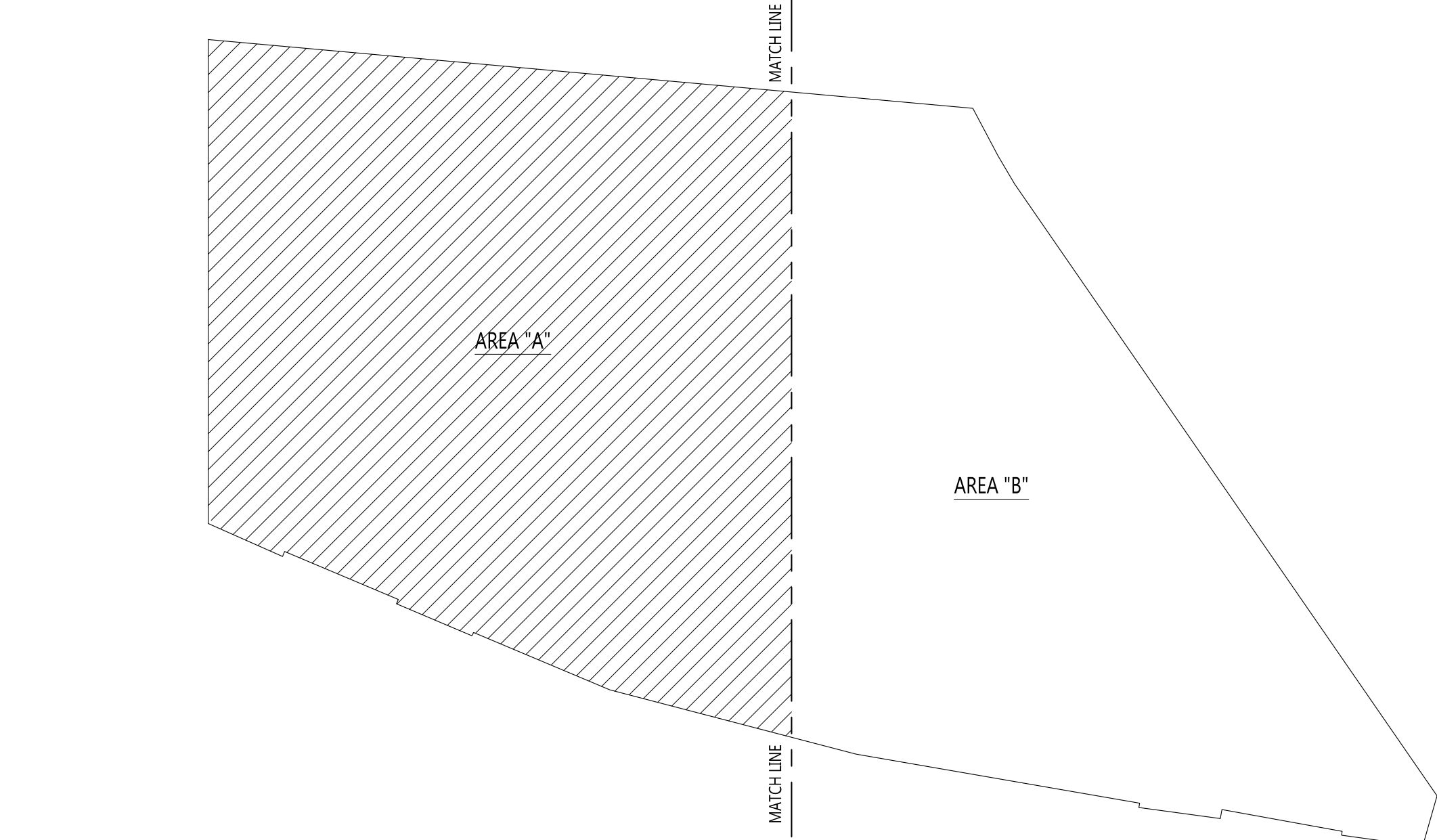
2 TYPICAL BOLLARD DETAIL  
SCALE: NTS



3 THERMAL CEILING DETAIL  
SCALE: NTS



4 NEW OPENING IN EXISTING WALL  
SCALE: NTS



KEY PLAN  
SCALE: NTS

**GENERAL NOTES**

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- ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL STORAGE AISLES ARE TO BE 5'-0" MINIMUM WIDTH (UNCL.).
- SEE SHEET A-090 FOR STORAGE AND LOADING AREA FINISHES.
- COORDINATE ALL SHAFT LOCATIONS AND SIZES WITH MEP AND STRUCTURAL.
- ALL PIPING, DUCTWORK, SPRINKLER LINES, STEEL COLUMNS, ETC. RUNNING WITHIN A STORAGE UNIT SHALL BE PROTECTED WITH CORRUGATED METAL PROVIDED BY THE GC.

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7	WRAP ALL COLUMNS VISIBLE FROM EXTERIOR WINDOWS WITH LINER PANEL.
8	EXISTING LOADING AREA COLUMNS AND CONCRETE ENCASEMENT TO REMAIN.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
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	SHEAR WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW GYP. BOARD / METAL STUD PARTITION. PRIME AND PAINT PER SCHEDULE.
	NEW CMU WALL / INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
	NEW STORAGE UNIT SWING DOOR
	NEW HOLLOW METAL SWING DOOR
	RECESSED FIRE EXTINGUISHER CABINET. REFER TO SHEET A-090 FOR ADDITIONAL INFORMATION.
	ADA ACCESSIBLE UNIT. REFER TO SHEET A-090 FOR ADDITIONAL INFORMATION.
	SHADE AREA REPRESENTS UNEXCAVATED AREA TO REMAIN.
	HATCHED AREA REPRESENTS NEW CONCRETE SLAB AND METAL DECK INFILL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

**FR**  
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35 PINELAWN ROAD, SUITE 207W  
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fax 631.271.4532  
www.fgrlf.com

CONSULTANTS:  
**Terry W. Wall, Jr., P.E., S.E.**  
**Consulting Structural Engineering**  
**WV**  
1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

MEP CONSULTANT:  
**GAP ENGINEERING, P.C.**  
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CLIENT:  
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3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

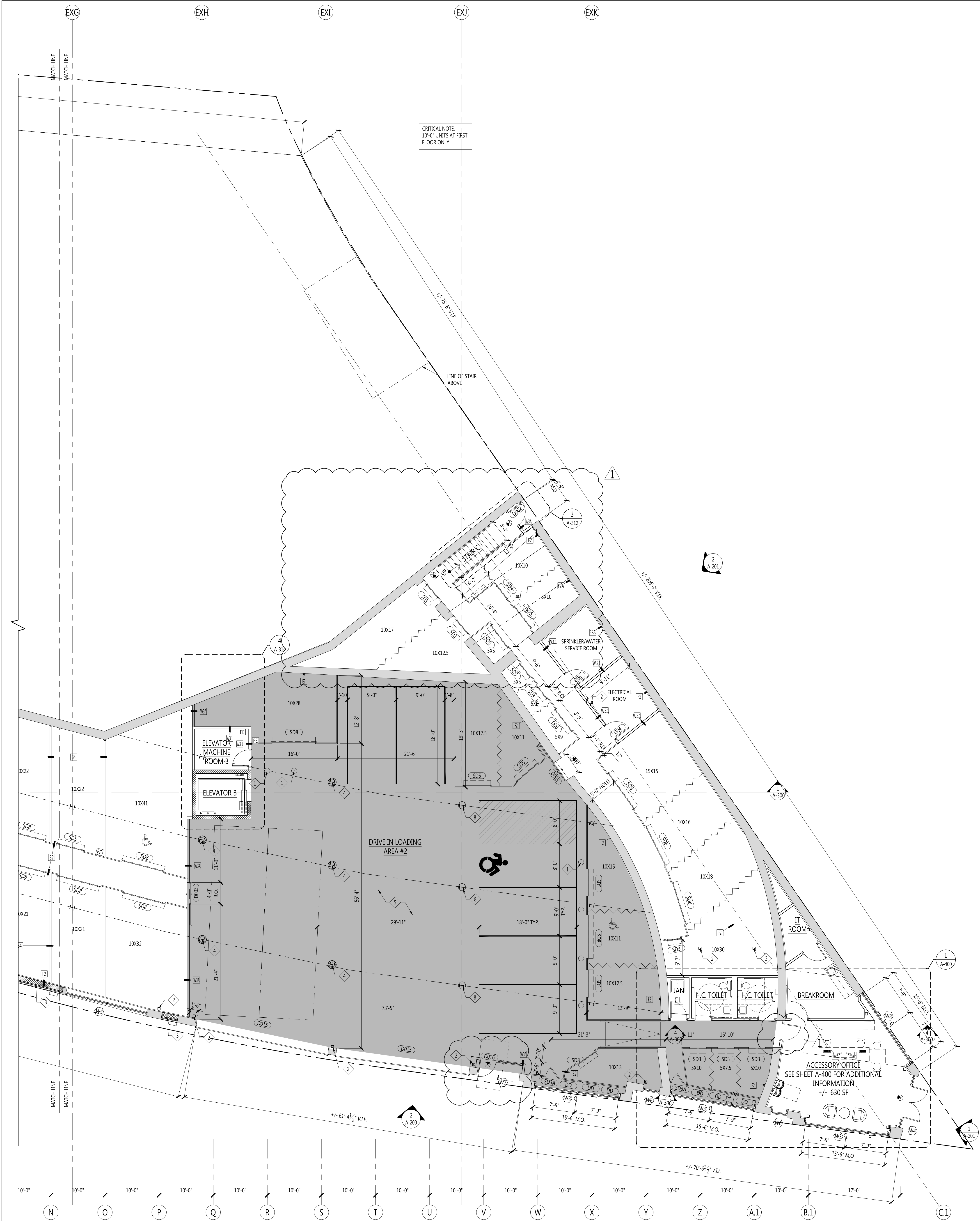
PROJECT:  
**YONKERS SELF STORAGE**  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
**PARTIAL FIRST FLOOR PLAN  
AREA "A"**

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
	DWG. No.:	A-100.00
	ALT	OF XX

DOB JOB NUMBER:





2  
1  
PARTIAL FIRST FLOOR PLAN-AREA "B"  
SCALE: 1/8" = 1'-0"

KEY PLAN  
SCALE: NTS

## GENERAL NOTES

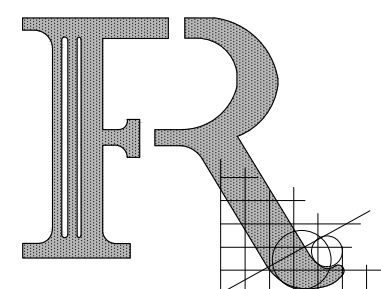
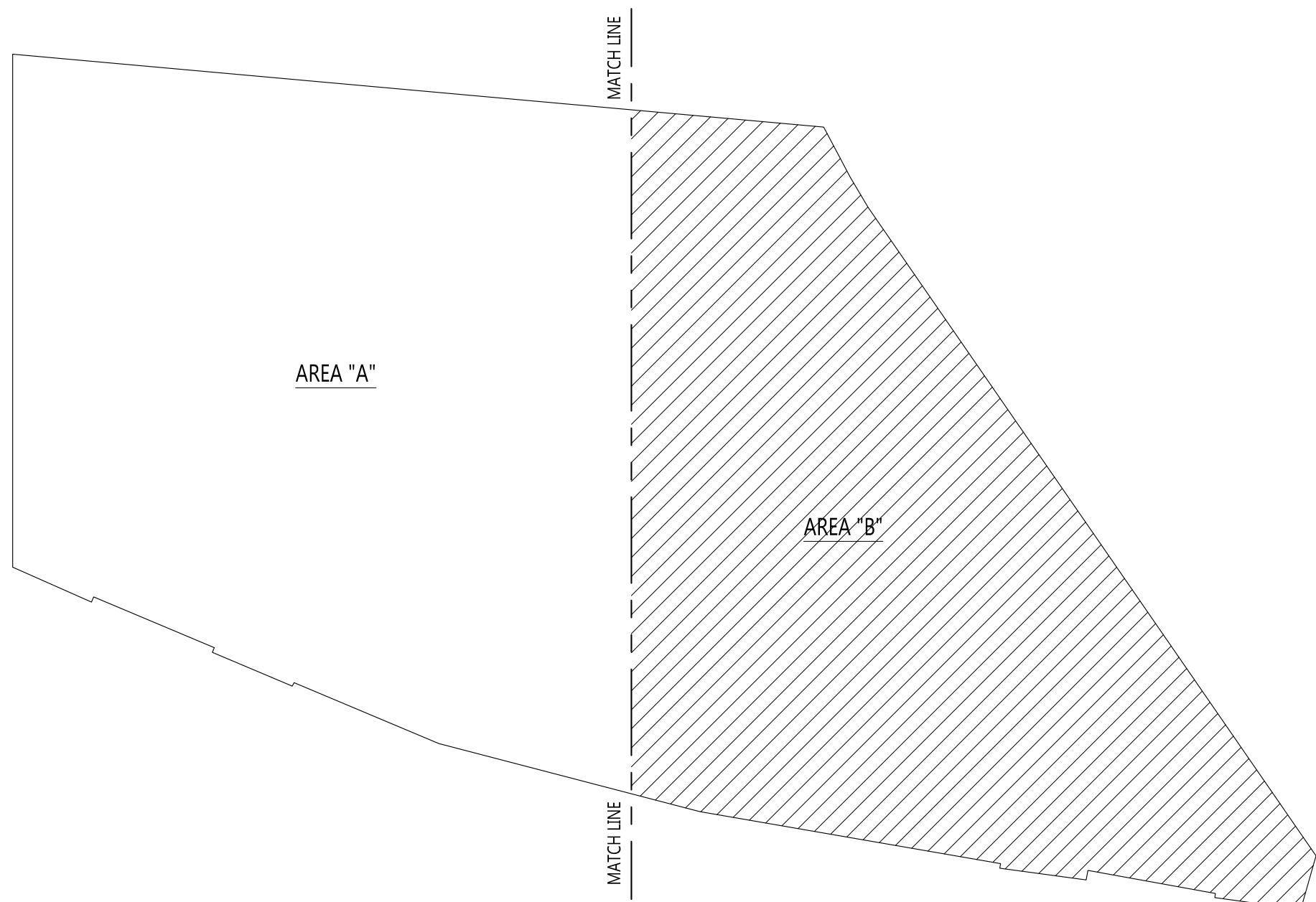
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## KEYED CONSTRUCTION NOTES

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	EXISTING COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
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### CONSULTANTS:

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### CLIENT:

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3333 NEW HYDE PARK ROAD, SUITE 200,  
LAKE SUCCESS, NY, 11042

### PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

### TITLE DRAWING:

PARTIAL FIRST FLOOR PLAN  
AREA "B"

### SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No.: 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

A-101.00

ALT OF XX

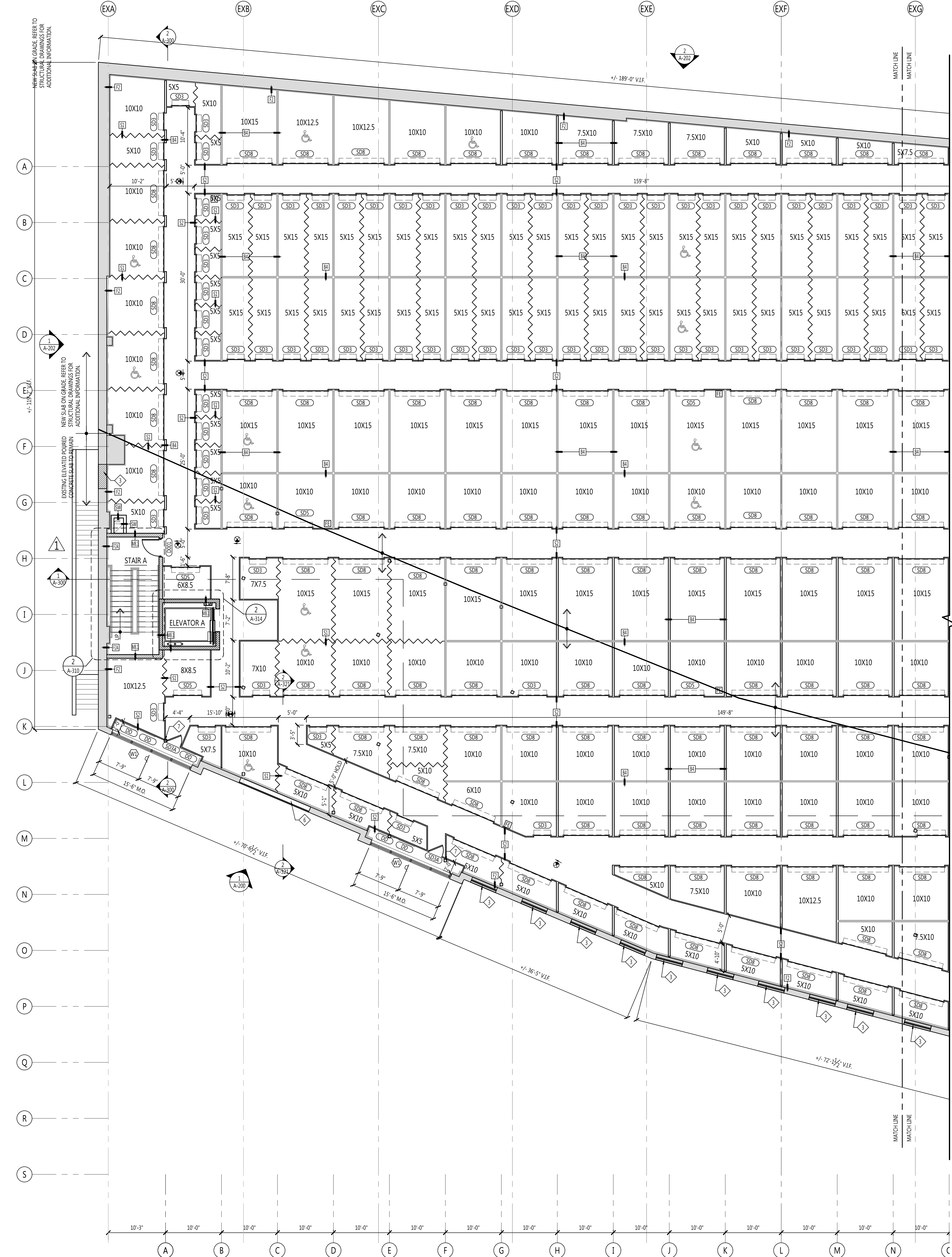
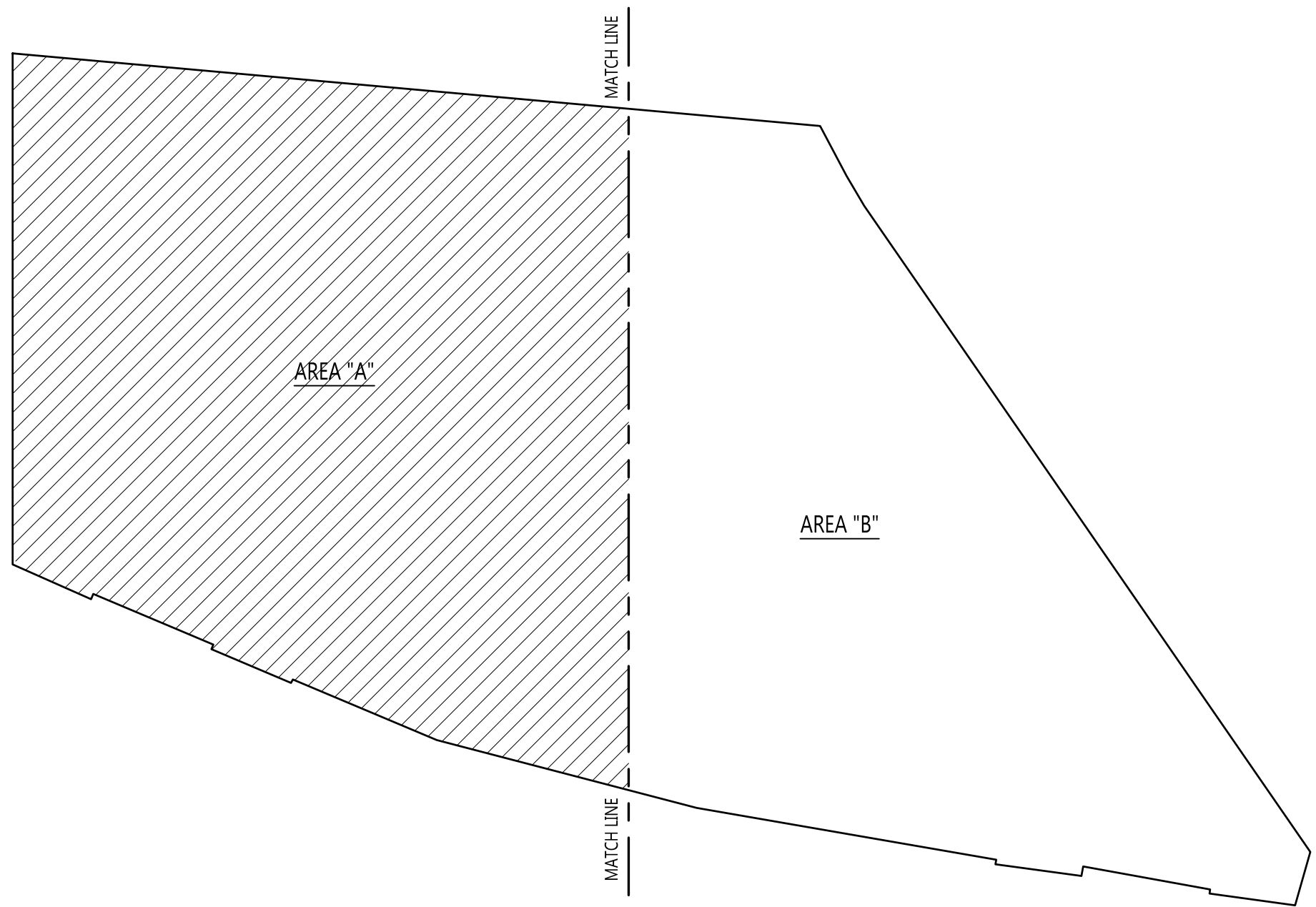
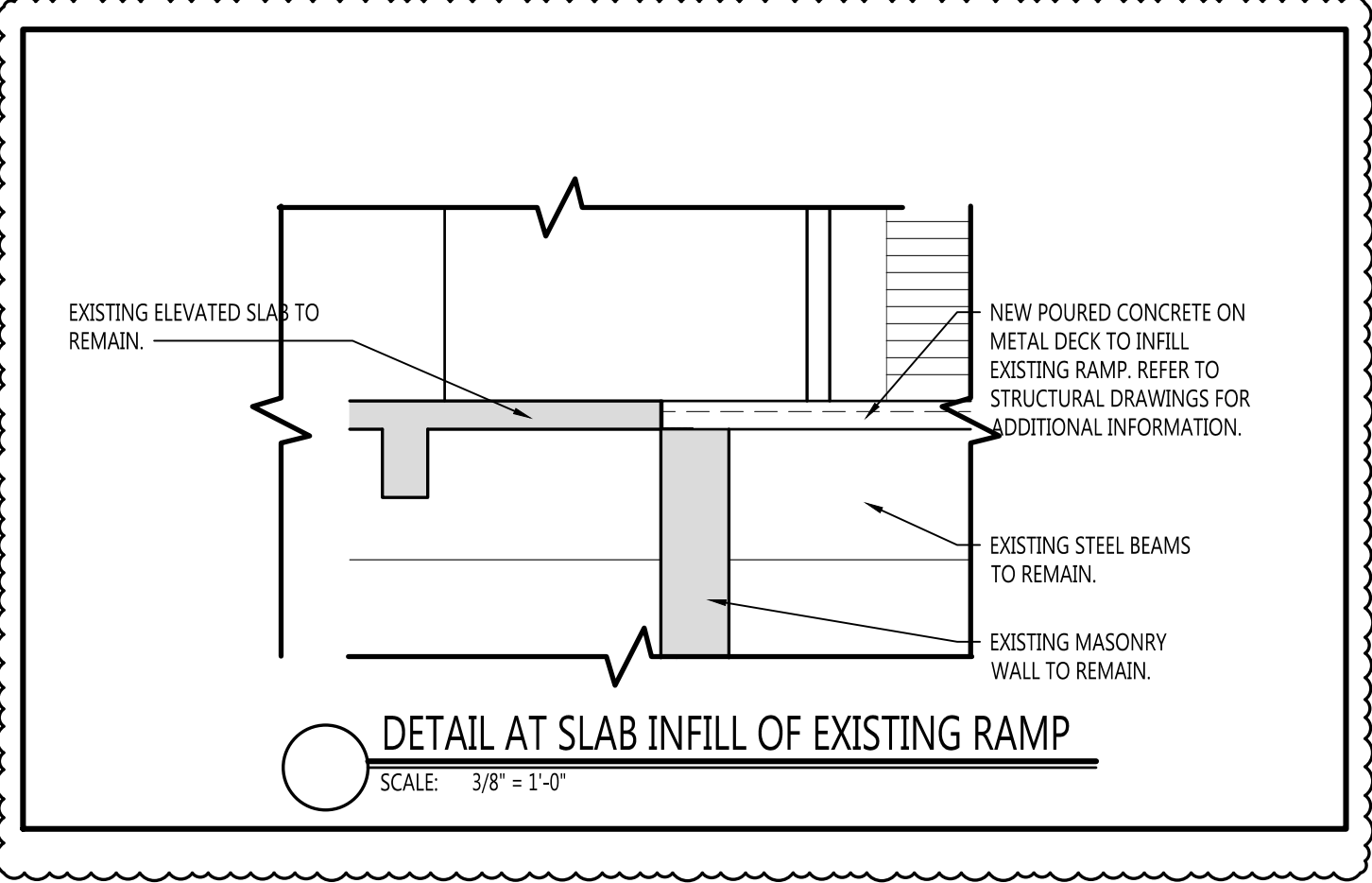
### DOB JOB NUMBER:



GENERAL NOTES	
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2	ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
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SYMBOLS LEGEND	
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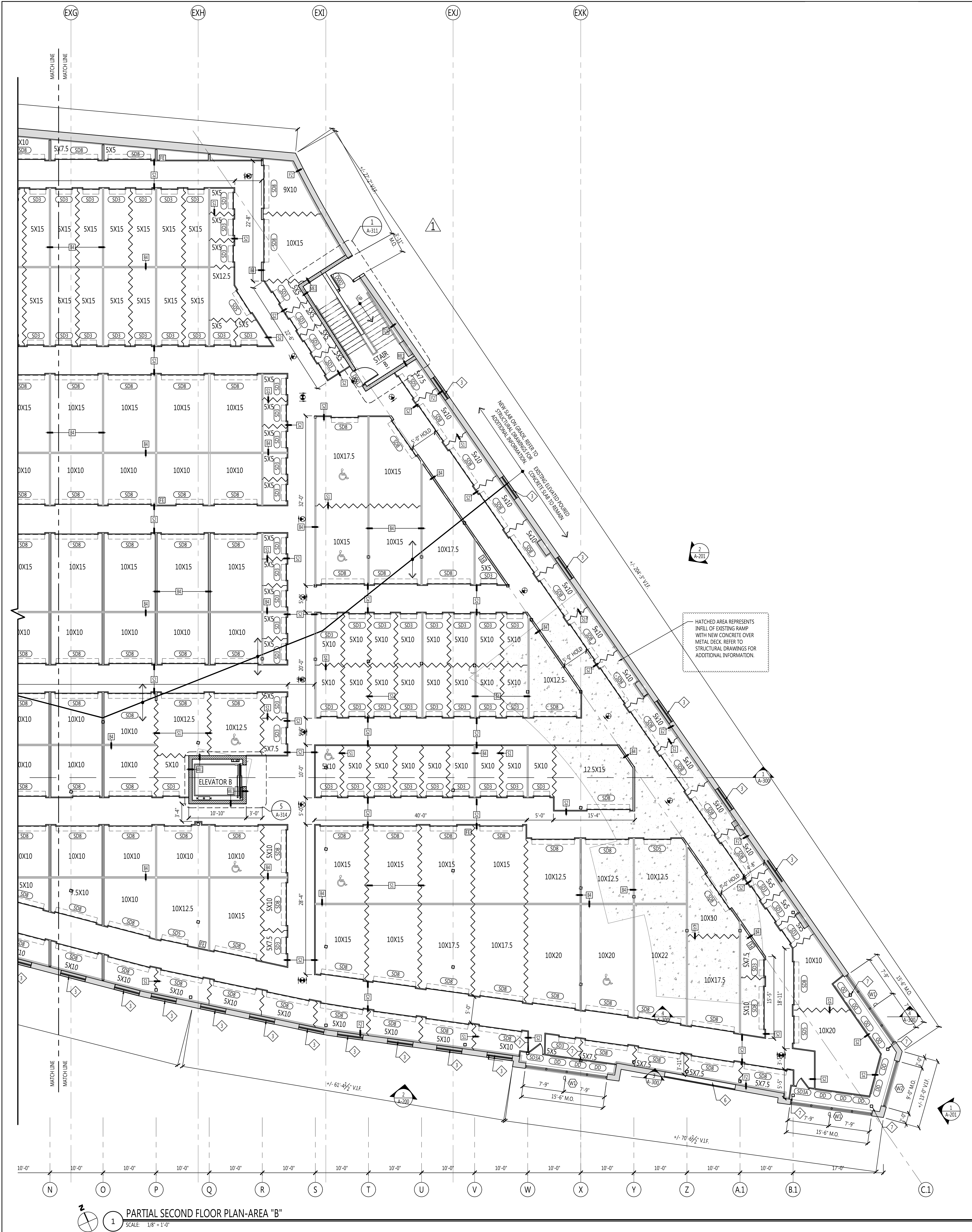
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PROJECT:  
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KEY PLAN  
SCALE: NTS

## GENERAL NOTES

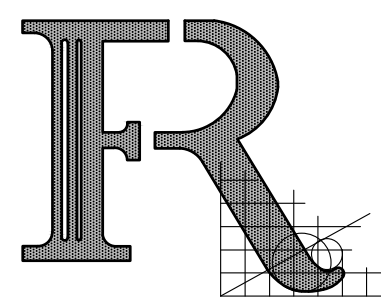
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	HATCHED AREA REPRESENTS NEW CONCRETE SLAB AND METAL DECK INFILL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.



FRANK G. RELF ARCHITECT, P.C.  
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### CONSULTANTS:

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1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

### MEP CONSULTANT:

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(631) 499-6599

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FRANK G. RELF ARCHITECT, P.C.

### REVISIONS:

#	DATE	COMMENT
1	09/20	REVISED PER DOB COMMENTS
2	2/18/21	REVISED PER DOB COMMENTS
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### ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
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### CLIENT:

SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

### PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

### TITLE DRAWING:

PARTIAL SECOND FLOOR PLAN  
AREA "B"

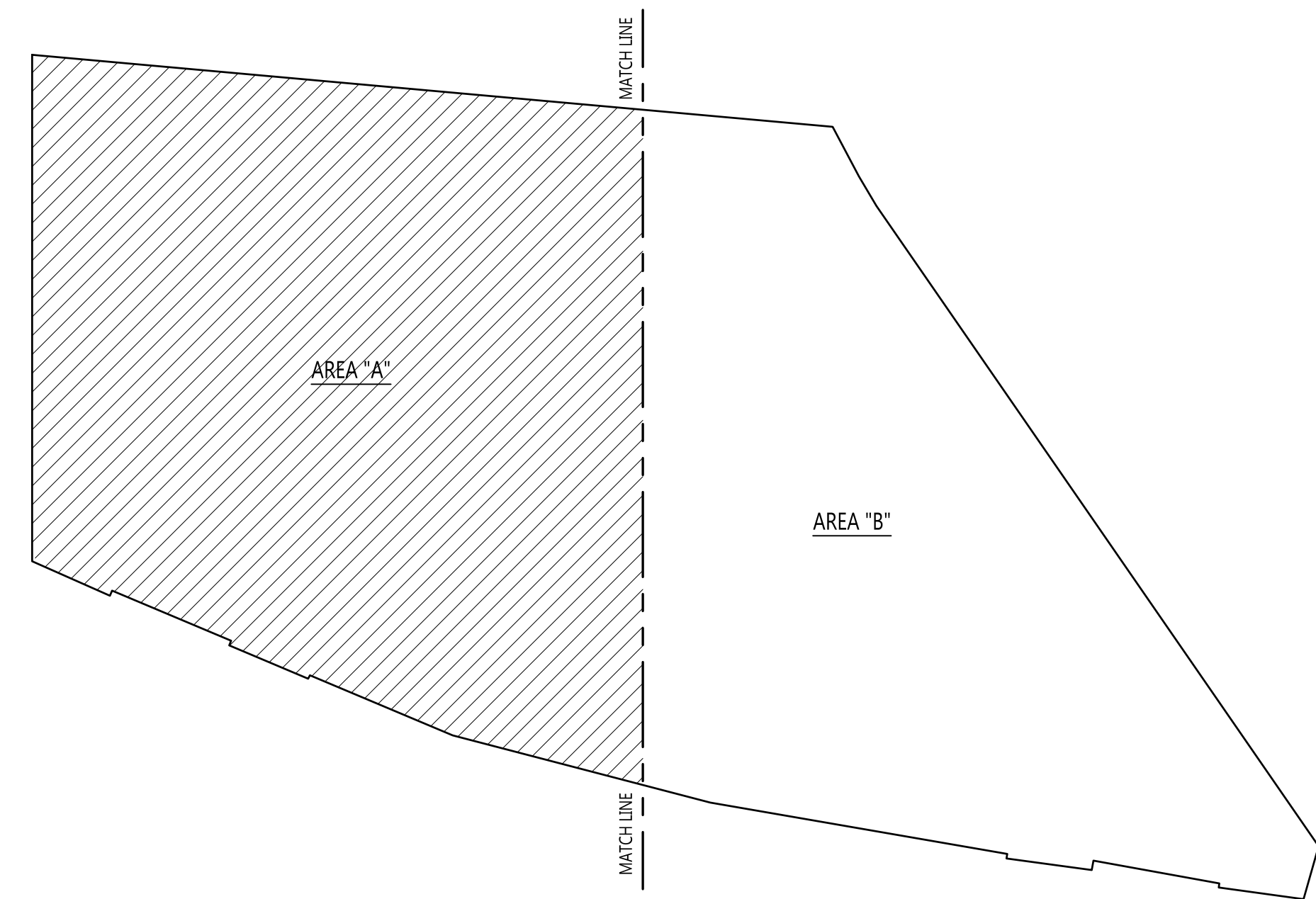
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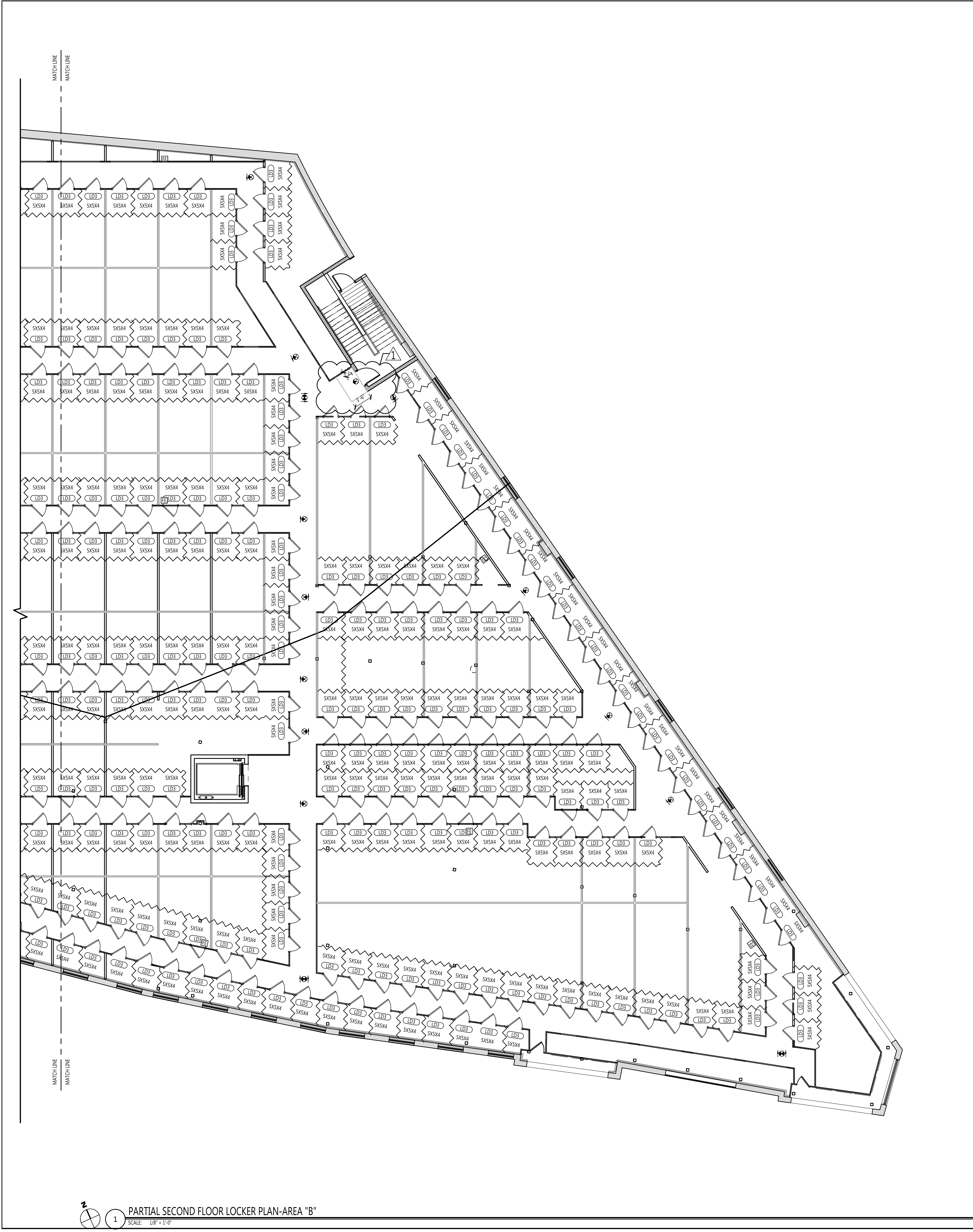
DATE: 6/13/18  
PROJECT No.: 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-103.00

ALT OF XX

### DOB JOB NUMBER:

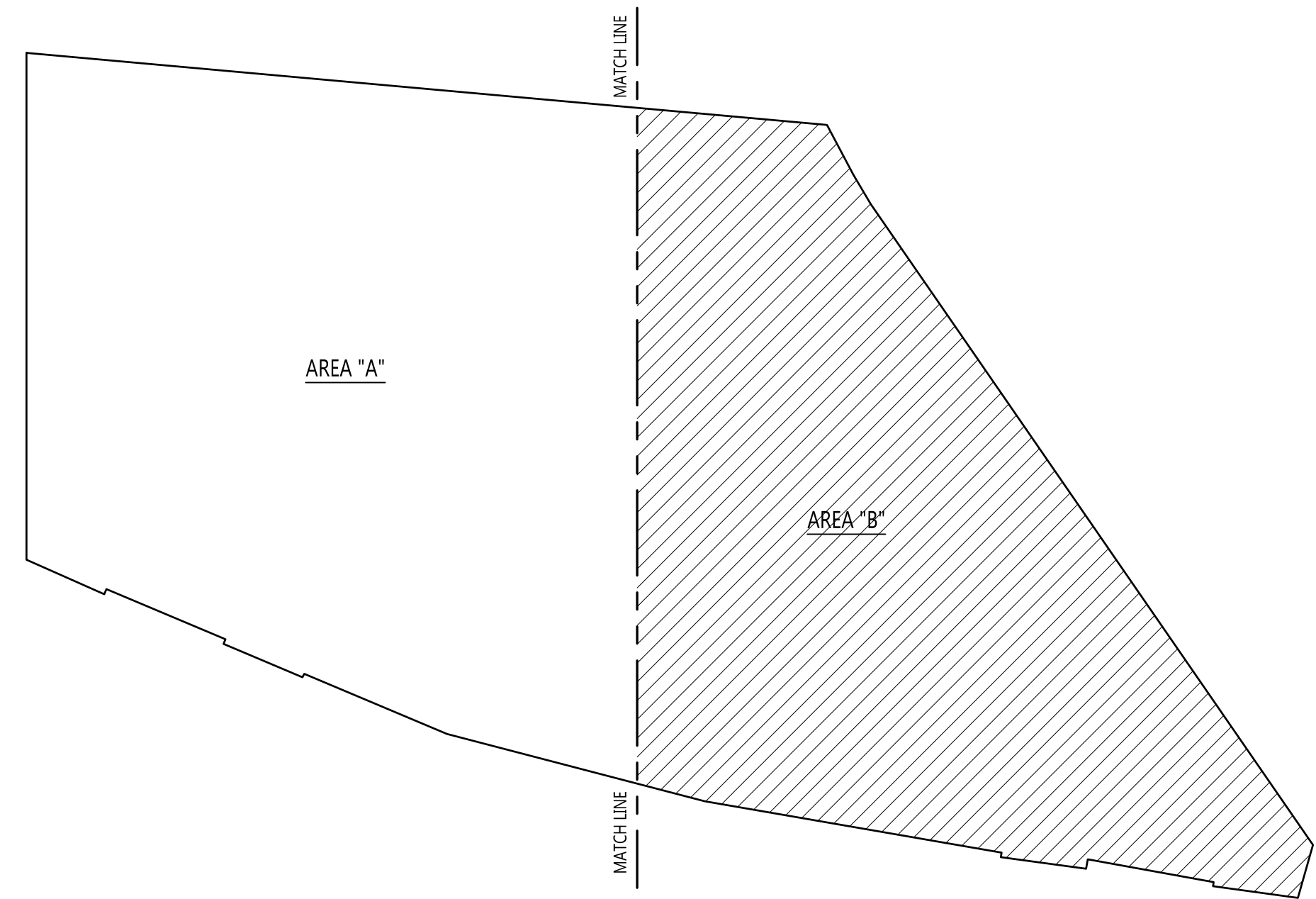






1 PARTIAL SECOND FLOOR LOCKER PLAN-AREA "B"  
SCALE: 1/8" = 1'-0"

KEY PLAN  
SCALE: NTS



GENERAL NOTES	
- ALL DIMENSIONS TO BE VERIFIED IN FIELD. TYPICAL.	
- ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.	
- ALL STORAGE ASLES ARE TO BE 5'-0" MINIMUM WIDTH (UNO).	
- SEE SHEET A-090 FOR STORAGE AND LOADING AREA FINISHES.	
- COORDINATE ALL SHAFT LOCATIONS AND SIZES WITH MEP AND STRUCTURAL.	
- ALL PIPING, DUCTWORK, SPRINKLER LINES, STEEL COLUMNS, ETC. RUNNING WITHIN A STORAGE UNIT SHALL BE PROTECTED WITH CORRUGATED METAL PROVIDED BY THE GC.	

KEYED CONSTRUCTION NOTES	
TAG #	REMARKS
1	CONCRETE FILLED STEEL BOLLARD. REFER TO DETAIL 3/A-100 FOR ADDITIONAL INFORMATION.
2	NEW STEEL TUBE COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
3	INFILL EXISTING OPENING WITH NEW CMU BLOCK AND BRICK VENEER TO MATCH EXISTING.
4	EXISTING LOADING AREA COLUMNS AT LOADING AREA TO BE CONCRETE ENCASED 5'-0" A.F.F. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
5	HATCHED AREA INDICATES LIMITS OF INSULATED AREA UNDER SECOND FLOOR DECK REFER TO DETAIL 3/A-100 FOR ADDITIONAL INFORMATION.
6	INFILL EXISTING OPENING WITH NEW METAL STUDS AND STUCCO. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION.
7	WRAP ALL COLUMNS VISIBLE FROM EXTERIOR WINDOWS WITH LINER PANEL.
8	EXISTING LOADING AREA COLUMNS AND CONCRETE ENCASEMENT TO REMAIN.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	EXISTING CMU WALL TO REMAIN
	EXISTING COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW ASLE PARTITIONS (WALL TYPE S1)
	NEW STORAGE UNIT INTERIOR PARTITIONS (WALL TYPE S2)
	LOAD BEARING WALL PARTITION LOCATED ALONG COLUMN LINES (WALL TYPE B4)
	SHEAR WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW GYP BOARD / METAL STUD PARTITION. PRIME AND PAINT PER SCHEDULE.
	NEW CMU WALL / INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
	NEW STORAGE UNIT SWING DOOR
	NEW HOLLOW METAL SWING DOOR
	RECESSED FIRE EXTINGUISHER CABINET. REFER TO SHEET A-090 FOR ADDITIONAL INFORMATION.
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CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

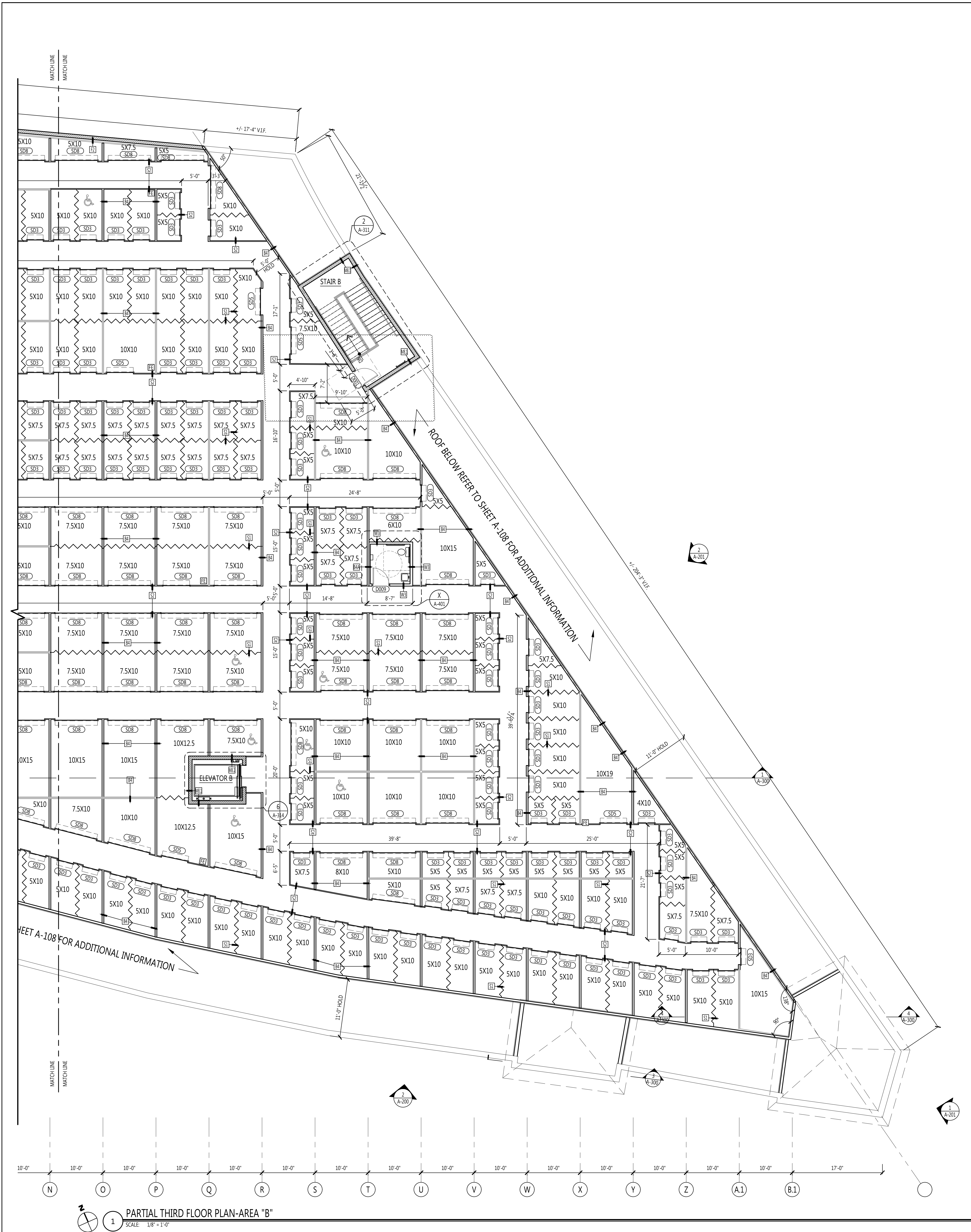
PARTIAL SECOND FLOOR  
LOCKER PLAN  
AREA "B"

SEAL & SIGNATURE	DATE: 6/13/18 PROJECT No. 18014 DRAWING BY: J.R. CHK BY: J.N. DWG. No.: <b>A-105.00</b> ALT OF XX
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DOB JOB NUMBER:







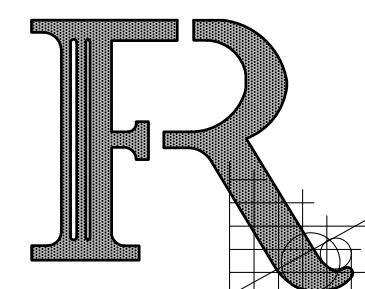
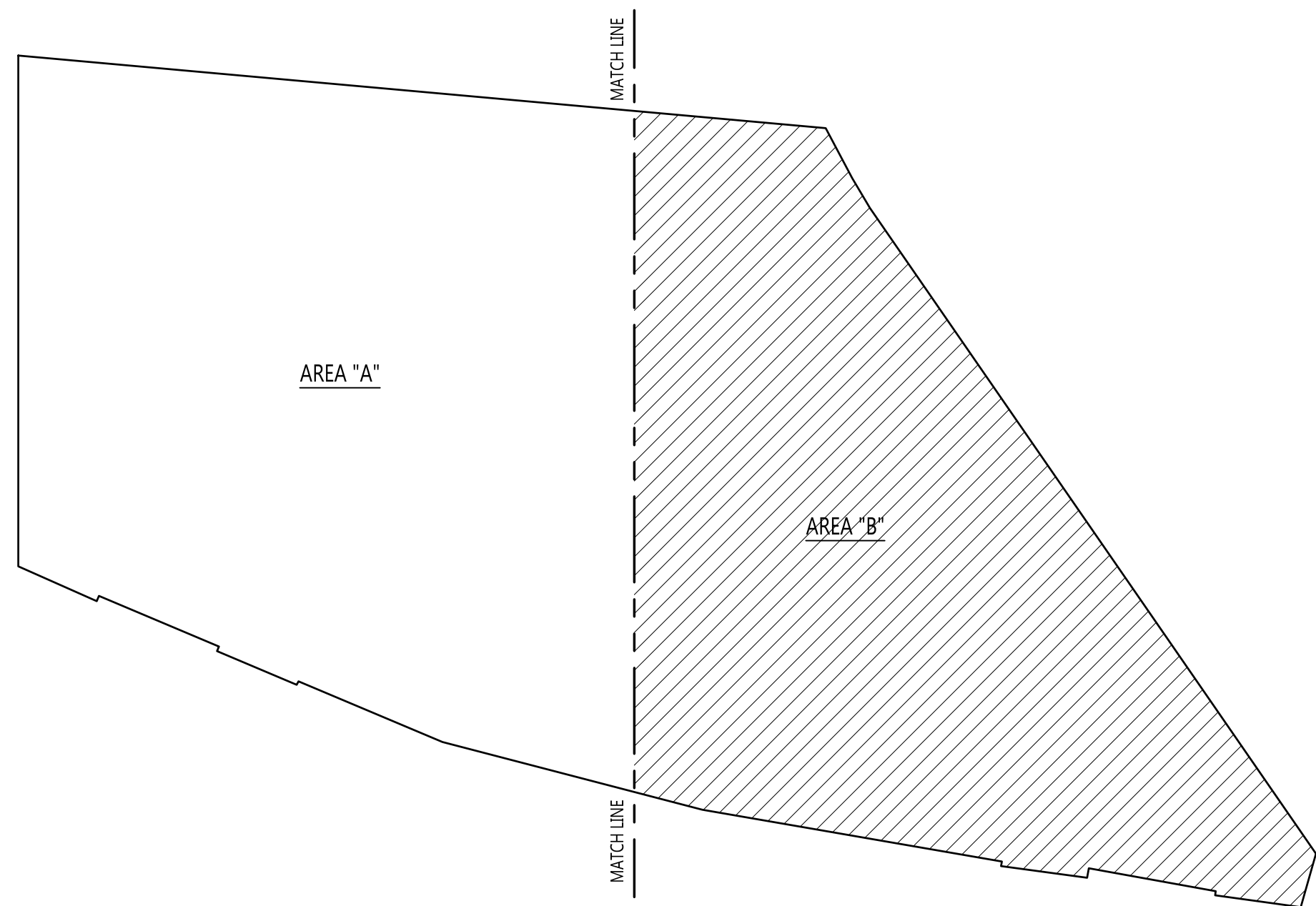
KEY PLAN  
SCALE: NTS

**GENERAL NOTES**

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- ALL COLUMNS ALONG COLUMN LINE INTERSECTIONS ARE LOAD BEARING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
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TAG #	REMARKS
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SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
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	NEW COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW AISLE PARTITIONS (WALL TYPE S1)
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	LOAD BEARING WALL PARTITION LOCATED ALONG COLUMN LINES (WALL TYPE B4)
	SHEAR WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
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	NEW CMU WALL / INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
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ISSUE:

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1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT

CLIENT:

SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

PARTIAL THIRD FLOOR PLAN  
AREA "B"

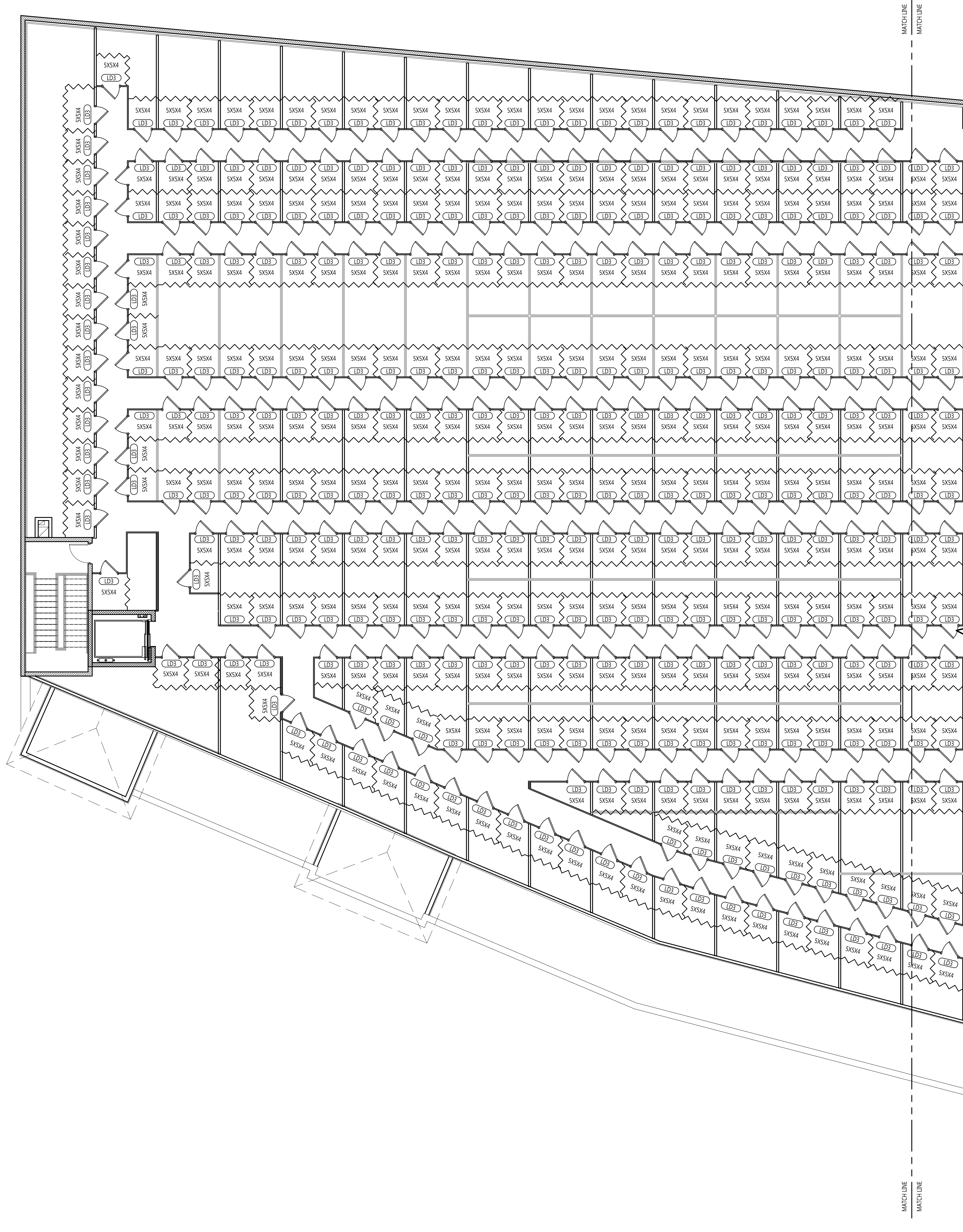
SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No.: 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-105.00

ALT OF XX

DOB JOB NUMBER:





2  
1  
PARTIAL THIRD FLOOR LOCKER PLAN-AREA "A"  
SCALE: 1/8" = 1'-0"

KEY PLAN  
SCALE: NTS

## GENERAL NOTES

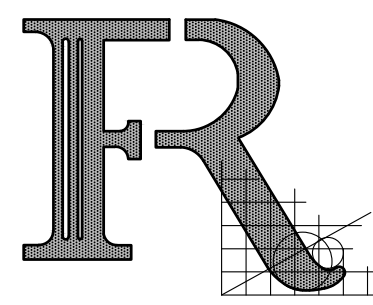
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## KEYED CONSTRUCTION NOTES

TAG #	REMARKS
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## SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	EXISTING CMU WALL TO REMAIN
	EXISTING COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
	NEW AISLE PARTITIONS (WALL TYPE S1)
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	SHEAR WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
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	NEW CMU WALL/INFILL
	NEW STORAGE UNIT ROLL-UP DOOR
	NEW STORAGE UNIT SWING DOOR
	NEW HOLLOW METAL SWING DOOR
	RECESSED FIRE EXTINGUISHER CABINET. REFER TO SHEET A-100 FOR ADDITIONAL INFORMATION.
	ADA ACCESSIBLE UNIT. REFER TO SHEET A-100 FOR ADDITIONAL INFORMATION.
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### PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

### TITLE DRAWING:

PARTIAL THIRD FLOOR  
LOCKER PLAN  
AREA "A"

### SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

A-106.00

ALT OF  
XX

### DOB JOB NUMBER:



2  
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PARTIAL THIRD FLOOR LOCKER PLAN-AREA "B"  
SCALE: 1/8" = 1'-0"

KEY PLAN  
SCALE: NTS

## GENERAL NOTES

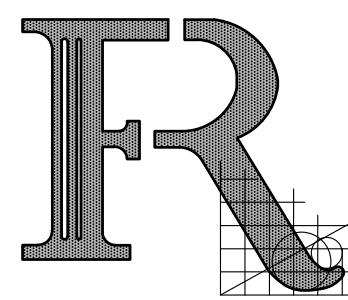
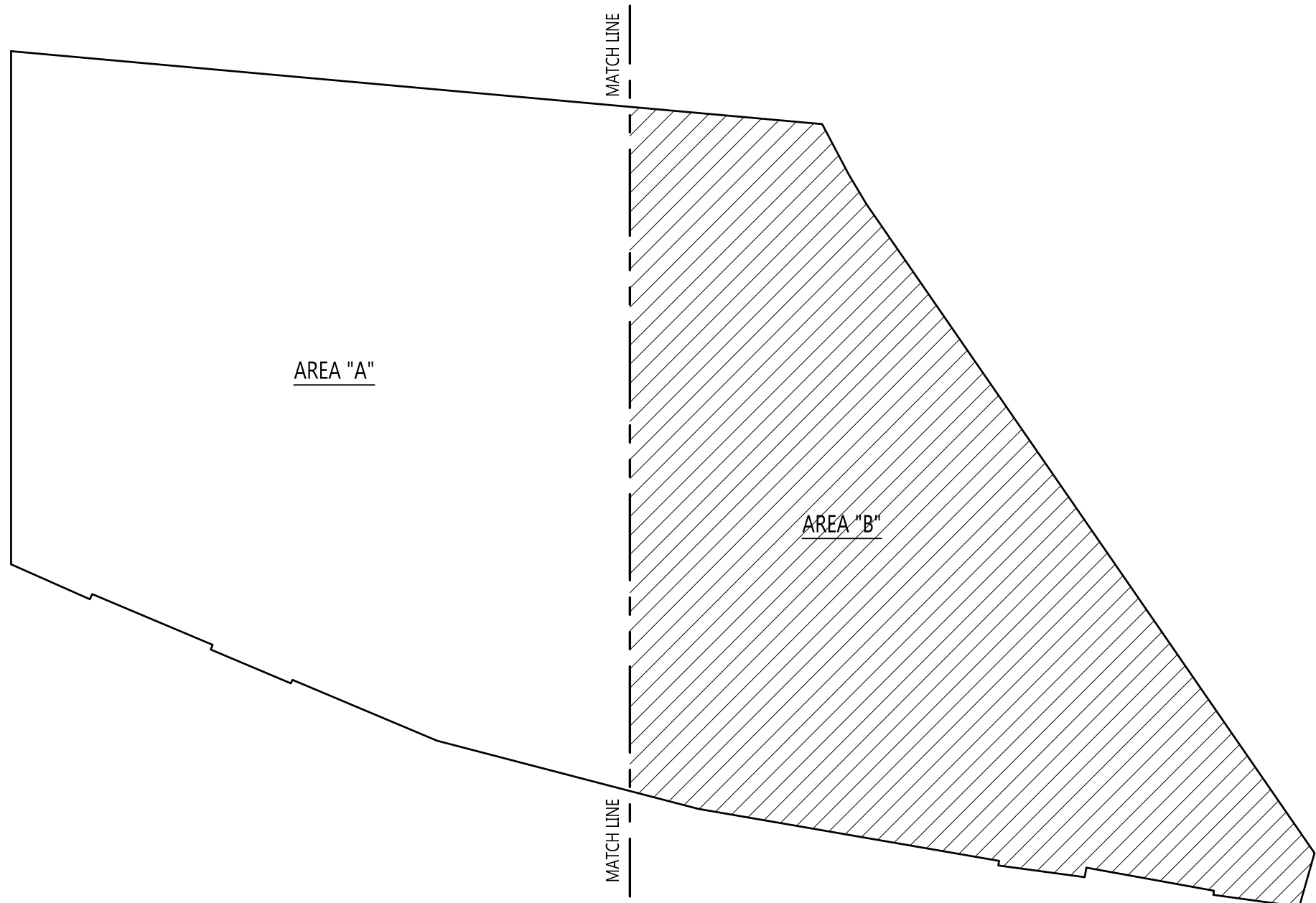
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## SYMBOLS LEGEND

SYMBOL	DESCRIPTION
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	NEW STORAGE UNIT INTERIOR PARTITIONS (WALL TYPE S2)
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www.fgrlf.com

CONSULTANTS:

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678.802.2094

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(631) 499-6599

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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

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ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

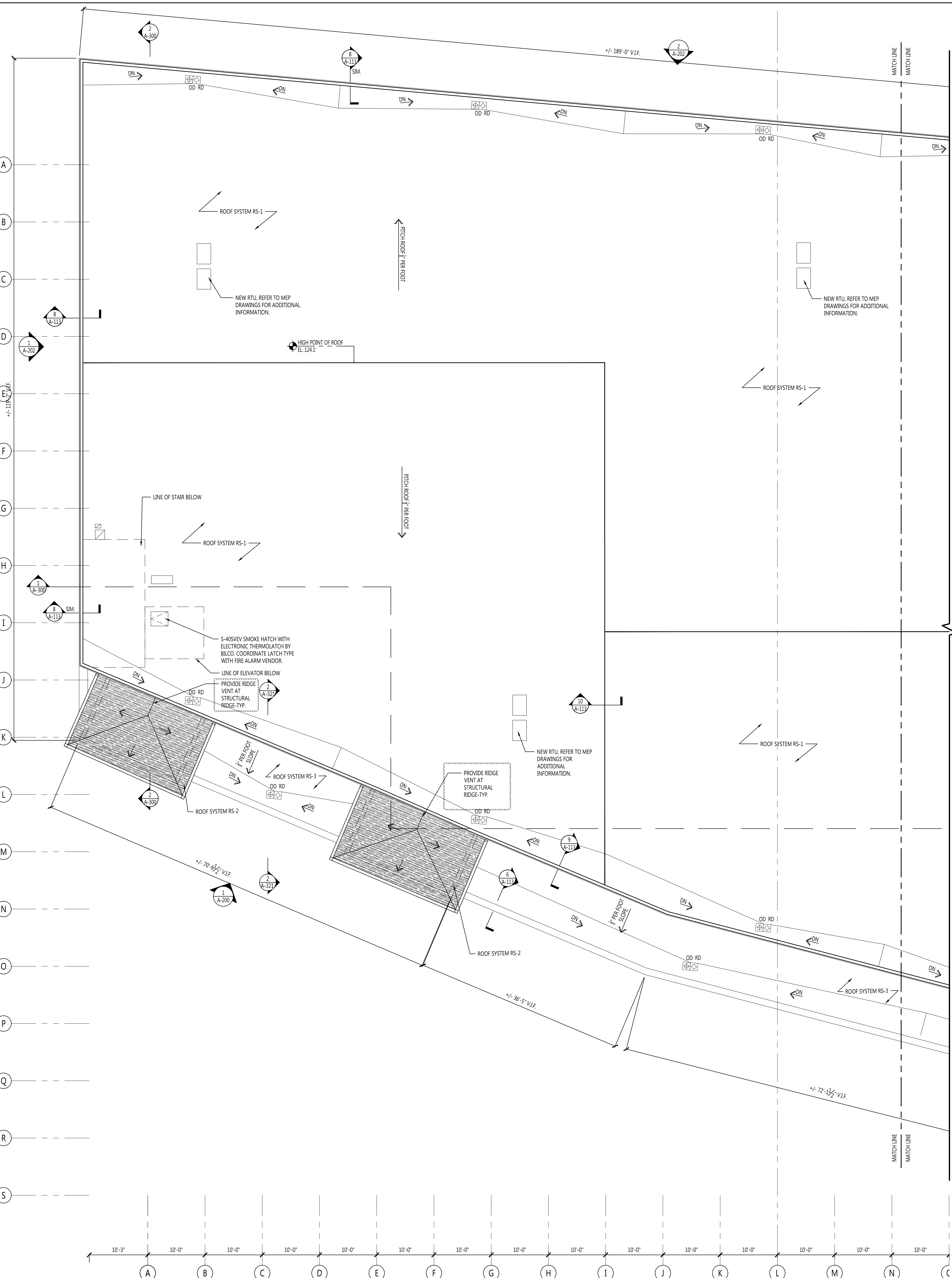
PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
PARTIAL THIRD FLOOR  
LOCKER PLAN  
AREA "B"

SEAL & SIGNATURE	DATE: 6/13/18 PROJECT No. 18014 DRAWING BY: J.R. CHK BY: J.N. DWG. No.: <b>A-107.00</b> ALT OF XX
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DOB JOB NUMBER:





1 PARTIAL ROOF FLOOR PLAN-AREA "A"  
SCALE: 1/8" = 1'-0"

KEY PLAN  
SCALE: NTS

**ROOF NOTES**

- CONTRACTOR TO STAGGER ALL JOINTS ON MULTI-LAYER INSULATION.
- CONTRACTOR TO PROVIDE AND INSTALL WALKWAY/TRAFFIC PADS ON ROOF AROUND ALL MECHANICAL EQUIPMENT.
- ALL SPRING CLIPS AND TERMINATION BARS ARE TO BE FASTENED @ 6" O.C. UNLESS NOTED OTHERWISE.
- ALL METAL COPINGS TO BE BY BUILDING MANUFACTURER.
- PROVIDE TAPERED CRICKETS AT ALL EQUIPMENT CURBS TO ENSURE ADEQUATE DRAINAGE.
- "BASE" INDICATES DETAIL THROUGH ROOF-WALL INTERSECTION.
- "HEAD" INDICATES DETAIL AT TOP OF WALL.
- ALL ROOF PENETRATIONS RTU'S, VENTS, CURBS, DRAINS, ETC. ARE TO BE COORDINATED WITH ALL MEP DRAWINGS FOR QUANTITIES AND LOCATION. FLASH ALL PENETRATIONS AS REQUIRED.
- ALL ROOF PENETRATIONS AND PATCH WORK BY G.C. ROOF CURBS BY MC, INSTALLED BY G.C. STRUCTURAL SUPPORTS PROVIDED AND INSTALLED BY G.C. G.C. TO COORDINATE WITH M.C. FOR SIZE AND LOCATION.
- R.D. INDICATES ROOF DRAIN
- O.D. INDICATES OVER FLOW DRAIN.

**NEW ROOF SYSTEM RS-1**

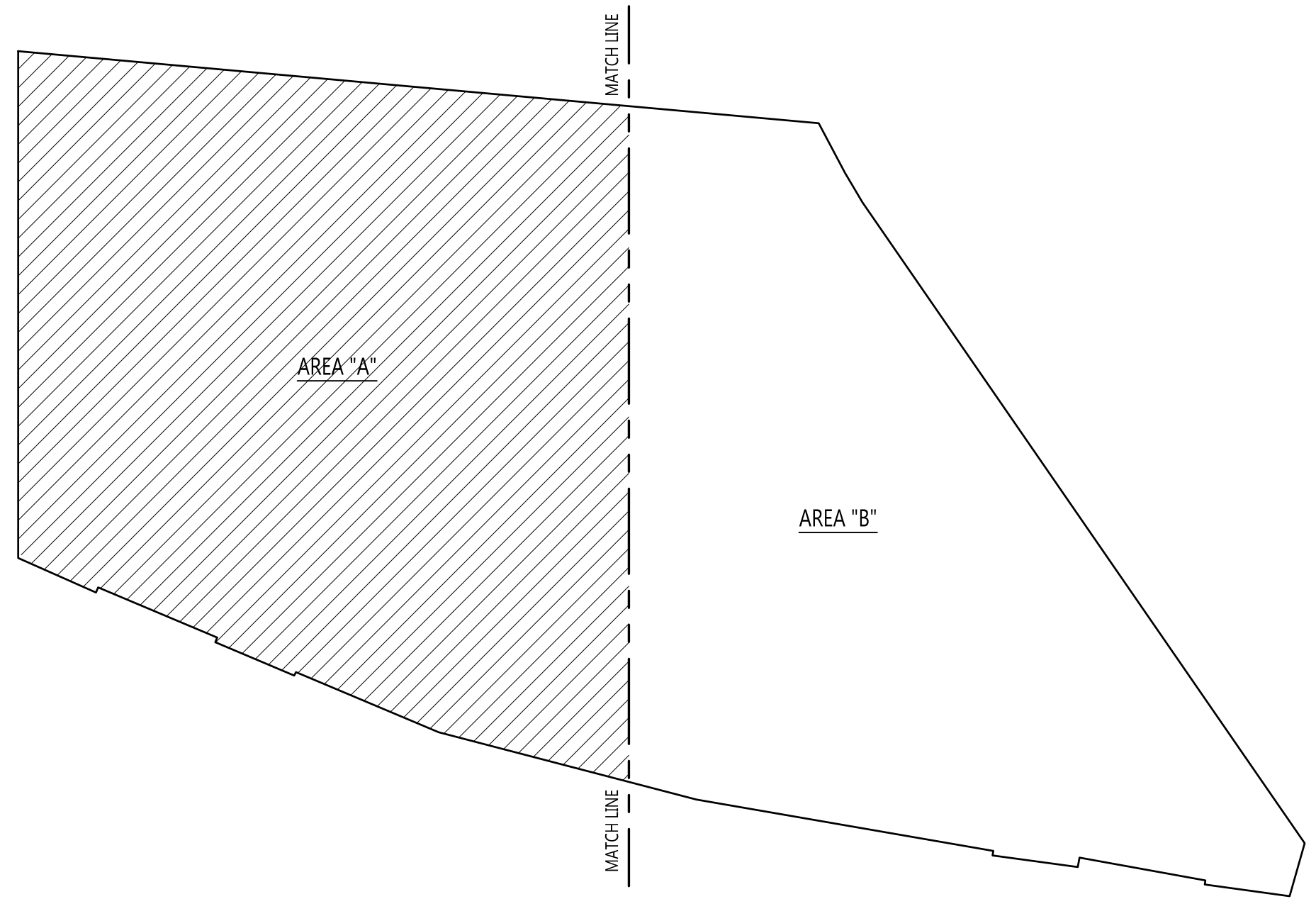
- NEW METAL ROOF DECK STRUCTURALLY SLOPED. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- (2) LAYERS OF 2-5" DURO GUARD ISO II INSULATION (R-30)
- (1) LAYER OF 5/8" DENS DECK PRIME AS MANUFACTURED BY GEORGIA PACIFIC
- (1) LAYER OF 50 MIL FULLY ADHERED DURO LAST ROOF SYSTEM AS MANUFACTURED BY DURO LAST
- G.C. TO INSTALL ROOF PER MANUFACTURER'S SPECIFICATIONS TO RECEIVE 20 YEAR WARRANTY.
- G.C. TO PROVIDE FULLY ENGINEERED SHOP DRAWINGS FOR REVIEW AND APPROVAL.

**NEW ROOF SYSTEM RS-2**

- ROOF PURLINS AT 2'-0" O.C. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 4" R-29 BATT INSULATION
- METAL ROOF DECKING
- 3/4" FIRE RETARDANT PLYWOOD
- #15 ROOF FELT
- ASPHALT SHINGLES

**NEW ROOF SYSTEM RS-3**

- NEW METAL ROOF DECK. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- TAPERED DURO GUARD ISO II INSULATION (R-30)
- (1) LAYER OF 5/8" DENS DECK PRIME AS MANUFACTURED BY GEORGIA PACIFIC
- (1) LAYER OF 50 MIL FULLY ADHERED DURO LAST ROOF SYSTEM AS MANUFACTURED BY DURO LAST
- G.C. TO INSTALL ROOF PER MANUFACTURER'S SPECIFICATIONS TO RECEIVE 20 YEAR WARRANTY
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CLIENT:  
SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042


PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
PARTIAL ROOF FLOOR PLAN  
AREA "A"

SEAL & SIGNATURE	DATE: 6/13/18 PROJECT No. 18014 DRAWING BY: J.R. CHK BY: J.N. DWG. No.: <b>A-110.00</b> ALT OF XX
DOB JOB NUMBER:	



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SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

PARTIAL ROOF PLAN  
AREA "B"

DATE:	6/13/18
PROJECT No.	18014
DRAWING BY:	J.R.
CHK BY:	J.N.
DWG. No.:	

A-111.00

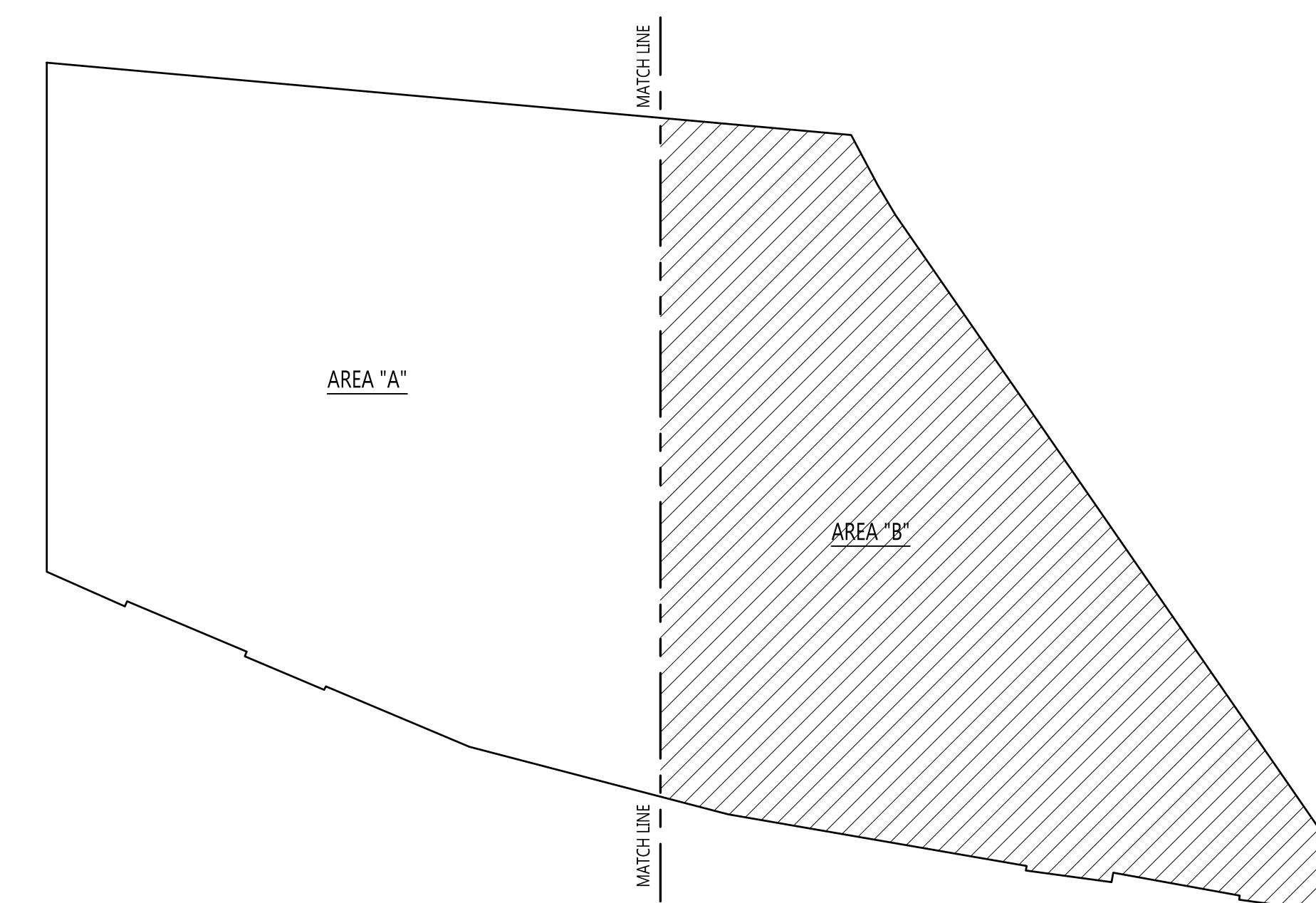
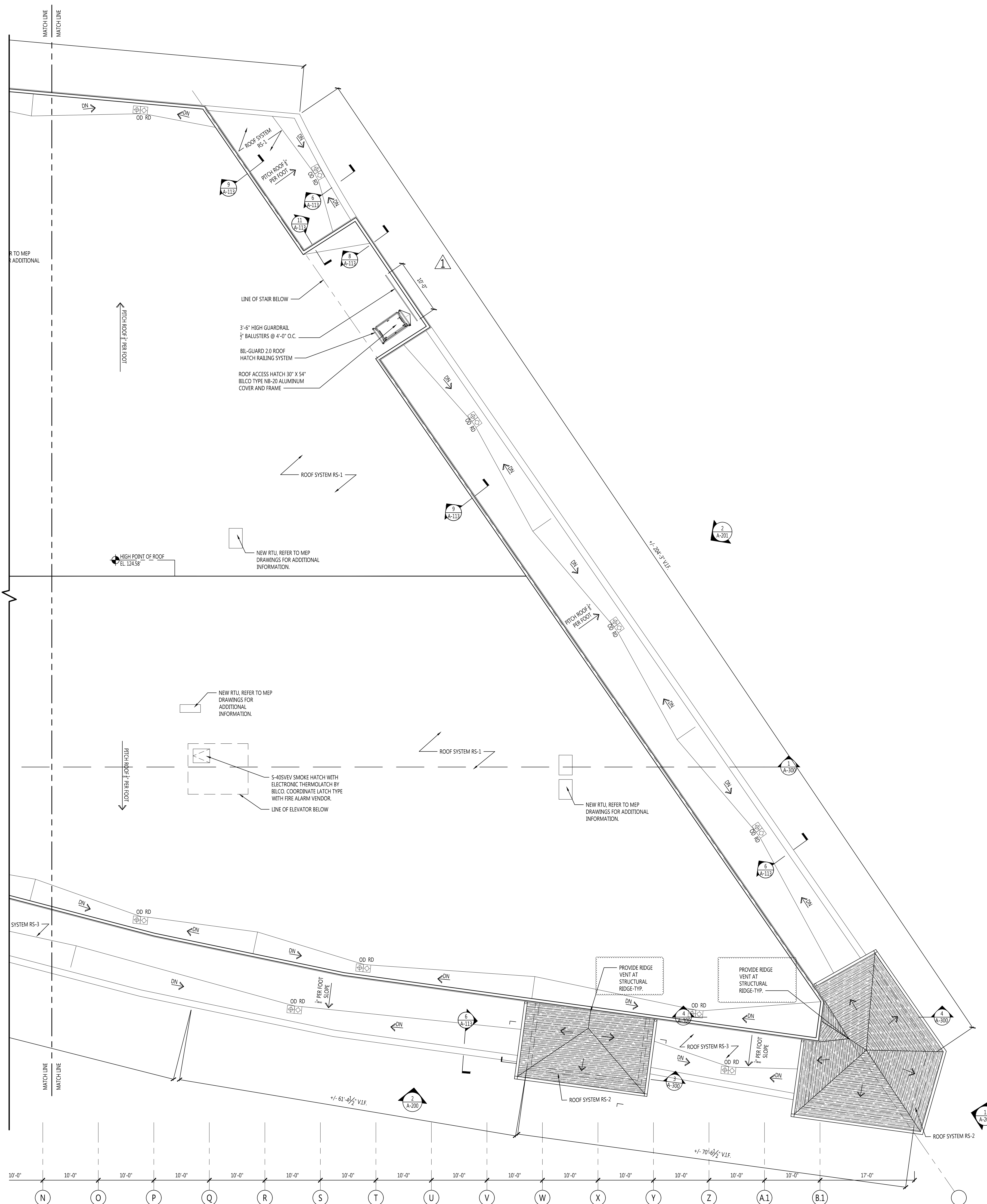
DOB JOB NUMBER

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- NEW METAL ROOF DECK STRUCTURALLY SLOPED. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- (2) LAYERS OF 2.5" DURO GUARD ISO II INSULATION (R-30)
- (1) LAYER OF  $\frac{1}{2}$ " DENS DECK PRIME AS MANUFACTURED BY GEORGIA PACIFIC
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- G.C. TO PROVIDE FULLY ENGINEERED SHOP DRAWINGS FOR REVIEW AND APPROVAL

- ROOF PURLINS AT 2'-0" O.C. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
- 6" (R-19) BATT INSULATION
- METAL ROOF DECKING
- 3/4" FIRE RETARDANT PLYWOOD
- #15 ROOF FELT
- ASPHALT SHINGLES

- NEW METAL ROOF DECK, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- TAPERED GUARD DURO ISO II INSULATION R-30
- (1) LAYER OF 1/2" DENS DECK PRIME AS MANUFACTURED BY GEORGIA PACIFIC.
- (1) LAYER OF 50 ML FULLY ADHERED DURO LAST ROOF SYSTEM AS MANUFACTURED BY DURO LAST
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## KEY PLAN

SCALE: NTS









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FRANK G. RELF ARCHITECT, P.C.

REVISIONS

[illegible]

ISSUE:

[illegible]

CLIENT:

SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJEC

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

TOWER PLANS

SEAL &amp; SIGNATURE

DATE: 6/13/18

PROJECT No.	18014
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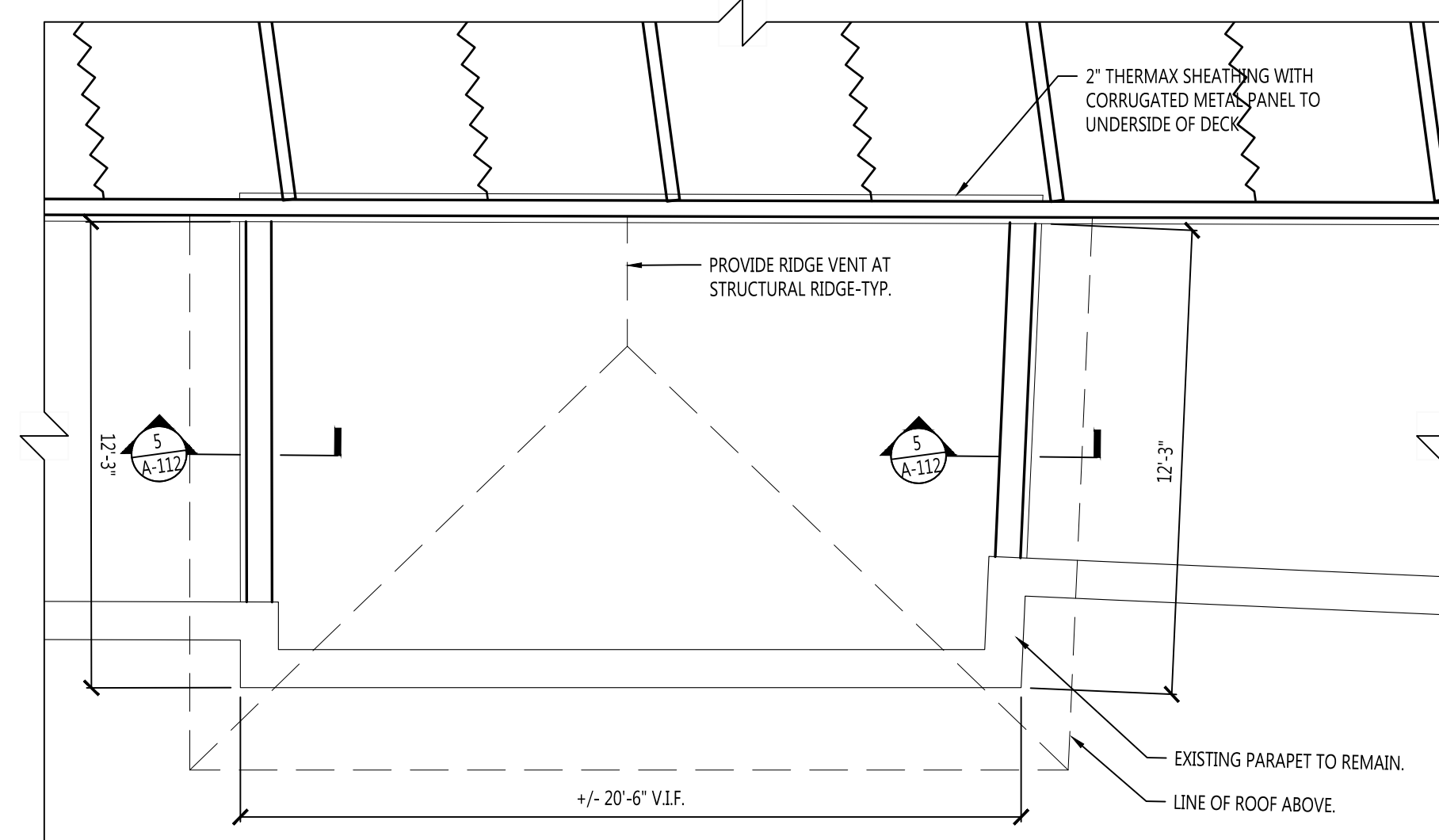
DRAWING BY: J.R.

CHK BY: J.N.

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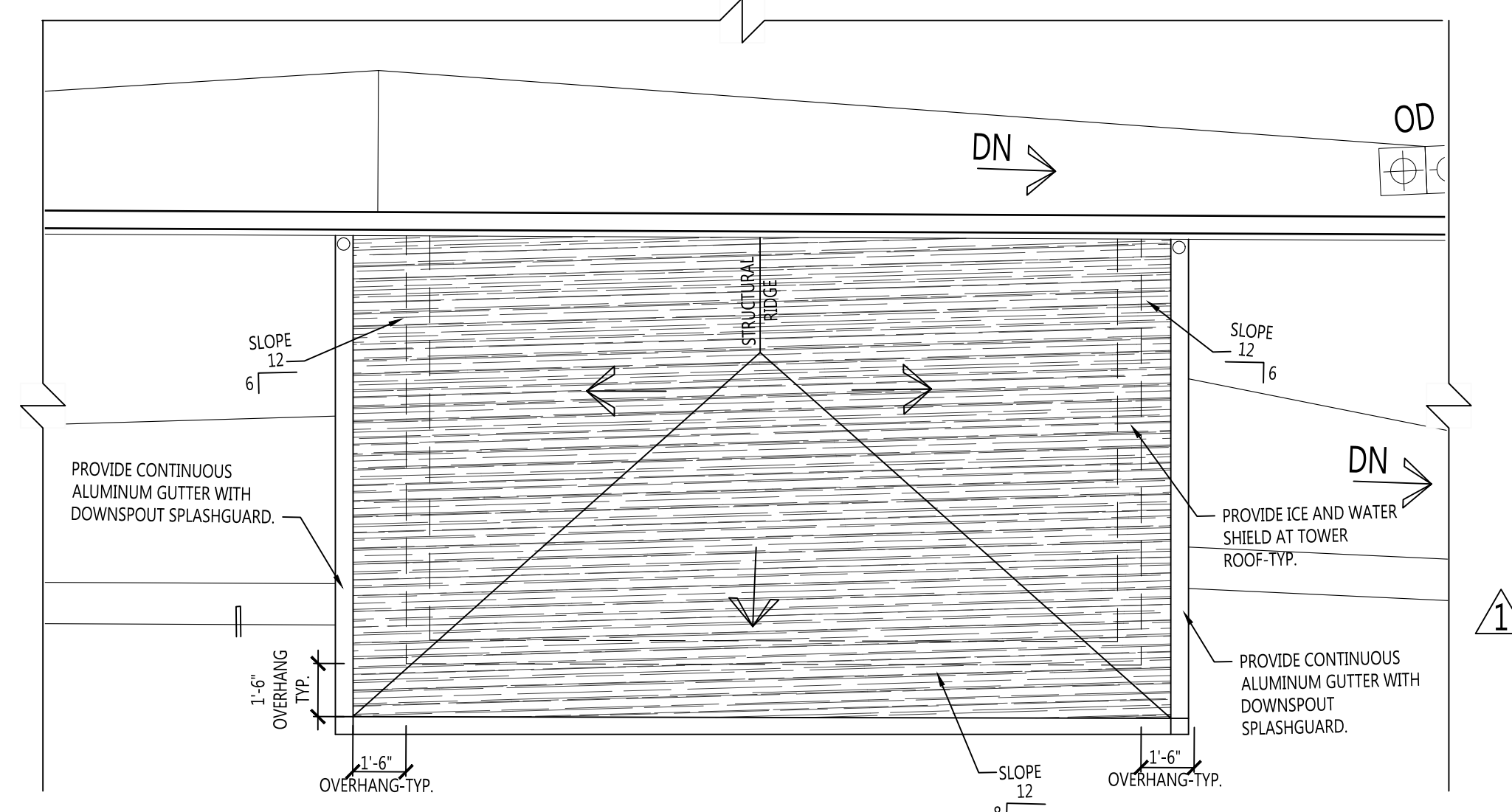
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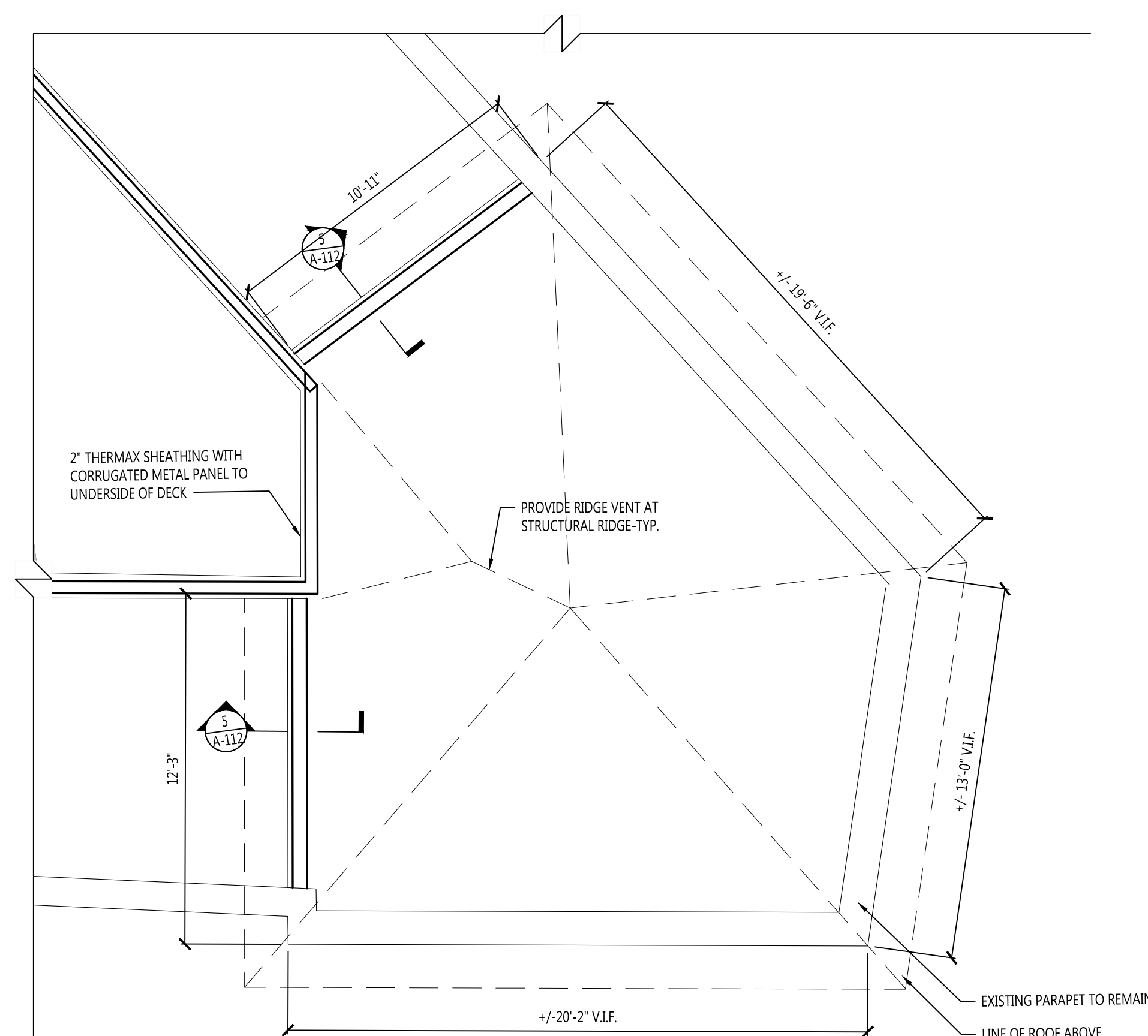
○ TOWER FRAMING PLAN (ALONG MCLEAN AVE)

SCALE: 1/4" = 1'-0"



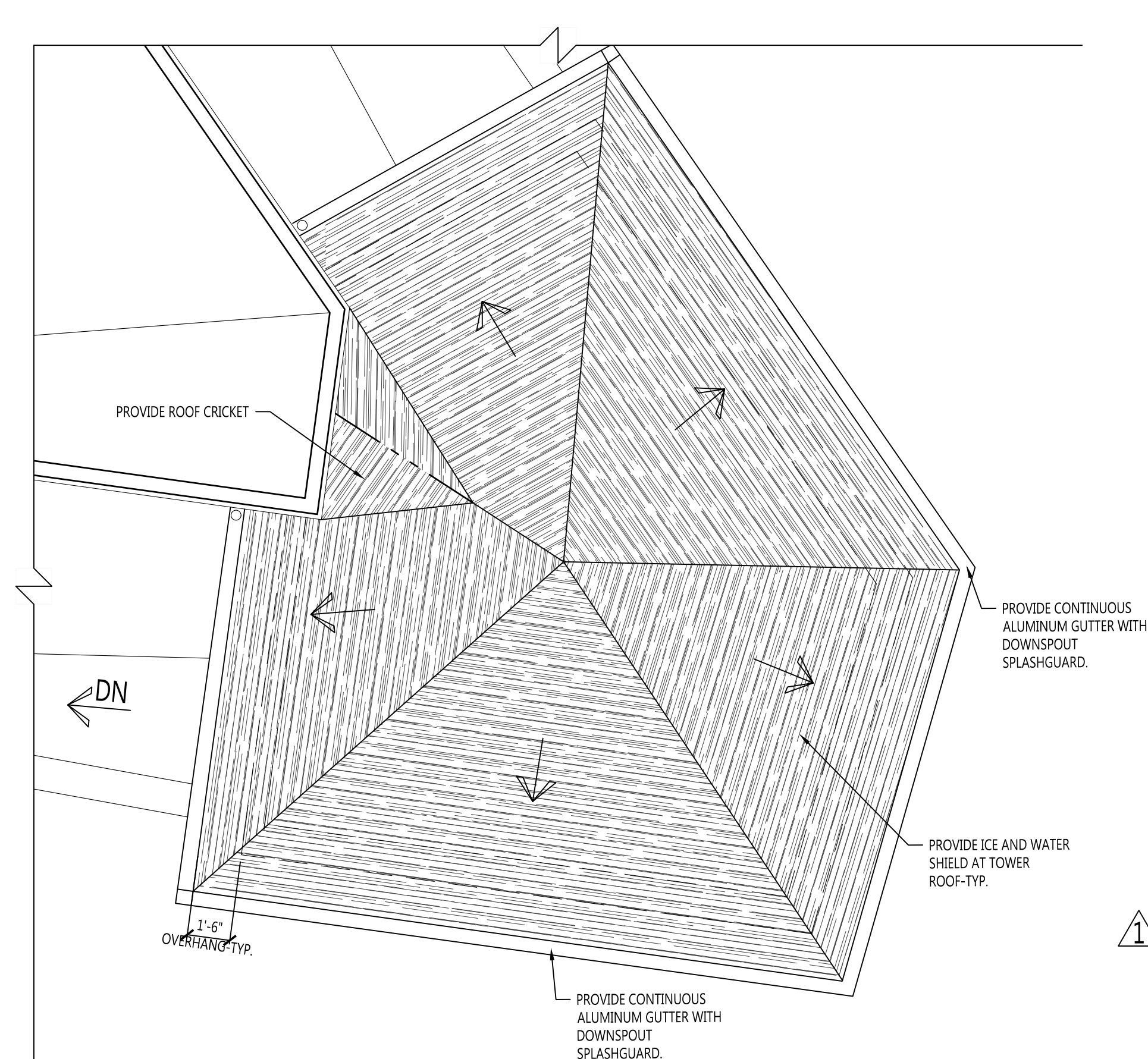
○ TOWER ROOF PLAN (ALONG MCLEAN AVE)

SCALE: 1/4" = 1'-0"



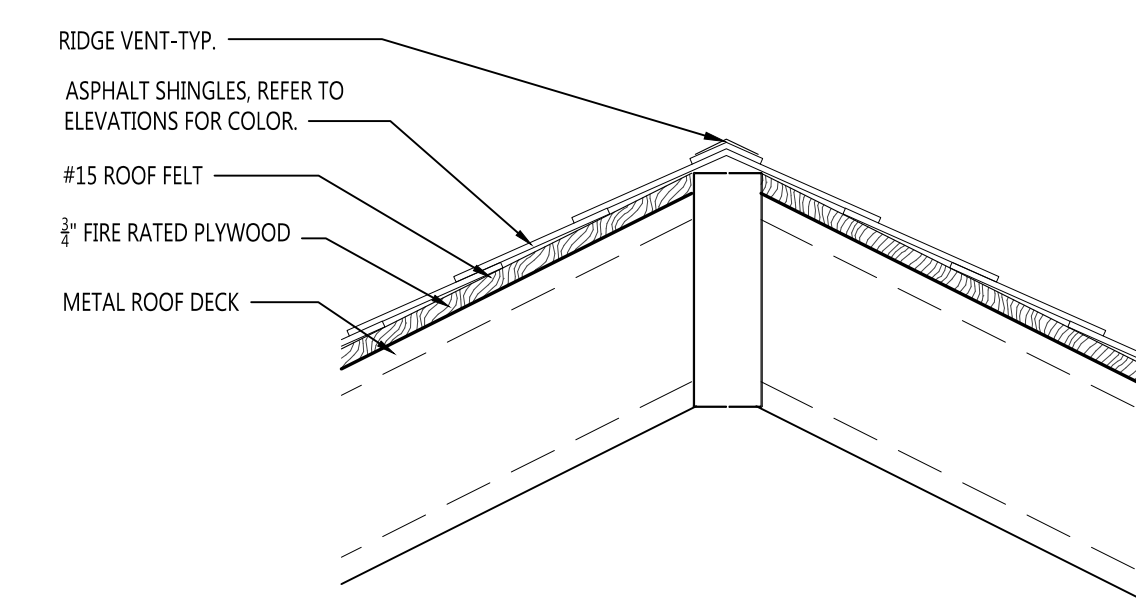
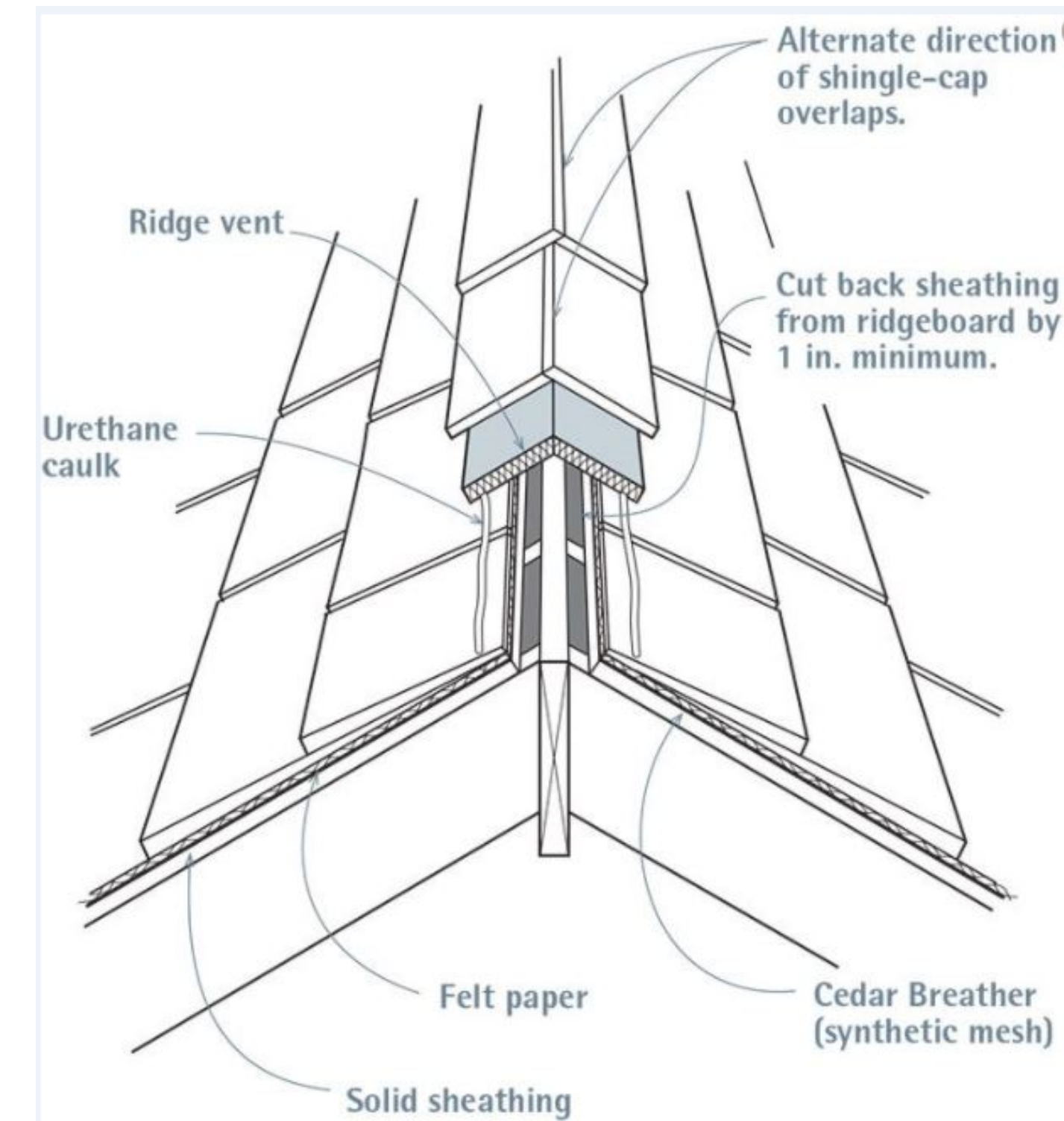
CORNER TOWER FRAMING PLAN

SCALE: 1/4" = 1'-0"



CORNER TOWER ROOF PLAN

SCALE: 1/4" = 1'-0"



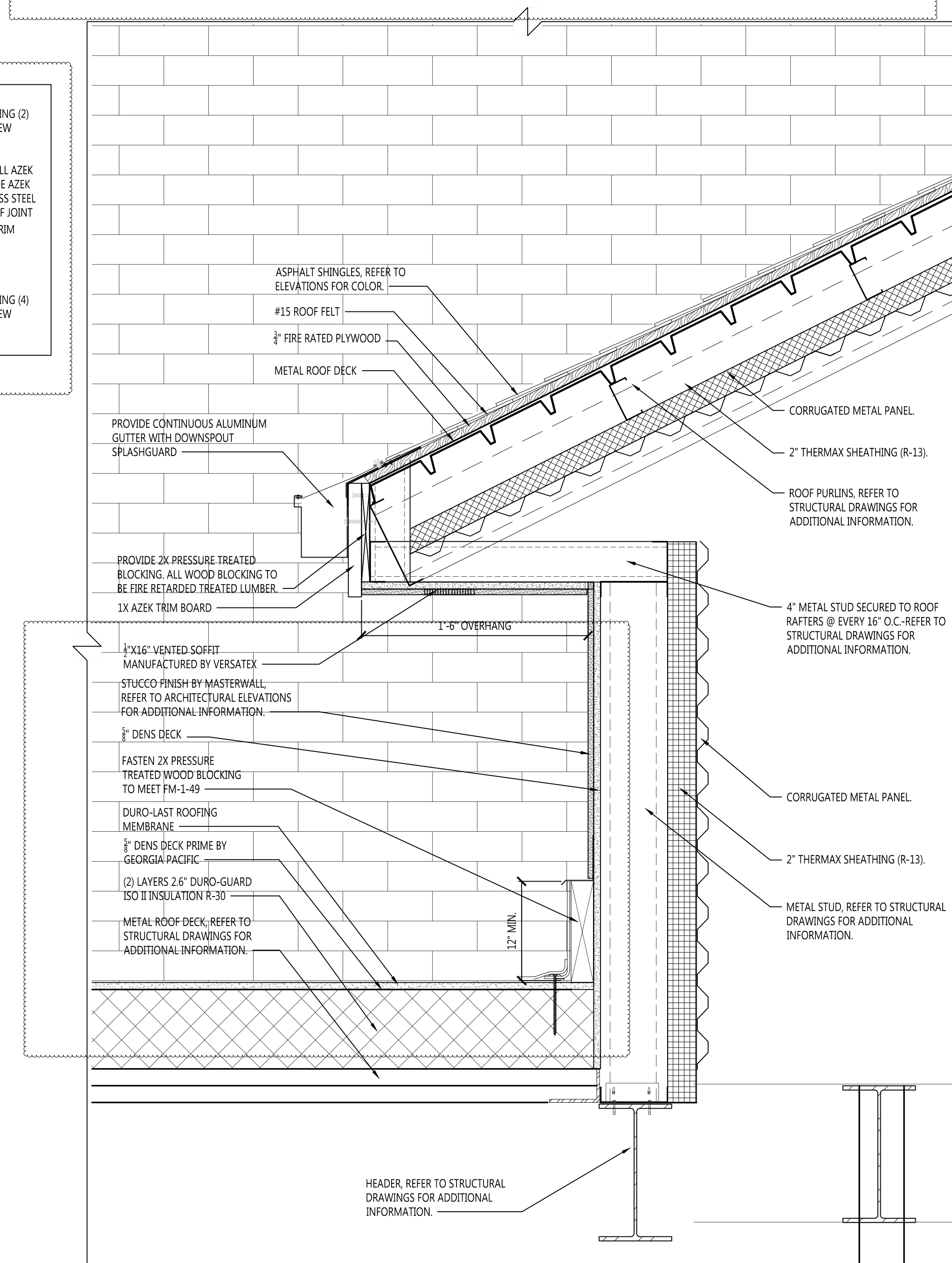
## TYPICAL RIDGE VENT DETAILS

SCALE: 1 1/2" = 1'-0"

AZEK NOTES:  
-SECURE TO FRT BLOCKING USING (2)  
#8 STAINLESS STEEL TRIM SCREW  
EVERY 6" O.C.

- PROVIDE A SCRAF JOINT AT ALL AZEK TO AZEK TRIM JOINTS. PROVIDE AZEK ADHESIVE AND (2) #8 STAINLESS STEEL TRIM SCREWS AT EACH SIDE OF JOINT
- ALLOW  $\frac{1}{8}$ " ER 18-0" OF AZEK TRIM BOARD FOR EXPANSION AND CONTRACTION

**VERSATEK NOTES**  
-SECURE TO FRT  
#8 STAINLESS ST  
EVERY 16"O.C.




TYPICAL ROOF FRAMING SECTION

SCALE: 1 1/2" = 1'-0"





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FRANK G. RELF ARCHITECT, P.C.

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SNL DEVELOPMENT GROUP  
3333 NEW HYDE PARK ROAD, SUITE 200,  
LAKE SUCCESS, NY, 11042

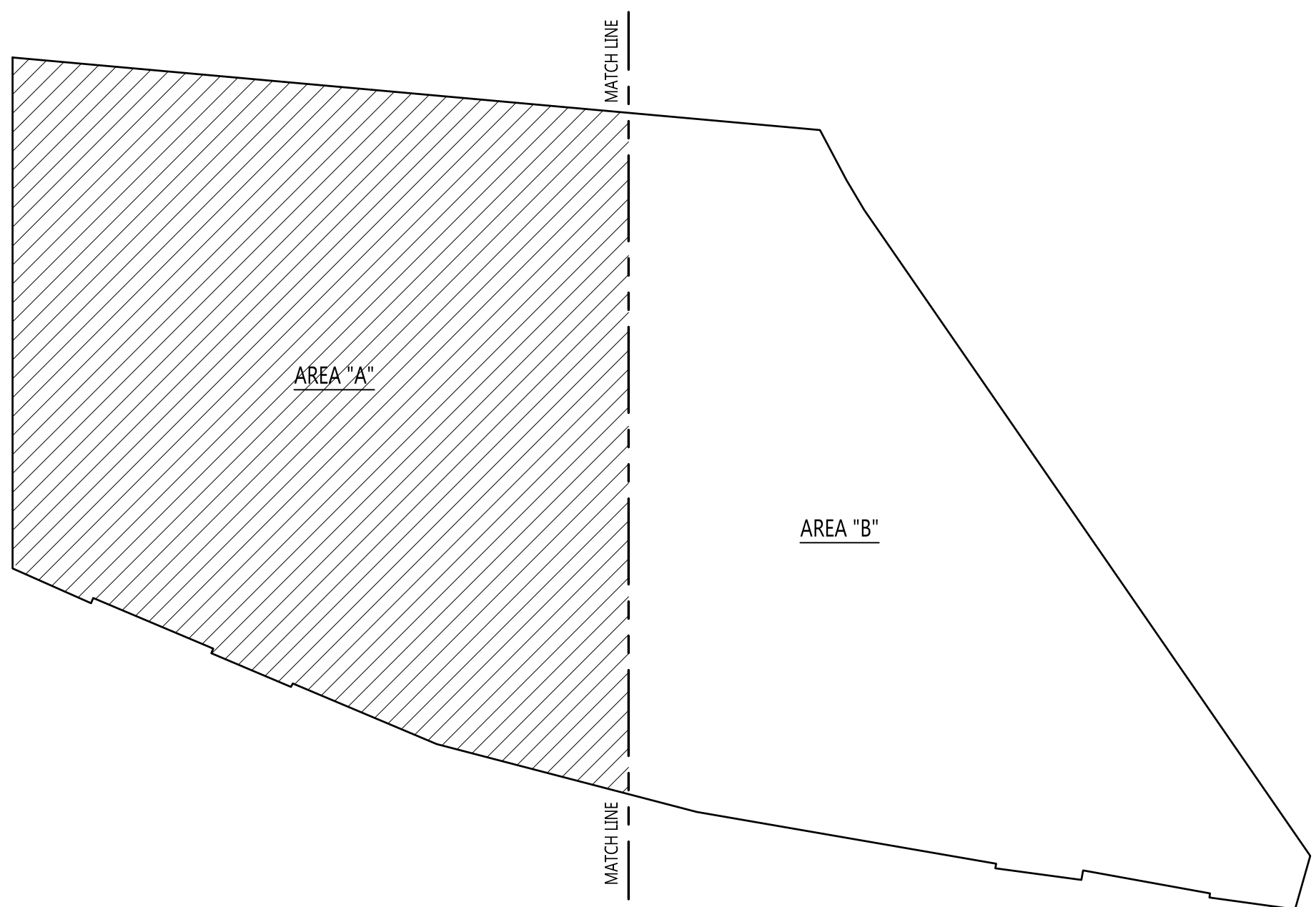
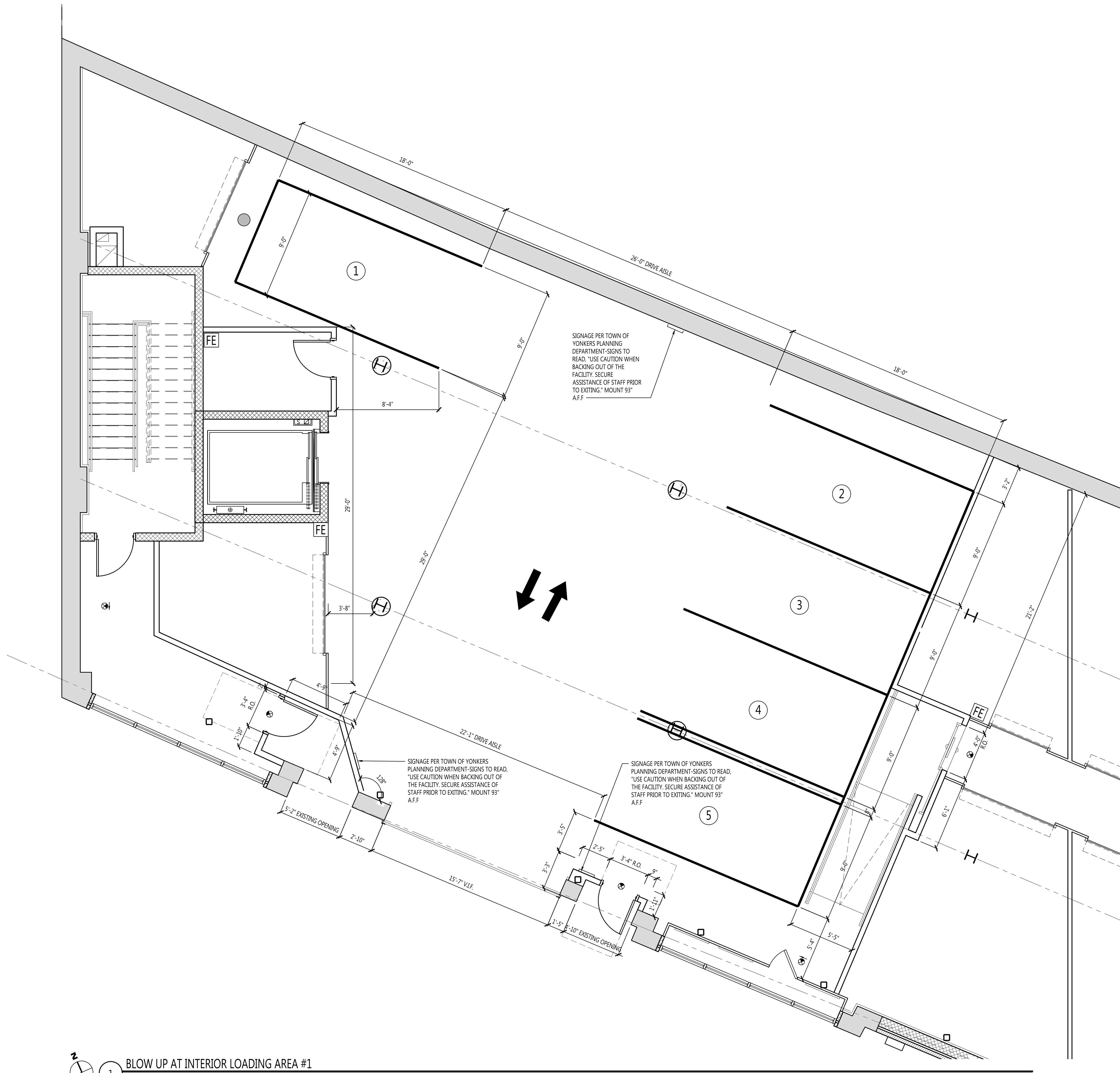
PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

BLOW UP AT INTERIOR  
LOADING AREA #1

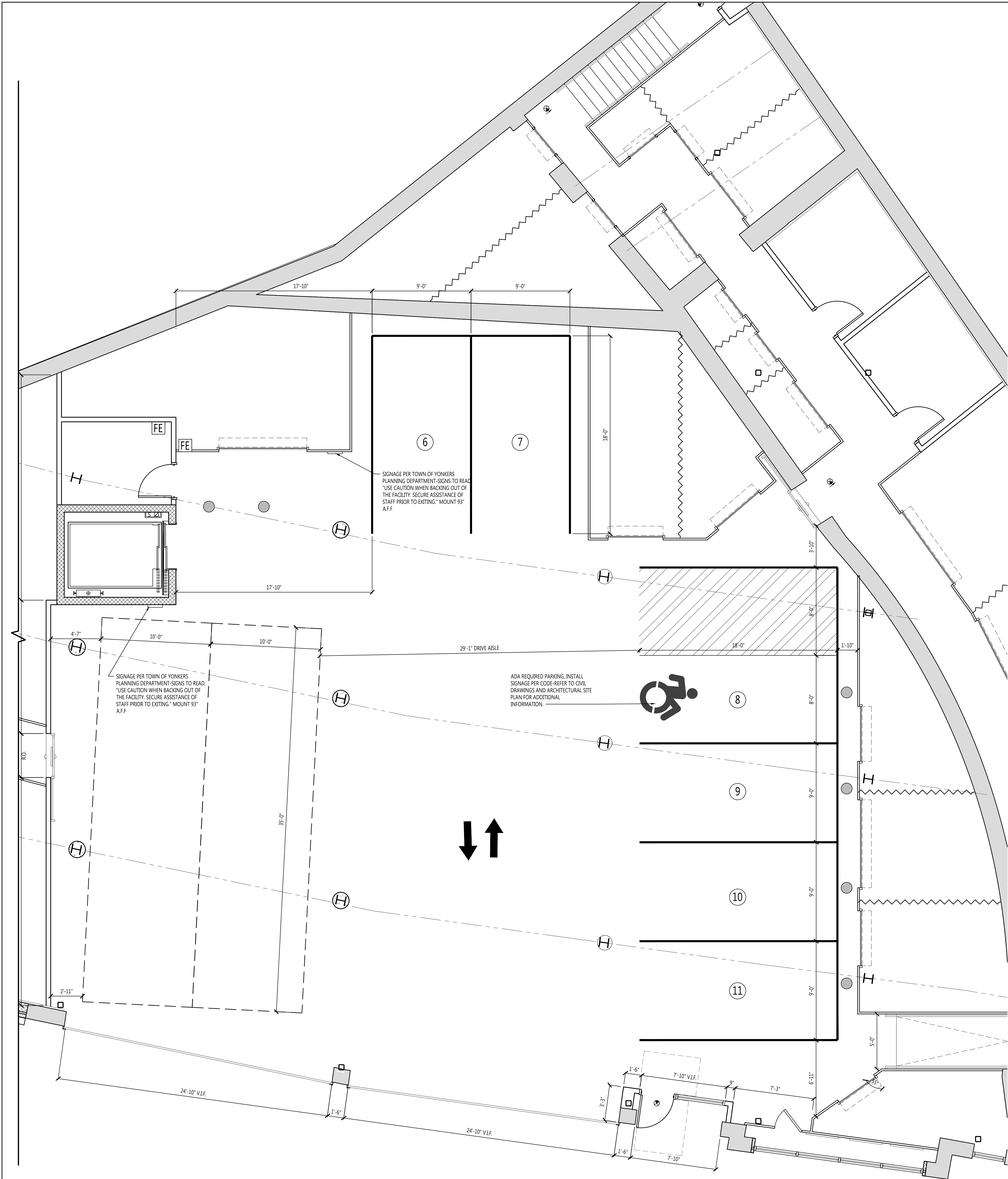
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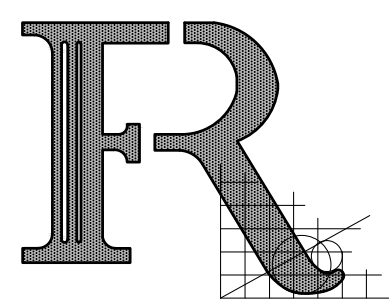
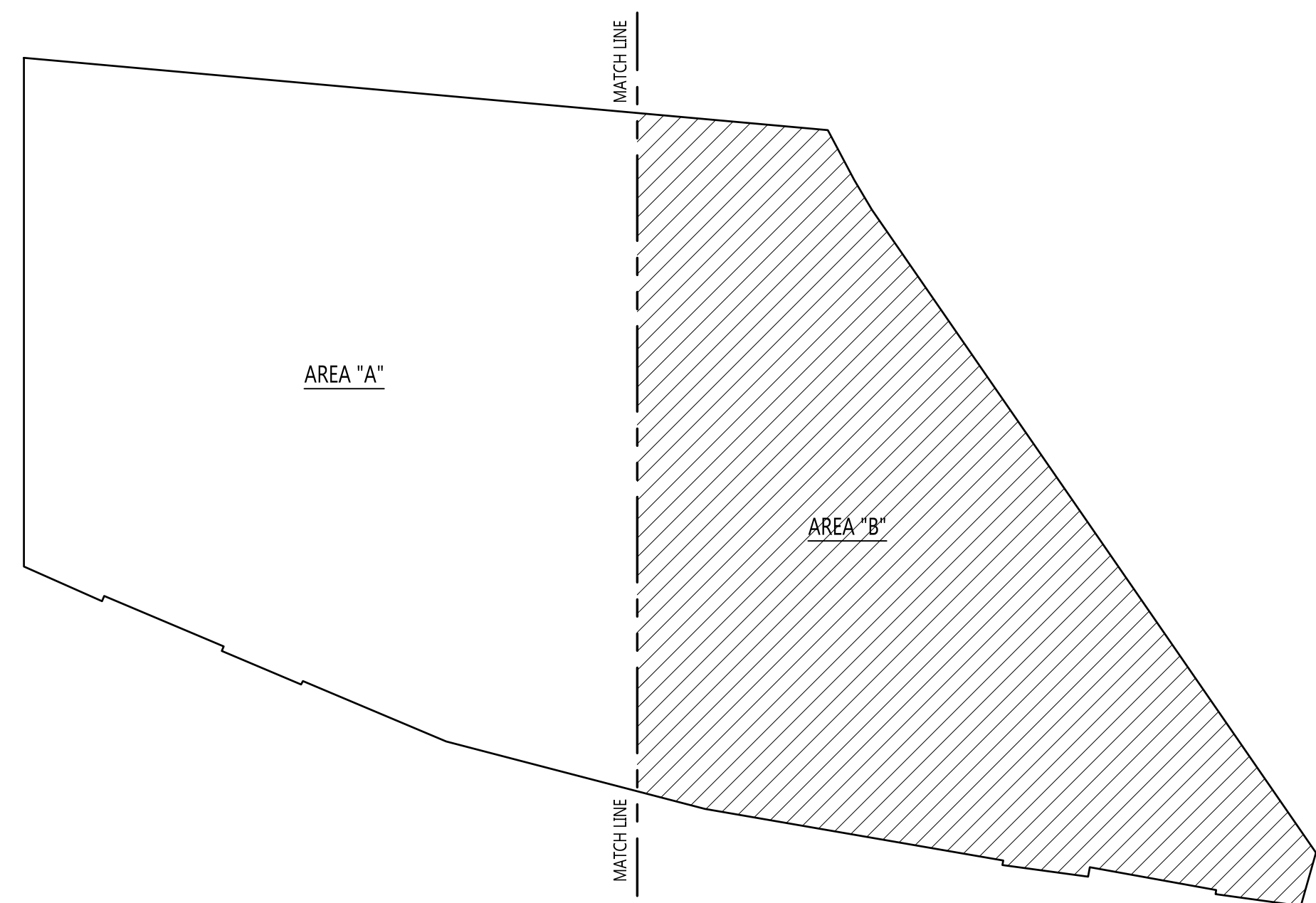
KEY PLAN  
SCALE: NTS





2  
1  
BLOW UP AT INTERIOR LOADING AREA #2  
SCALE: 1/4" = 1'-0"

KEY PLAN  
SCALE: NTS



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200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

BLOW UP AT INTERIOR  
LOADING AREA #2

SEAL & SIGNATURE

DATE: 6/13/18

PROJECT No. 18014

DRAWING BY: J.R.

CHK BY: J.N.

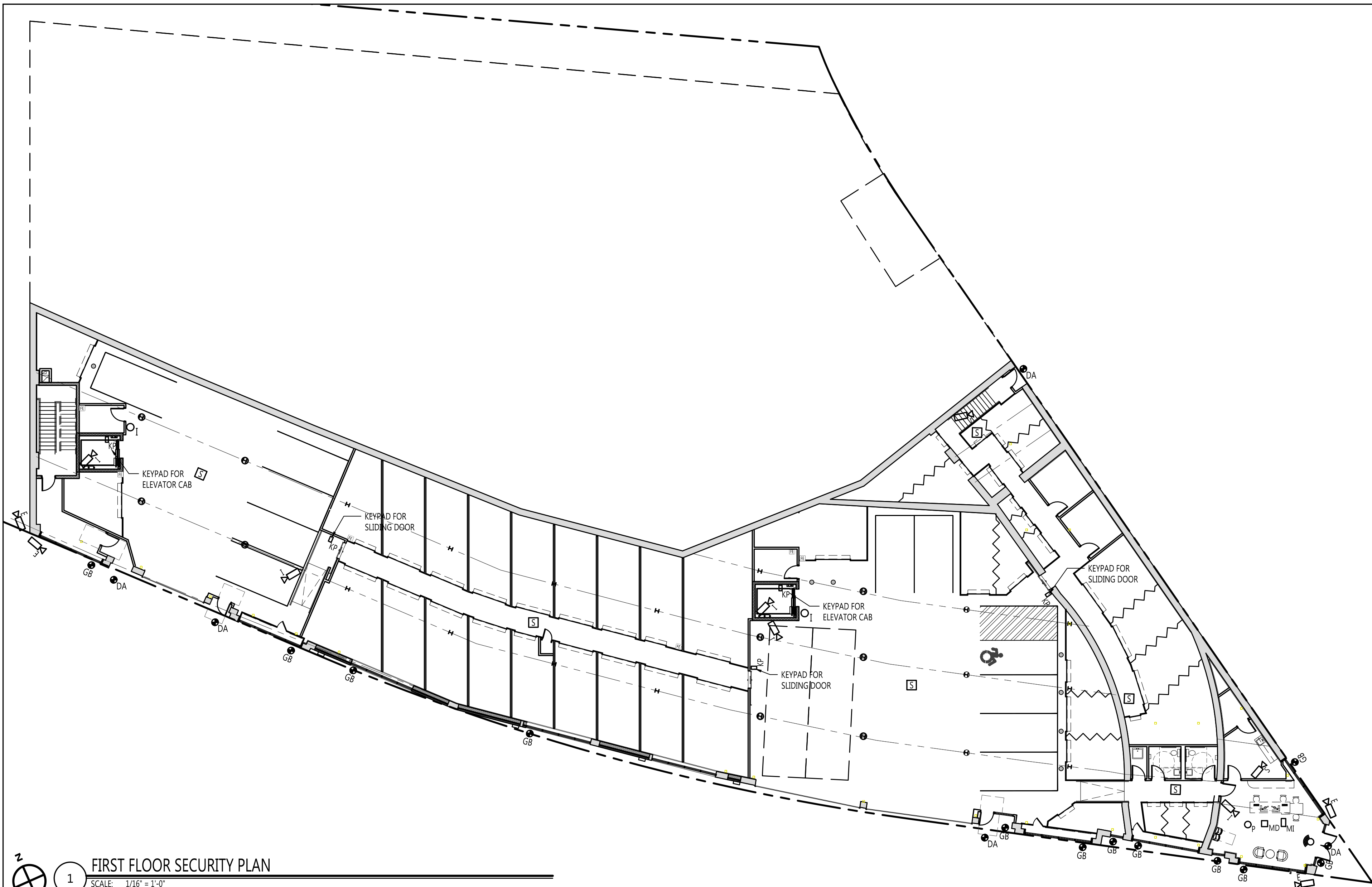
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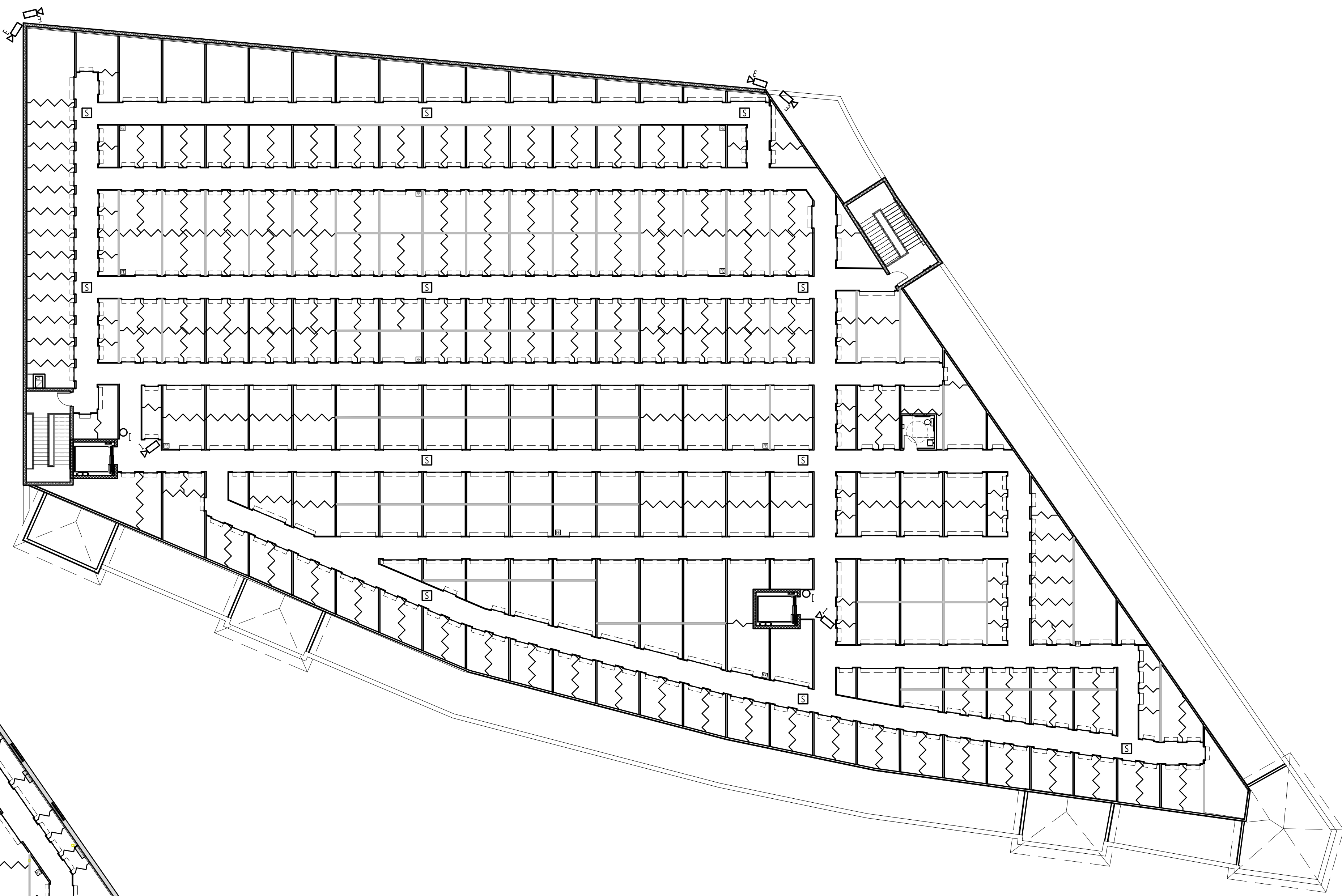




1 FIRST FLOOR SECURITY PLAN  
SCALE: 1/16" = 1'-0"

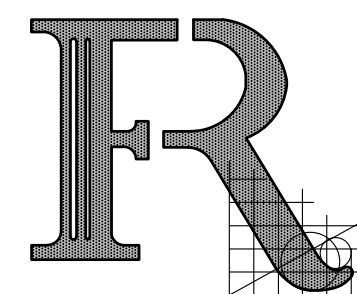


2 SECOND FLOOR SECURITY PLAN  
SCALE: 1/16" = 1'-0"



3 THIRD FLOOR SECURITY PLAN  
SCALE: 1/16" = 1'-0"

SECURITY LEGEND		
ICON	DESCRIPTION	COMMENTS
	INTERCOM WITH CALL BUTTON	ALL INTERCOMS TO MASTER INTERCOM
	SPEAKER FOR MUSIC & ANNOUNCEMENTS	TO BE TIED TO ALL RADIO OR STEREO SYSTEM
	INTERIOR COLOR CAMERA	COLOR CAMERA TO BE VISIBLE TO CUSTOMERS & ALL EXT CAMERAS TO BE IN HEATED WEATHERPROOF ENCLOSURE. MOUNT CAMERAS TO BUILDING STRUCTURE, COMPUTER, BMM AUTO IRIS LENSE, 1/3 CCTV CAMERAS, INCL. SUN VISORS
	EXTERIOR COLOR CAMERA @ 20' A.F.F.	
	HIDDEN CAMERA	LOCATED IN BREAK ROOM FACING SAFE- USE CLOCK, SMOKE DETECTOR ETC HIDDEN CAMERA
	KEYPAD (EXT. TO BE WEATHER SAFE)	TIED TO MUSIC, MASTER INTERCOM SECURITY & COMPUTER SYSTEM DOOR STRIKES & DOOR STRIKE POWER SUPPLY INCLUDED
	DOOR AJAR ALARM	TIED TO SECURITY LOCAL 24 HOUR MONITORING
	MOTION DETECTORS W/ SIREN BOX & KEYPAD FOR SIREN BOX	TIED TO BOTH LOCAL AND CENTRAL ALARM
	PANIC BUTTON	TIED TO CENTRAL ALARM
	MASTER INTERCOM	TO BE TIED TO ALL INTERCOMS
	SECURITY MONITOR	50" WALL MOUNTED SECURITY MONITOR
	GLASS BREAK ALARM	LOCATED AT ALL GLAZING @ FIRST FLOOR
	DOOR CONTACT FOR ELECTRONIC STRIKE	LOCATED AT ALL EGRESS DOORS TO STAIR
	WIRELESS INTERNET	LOCATED AT OFFICE AND LOADING AREAS
SECURITY NOTES: SECURITY VENDOR IS TO PROVIDE ALL REQUIRED EQUIPMENT FOR PROPER OPERATION OF LOW VOLTAGE AND SECURITY SYSTEM, INCLUDING BUT NOT LIMITED TO FACILITY INTERCOM, DIGITAL HARD DRIVE RECORDER, FLAT PANEL MONITORS ETC. OWNER/ OPERATOR IS TO OWN ALL PROGRAMMING AND ACCESS CODES TO ANY INSTALLATIONS PERFORMED BY THIRD PARTIES.		
PRODUCT SPECIFICATIONS:		
ACCESS CONTROL SYSTEM	PTI	
ACCESS CONTROL KEYPAD	SURFACE MOUNT PTI APEX METAL WITH INTERCOM	
COMPUTER BASED DVR:	OPENEYE 16 CHANNEL OE-ESLM, MODEL # OE-ESLM16-1T	
DVR SURGE PROTECTOR	DITEK # DTK-DRP16	
DVR RACK	PER OWNER / OPERATOR	
INTERIOR CAMERAS:	NUVICO CD-HD2M	
OUTDOOR CAMERAS:	NUVICO CB-HD22N-L-DA	
SECURITY MONITOR:	50 INCH FLAT PANEL LED, PROVIDE MOUNTING BRACKET, COORDINATE MANUFACTURER WITH OWNER	
MUSIC SYSTEM:	SPECO TECHNOLOGIES MINI 3 WAY SPEAKER, # DMS-3TS	
OFFICE ALARM SYSTEM:	VISTA 20P VISTA CONTROL PANEL BY HONEYWELL	
CATT 5 CABLE:	VU PROTECTED CABLE ONLY	



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678.802.2094

MEP CONSULTANT:

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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

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ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
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CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

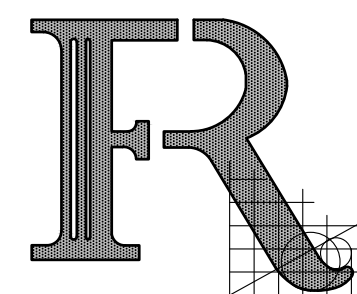
PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
SECURITY PLANS

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
	DWG. No.:	A-120.00
ALT		OF XX

DOB JOB NUMBER:





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200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
BUILDING ELEVATIONS

SEAL & SIGNATURE  
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-200.00

ALT OF XX

DOB JOB NUMBER:

## EXTERIOR FINISH SCHEDULE

TAG #	DESIGNATION	MANUFACTURER	MODEL	COLOR	REMARKS
1	PAINT EXISTING NEW WALL		ULTRA SPEC MASONRY ELASTOMERIC LOW LUSTRE		ALL EXISTING WALLS TO BE THOROUGHLY POWER WASHED AND SCAPED PRIOR TO PAINTING. PREP EXISTING CMU IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2	METAL CORNICE	B & B SHEET METAL	VERRAZANO CORNICE		INSTALL PER MANUFACTURER SPECIFICATIONS.
3	FAUX BRICK	MASTERWALL INC.	2" (R-7.7) EPS WITH FAUX BRICK CFS		INSTALL PER MANUFACTURER SPECIFICATIONS.
4	STUCCO FINISH	MASTERWALL INC.	CEMPLASTER FIBERSTUCCO BASE 5		INSTALL PER MANUFACTURER SPECIFICATIONS, COORDINATE LOCATIONS WITH CONSTRUCTION DRAWINGS.
5	PARAPET COPING	REFER TO ROOF DETAILS AND SECTIONS FOR ADDITIONAL INFORMATION.			
6	ASPHALT SHINGLE ROOF				
7	STOREFRONT	REFER TO A-880 FOR ADDITIONAL INFORMATION.			
8	FAUX WINDOWS	JANUS	5'-0" WIDE X 7'-0" TALL SURFACE MOUNTED ALUMINUM SUPPLY MEDIUM GRAY		INSTALL PER MANUFACTURER SPECIFICATIONS.
9	OVERHEAD GARAGE DOOR	UNITED STEEL PRODUCTS	MODEL 500		COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY DOOR FRAME AND SHROUD TO MATCH URBAN BRONZE, DOOR PANEL TO BE LIFE STORAGE YELLOW INSTALL PER MANUFACTURER SPECIFICATIONS, G.C. TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS.
10	WOOD CORBELS				
11	LED WALL PACK	REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATIONS.			MOUNT 12'-6" A.F.F.
12	HVAC LOUVER	REFER TO MECHANICAL DRAWINGS FOR SPECIFICATIONS			LOUVER COLOR TO MATCH ADJACENT WALL/PANEL COLOR
13	FAUX BRICK	MASTERWALL INC.	3" EPS WITH FAUX BRICK CFS		COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY INSTALL PER MANUFACTURER SPECIFICATIONS.

NOTE: PROVIDE WEEP HOLES IN EXISTING MASONRY WALLS AT 20'-0" O.C. MIN. 8" ABOVE GRADE -TYP.

## COLOR HATCH KEY

	SHERWIN WILLIAMS URBAN BRONZE (SW 7048)
	BENJAMIN MOORE GUN METAL (1502)
	BENJAMIN MOORE STORMY MONDAY (2112-50)
	SHERWIN WILLIAMS CUSTOM COLOR TO MATCH LIFE STORAGE YELLOW
	SHERWIN WILLIAMS HONORABLE BLUE (SW 6811)



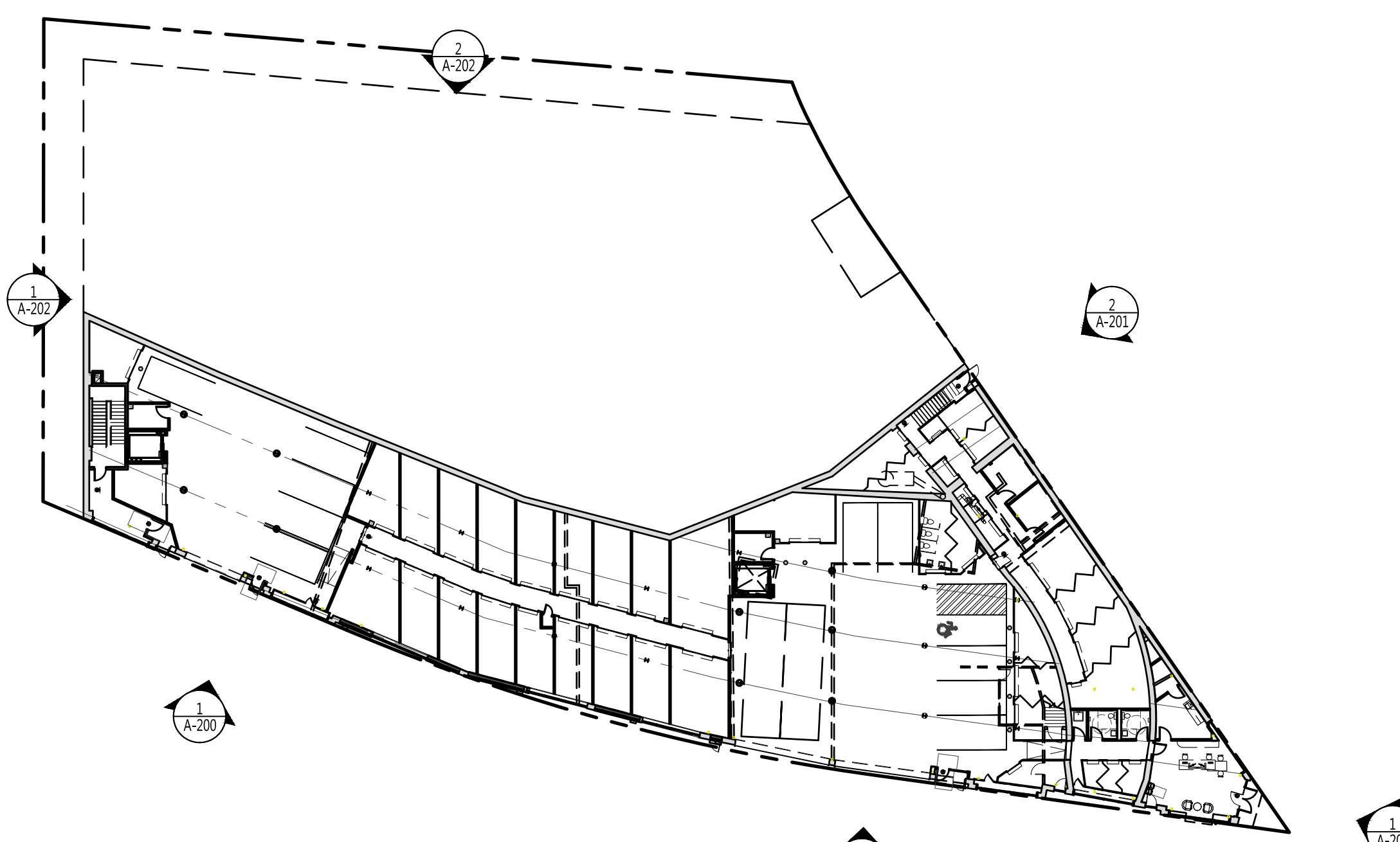
1 SOUTH ELEVATION "AREA A" - McLEAN AVENUE

SCALE: 1/8" = 1'-0"



2 SOUTH ELEVATION "AREA B" - McLEAN AVENUE

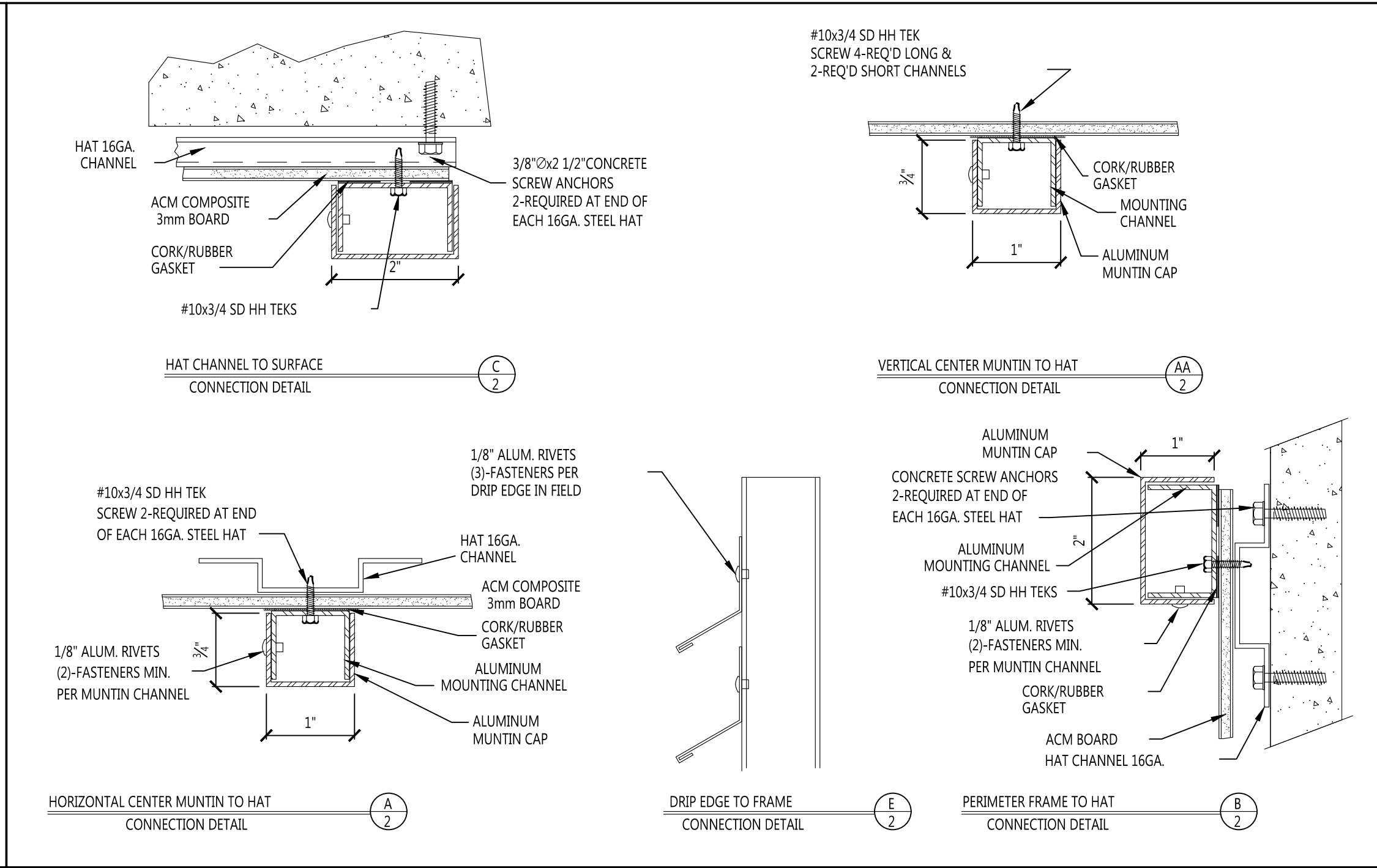
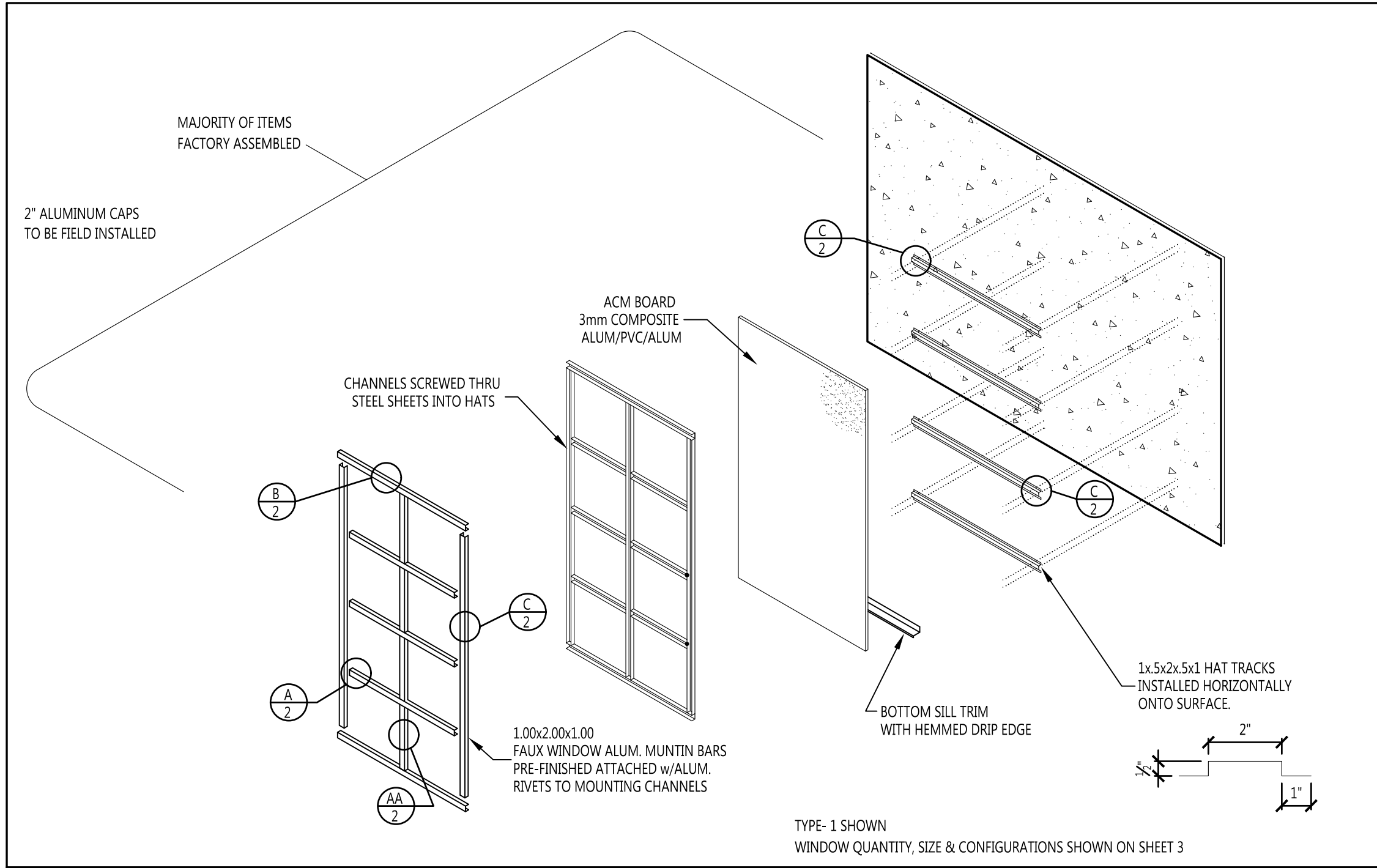
SCALE: 1/8" = 1'-0"



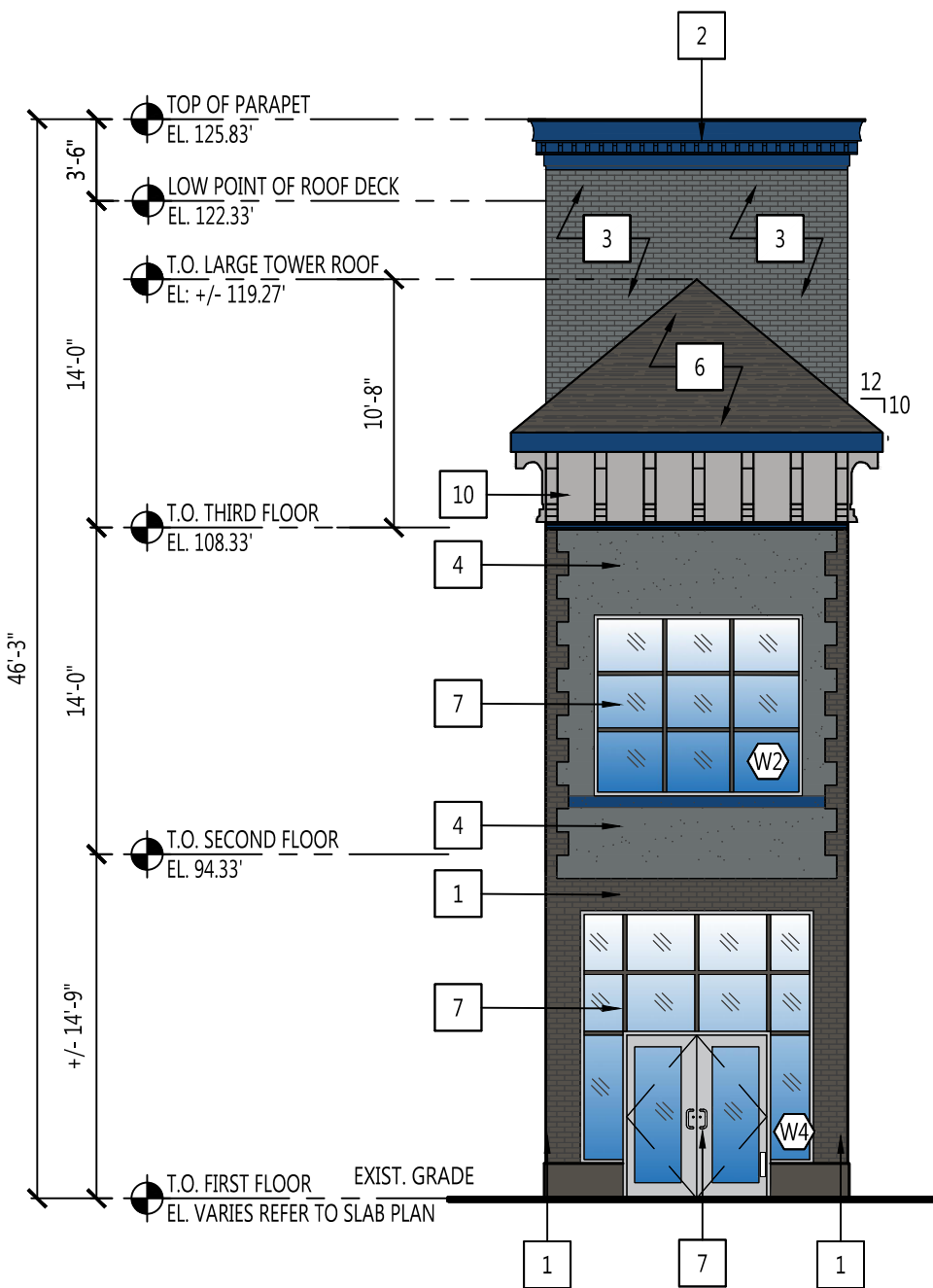
ELEVATION KEY PLAN

SCALE: 1/32" = 1'-0"

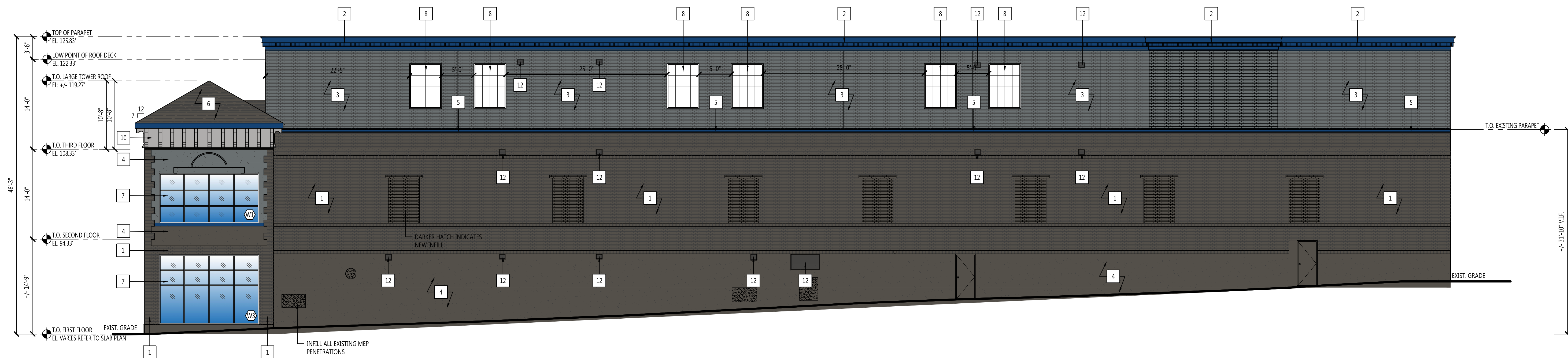




1 JANUS FALSE GLAZING DETAILS  
SCALE: NTS



1 SOUTH-EAST CORNER ELEVATION  
SCALE: 1/8" = 1'-0"

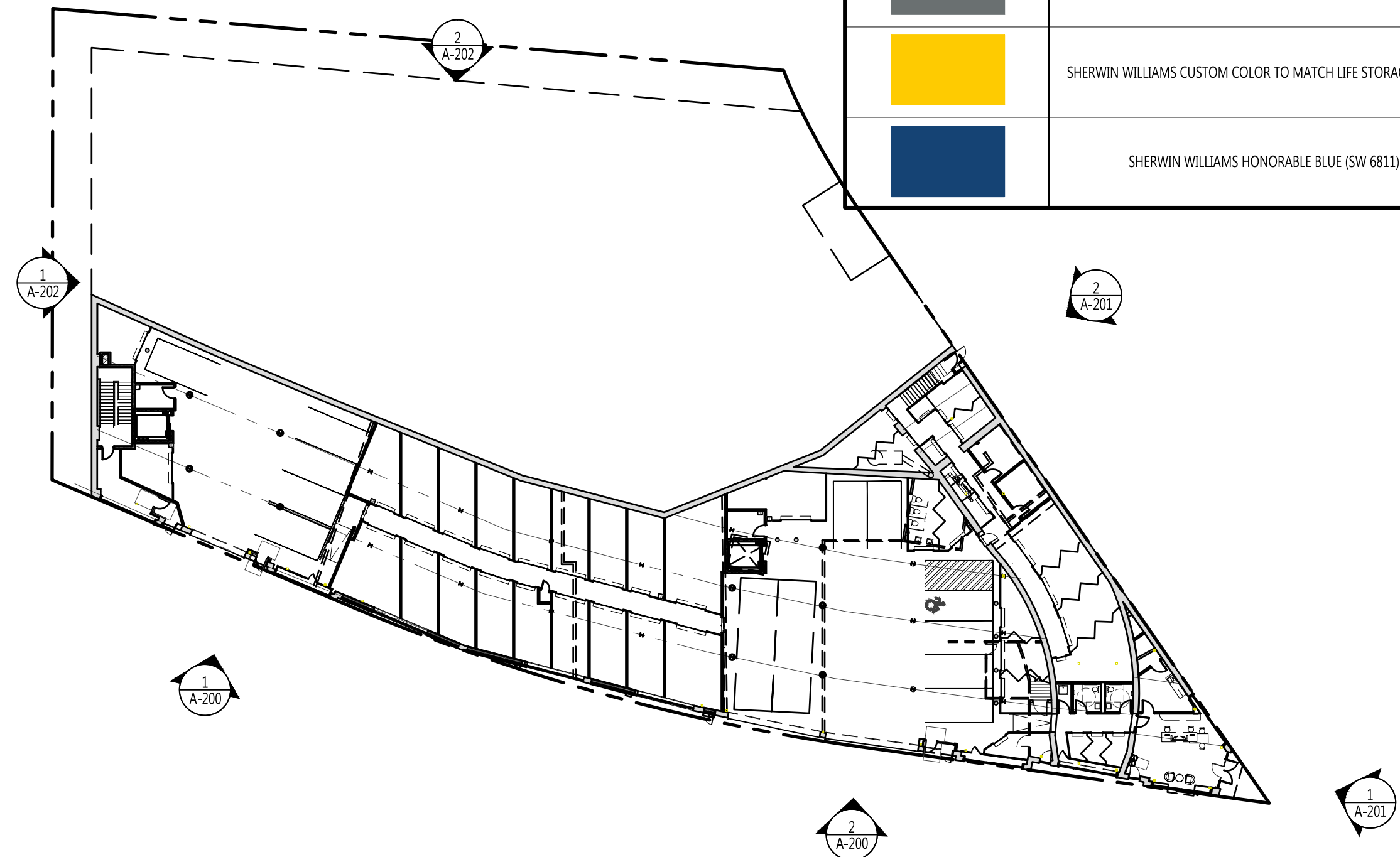


2 EAST ELEVATION - VAN CORTLANDT PARK AVENUE  
SCALE: 1/8" = 1'-0"

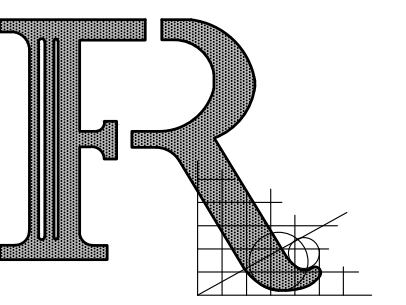
EXTERIOR FINISH SCHEDULE					
TAG #	DESIGNATION	MANUFACTURER	MODEL	COLOR	REMARKS
1	PAINT EXISTING/NEW WALL		ULTRA SPEC MASONRY BLASTOMERIC LOW LUSTRE		ALL EXISTING WALLS TO BE THOROUGHLY POWER WASHED AND SCRAPED PRIOR TO PAINTING. PREP EXISTING CMU IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2	METAL CORNICE	B & B SHEET METAL	VERRAZANO CORNICE		INSTALL PER MANUFACTURER SPECIFICATIONS.
3	FAUX BRICK	MASTERWALL INC.	2" (R-7.7) EPS WITH FAUX BRICK CIPS	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	INSTALL PER MANUFACTURER SPECIFICATIONS.
4	STUCCO FINISH	MASTERWALL INC.	CEMPASTER FIBERSTUCCO BASE 5		INSTALL PER MANUFACTURER SPECIFICATIONS, COORDINATE LOCATIONS WITH CONSTRUCTION DRAWINGS.
5	PARAPET COPING	REFER TO ROOF DETAILS AND SECTIONS FOR ADDITIONAL INFORMATION.			
6	ASPHALT SHINGLE ROOF				
7	STOREFRONT	REFER TO A-180 FOR ADDITIONAL INFORMATION.			
8	FAUX WINDOWS	JANUS	5'-0" WIDE X 7'-0" TALL SURFACE MOUNTED ALUMET SUPPLY MEDIUM GRAY		INSTALL PER MANUFACTURER SPECIFICATIONS.
9	OVERHEAD GARAGE DOOR	UNITED STEEL PRODUCTS	MODEL 500	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	DOOR FRAME AND SHROUD TO MATCH URBAN BRONZE, DOOR PANEL TO BE LIFE STORAGE YELLOW. INSTALL PER MANUFACTURER SPECIFICATIONS, G.C. TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS.
10	WOOD CORBELS				
11	LED WALL PACK	REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATIONS.			MOUNT 12'-6" A.F.F.
12	HVAC LOUVER	REFER TO MECHANICAL DRAWINGS FOR SPECIFICATIONS			LOUVER COLOR TO MATCH ADJACENT WALL/PANEL COLOR
13	FAUX BRICK	MASTERWALL INC.	3" EPS WITH FAUX BRICK CIPS	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	INSTALL PER MANUFACTURER SPECIFICATIONS.

NOTE: PROVIDE WEEP HOLES IN EXISTING MASONRY WALLS AT 20'-0" O.C. MIN. 8" ABOVE GRADE-TYP.

COLOR HATCH KEY	
	SHERWIN WILLIAMS URBAN BRONZE (SW 7048)
	BENJAMIN MOORE GUN METAL (1602)
	BENJAMIN MOORE STORMY MONDAY (2112-50)
	SHERWIN WILLIAMS CUSTOM COLOR TO MATCH LIFE STORAGE YELLOW
	SHERWIN WILLIAMS HONORABLE BLUE (SW 6811)



ELEVATION KEY PLAN  
SCALE: 1/32" = 1'-0"



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4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
EXTERIOR ELEVATIONS

SEAL & SIGNATURE  
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:






A-201.00

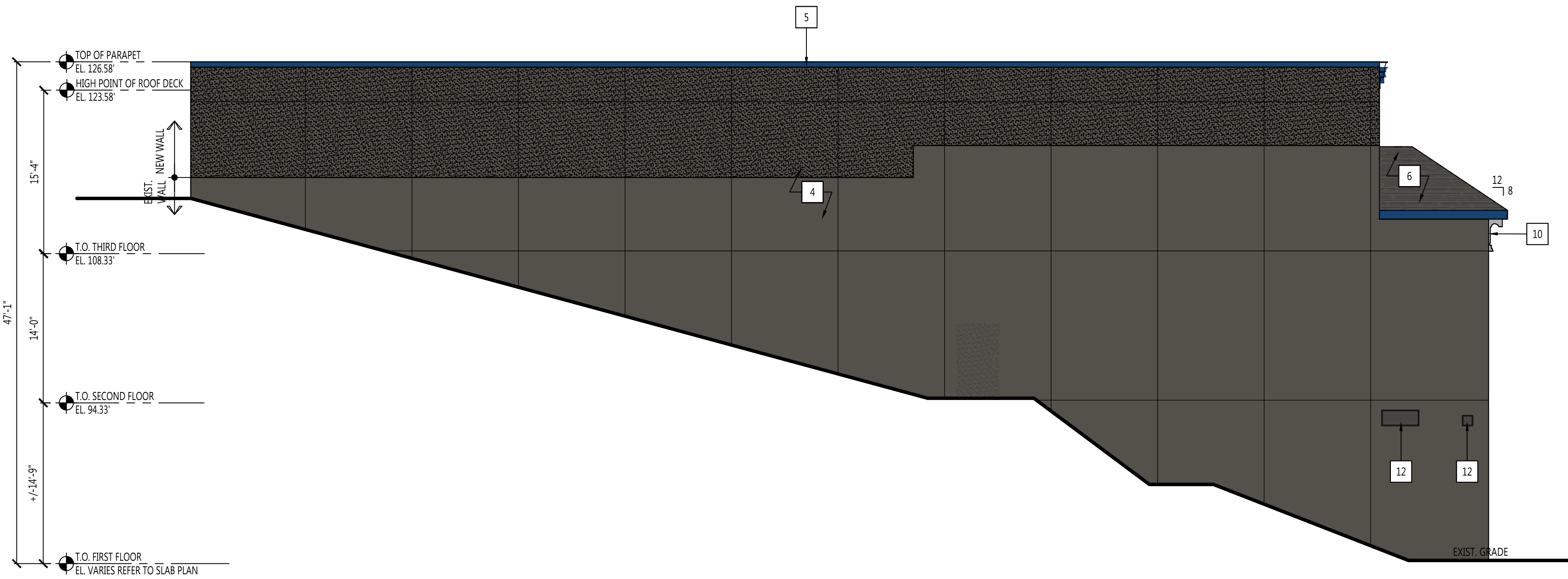
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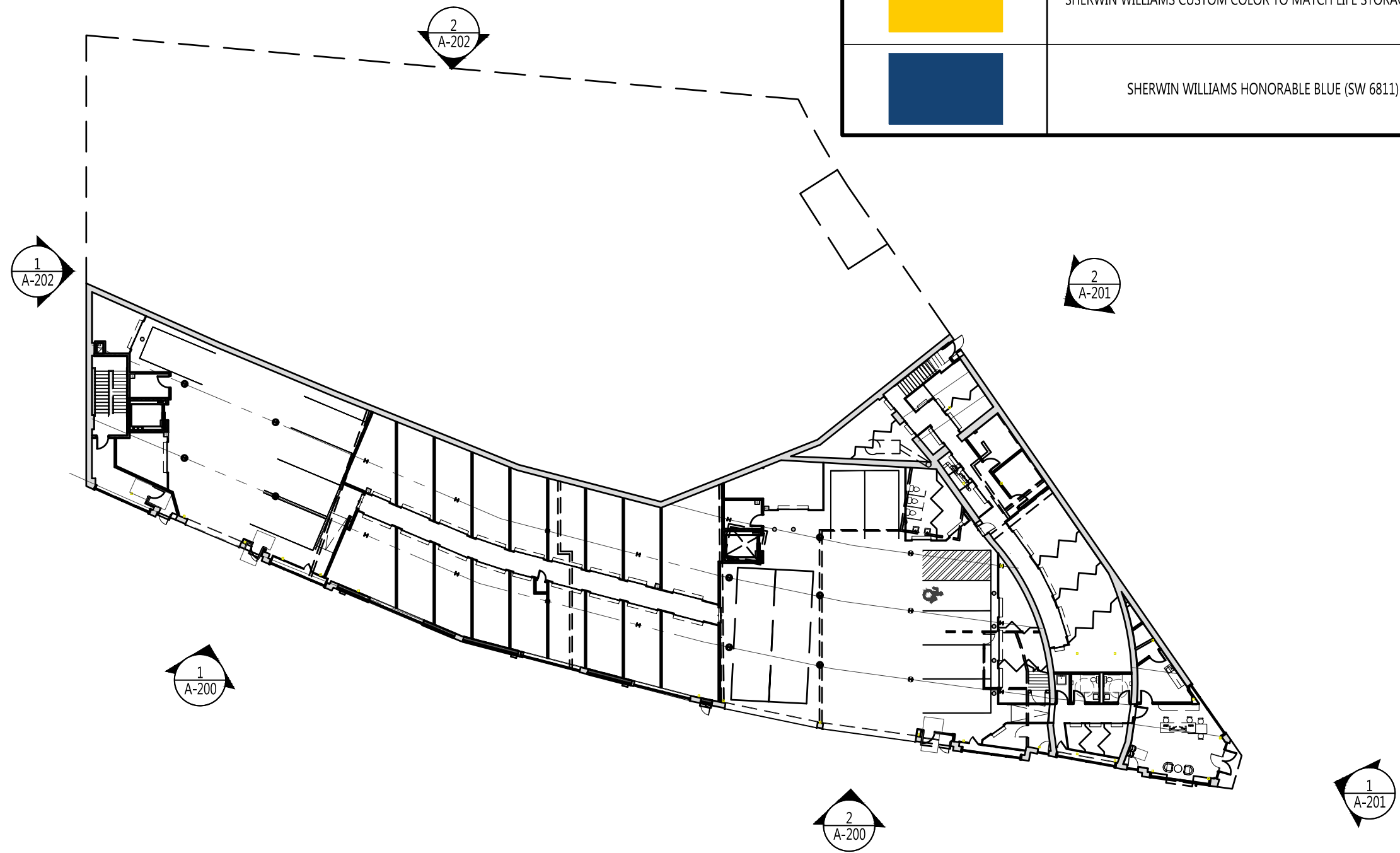


EXTERIOR FINISH SCHEDULE					
TAG #	DESIGNATION	MANUFACTURER	MODEL	COLOR	REMARKS
1	PAINT EXISTING/NEW WALL		ULTRA SPEC MASONRY ELASTOMERIC LOW LUSTRE	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	ALL EXISTING WALLS TO BE THOROUGHLY POWER WASHED AND SCRAPED PRIOR TO PAINTING. PREP EXISTING CMU IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2	METAL CORNICE	B & B SHEET METAL	VERRAZANO CORNICE		INSTALL PER MANUFACTURER SPECIFICATIONS.
3	FAUX BRICK	MASTERWALL INC.	2" (R-7.7) EPS WITH FAUX BRICK CIFS		INSTALL PER MANUFACTURER SPECIFICATIONS.
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5	PARAPET COPING	REFER TO ROOF DETAILS AND SECTIONS FOR ADDITIONAL INFORMATION.			
6	ASPHALT SHINGLE ROOF				
7	STOREFRONT	REFER TO A-280 FOR ADDITIONAL INFORMATION.			
8	FAUX WINDOWS	JANUS	5'-0" WIDE X 7'-0" TALL SURFACE MOUNTED ALUMET SUPPLY MEDIUM GRAY	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	INSTALL PER MANUFACTURER SPECIFICATIONS.
9	OVERHEAD GARAGE DOOR	UNITED STEEL PRODUCTS	MODEL 500		DOOR FRAME AND SHOULD TO MATCH URBAN BRONZE, DOOR PANEL TO BE LIFE STORAGE YELLOW INSTALL PER MANUFACTURER SPECIFICATIONS, C.C. TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS.
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13	FAUX BRICK	MASTERWALL INC.	3" EPS WITH FAUX BRICK CIFS	COORDINATE COLOR AND LOCATION WITH COLOR HATCH KEY	INSTALL PER MANUFACTURER SPECIFICATIONS.
NOTE: PROVIDE WEEP HOLES IN EXISTING MASONRY WALLS AT 20'-0" O.C. MIN. 8" ABOVE GRADE-TYP.					

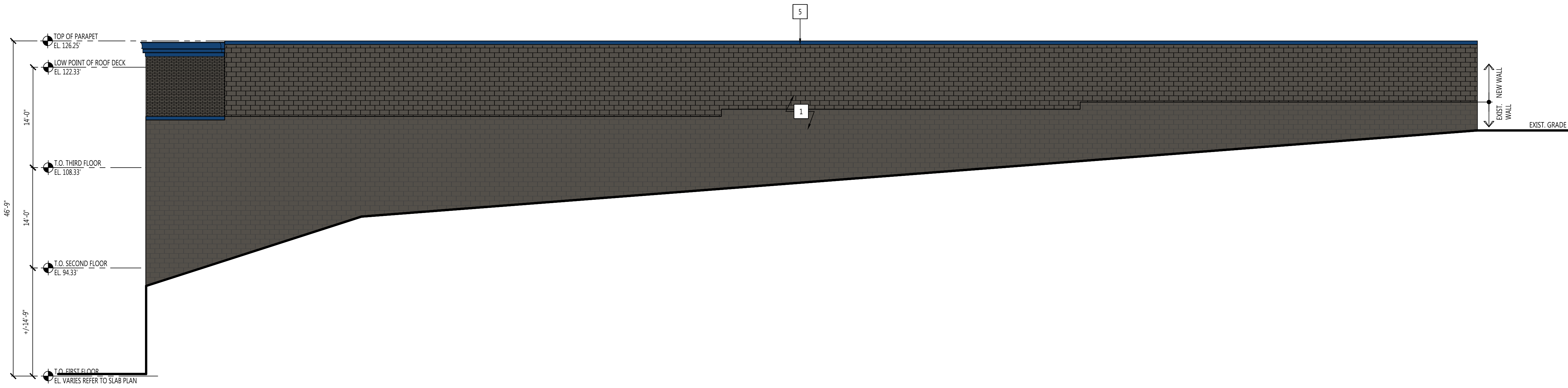
COLOR HATCH KEY	
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	BENJAMIN MOORE GUN METAL (1602)
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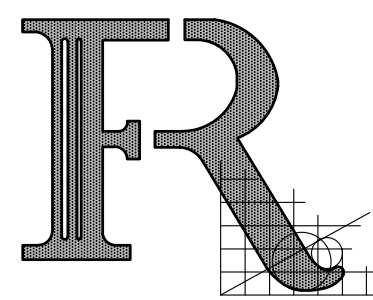
1 WEST ELEVATION  
SCALE: 1/8" = 1'-0"



2 ELEVATION KEY PLAN  
SCALE: 1/32" = 1'-0"



2 NORTH ELEVATION  
SCALE: 1/8" = 1'-0"



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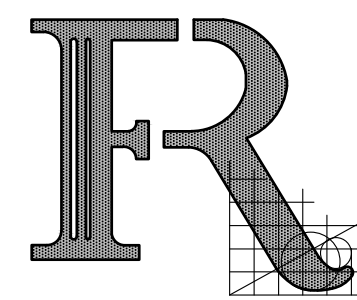
TITLE DRAWING:  
EXTERIOR ELEVATIONS

SEAL & SIGNATURE  
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PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
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XX

DOB JOB NUMBER:





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3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

BUILDING SECTIONS

SEAL & SIGNATURE

DATE: 6/13/18

PROJECT No. 18014

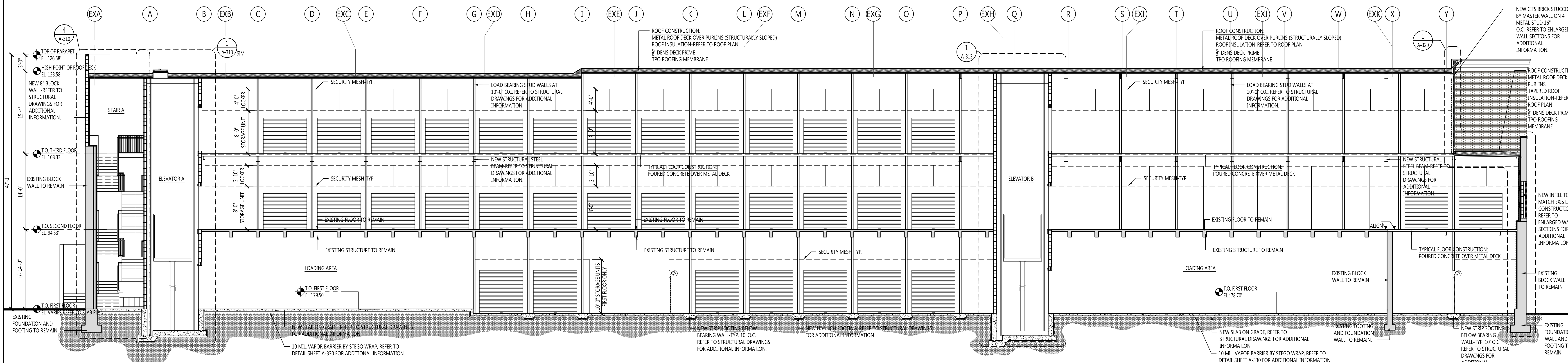
DRAWING BY: J.R.

CHK BY: J.N.

DWG. No. A-300.00

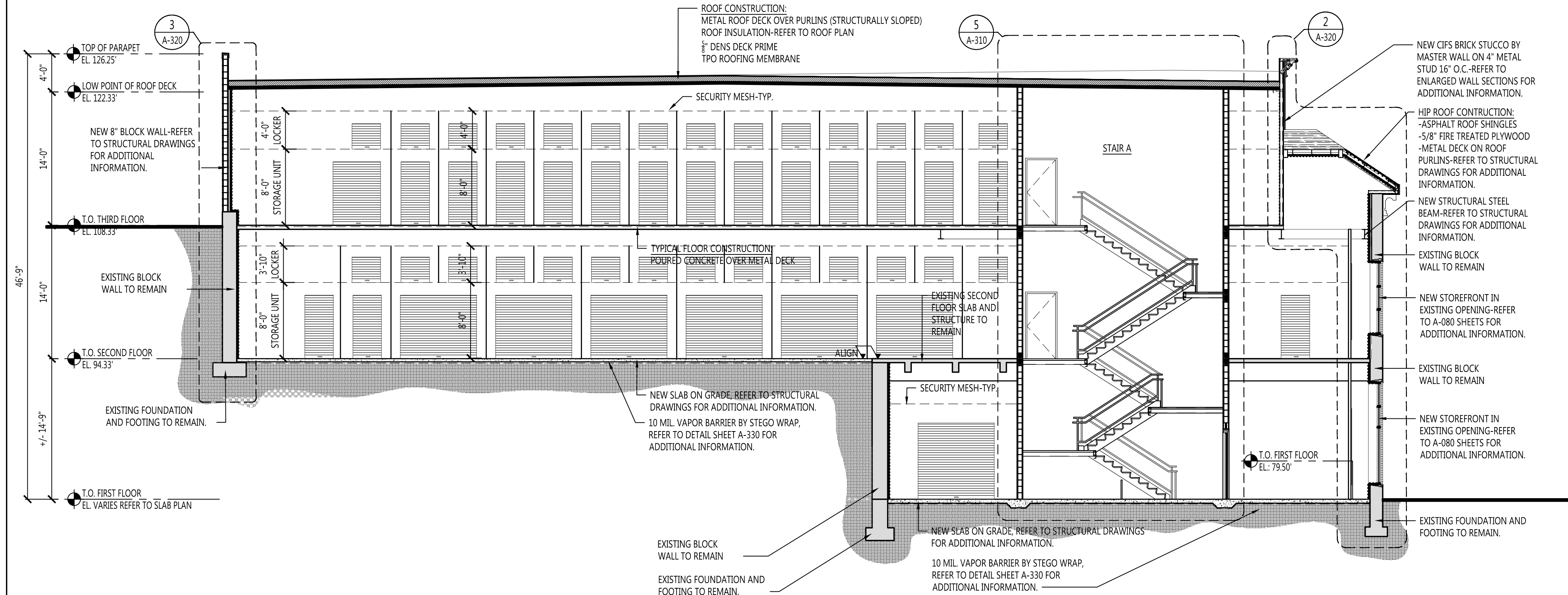
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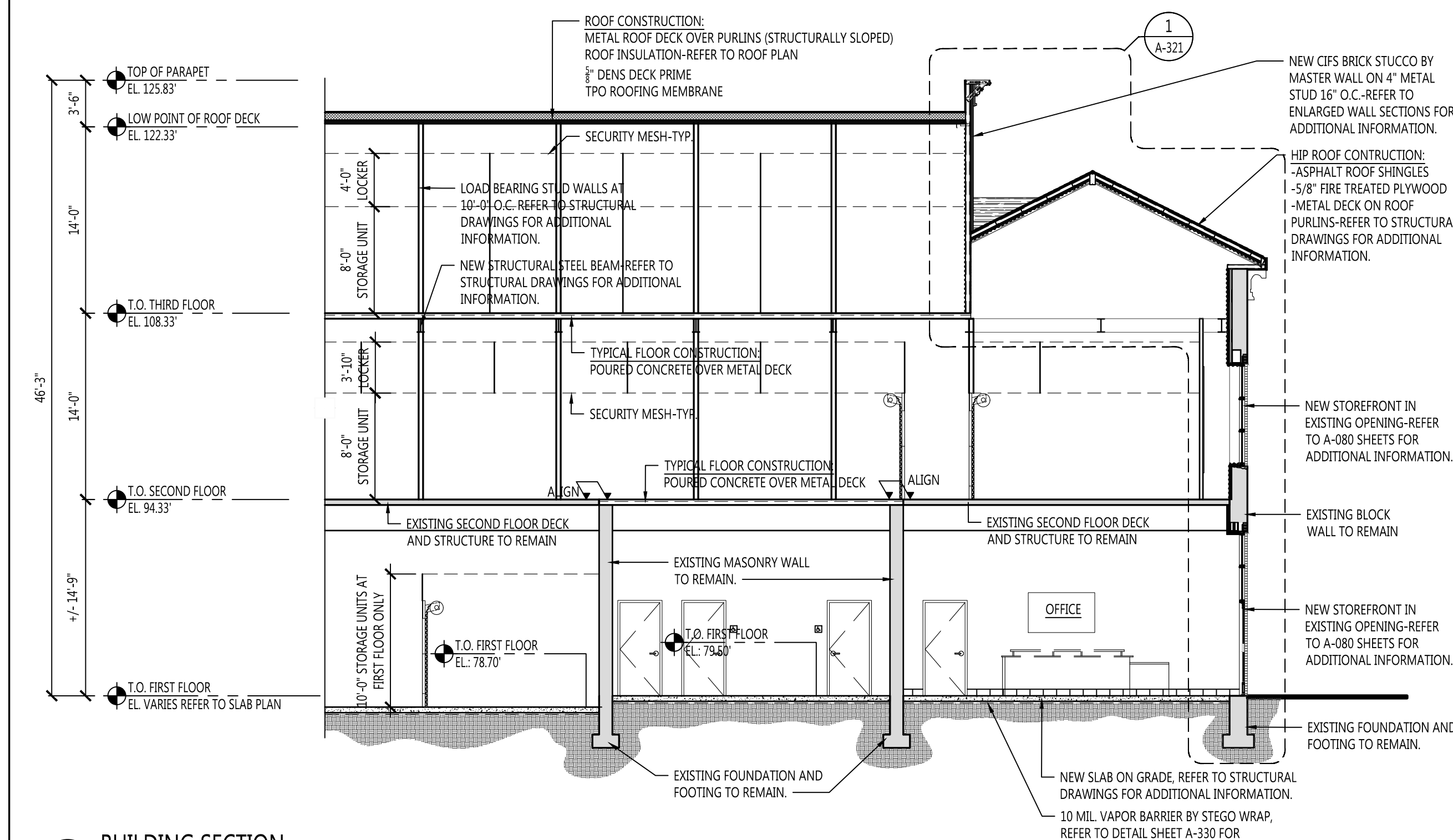
BUILDING SECTION

SCALE: 1/8" = 1'-0"



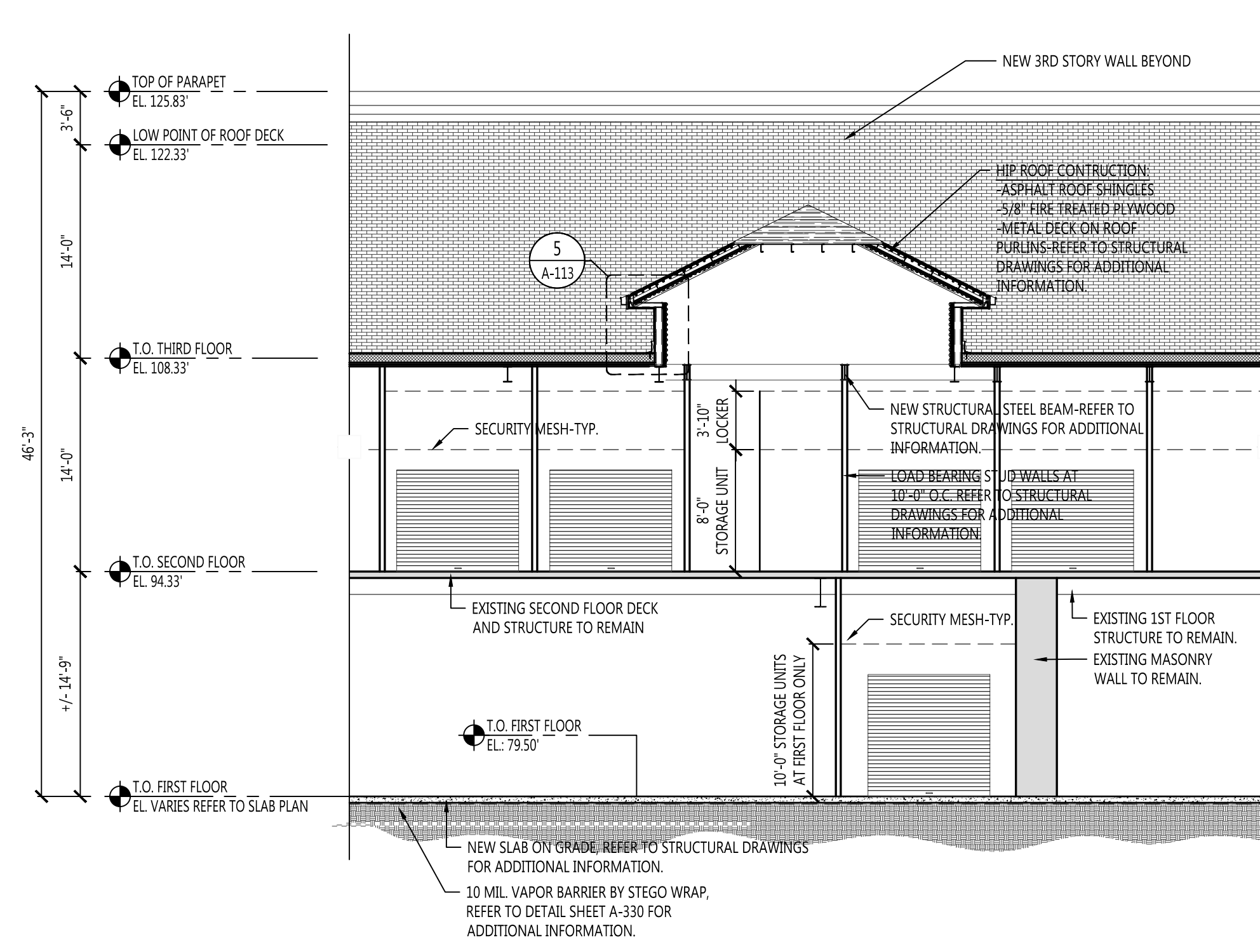
BUILDING SECTION

SCALE: 1/8" = 1'-0"



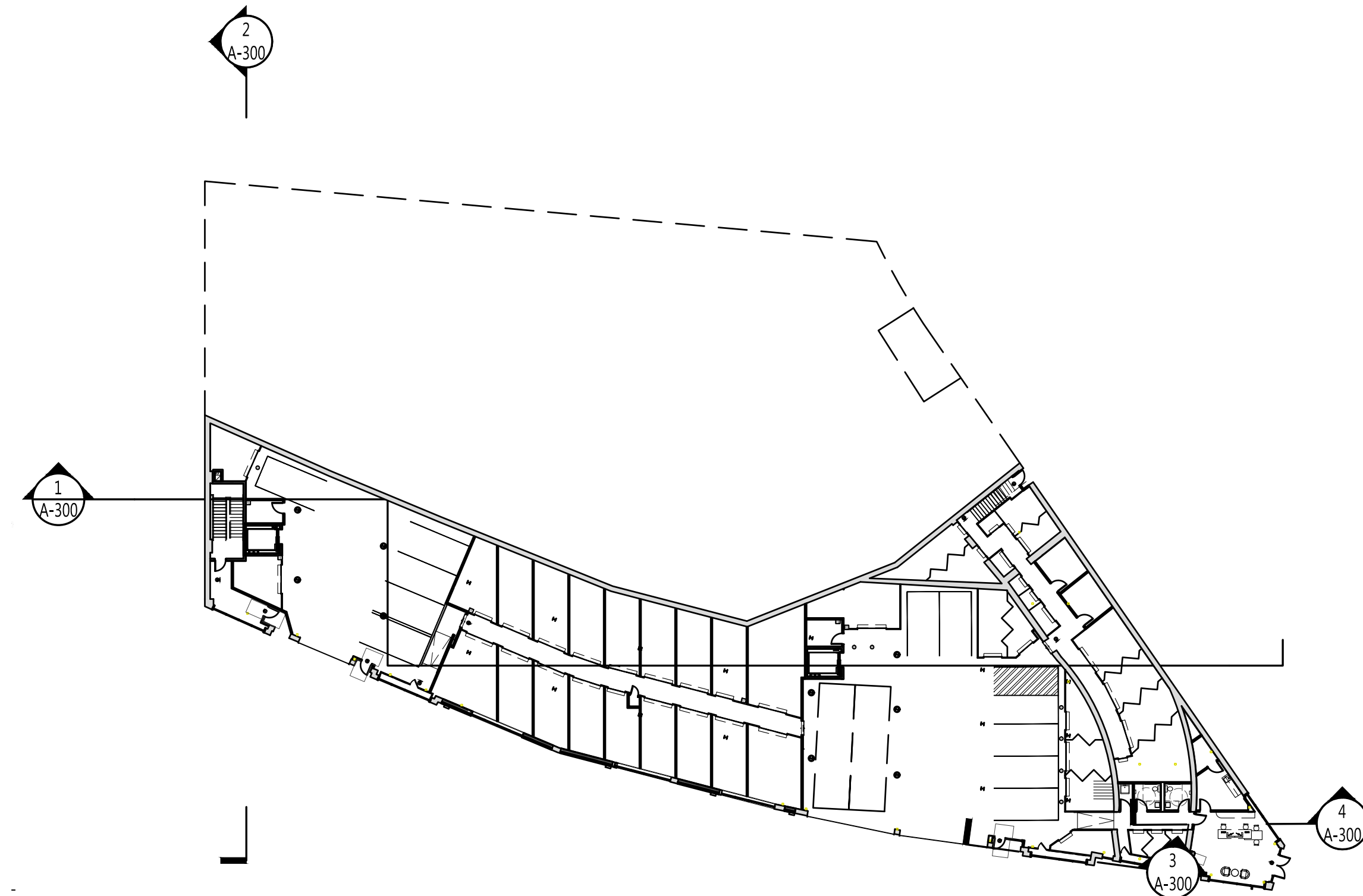
BUILDING SECTION

SCALE: 1/8" = 1'-0"



PARTIAL BUILDING SECTION

SCALE: 1/8" = 1'-0"



SECTION KEY PLAN

SCALE: 3/32" = 1'-0"



STAIR NOTES

1. STAIR MANUFACTURER/FABRICATOR TO SUBMIT ENGINEERED SHOP DRAWINGS FOR STAIRS AND ALL ASSOCIATED COMPONENTS FOR ARCHITECT'S APPROVAL.

2. MAXIMUM RISER HEIGHT = 7"

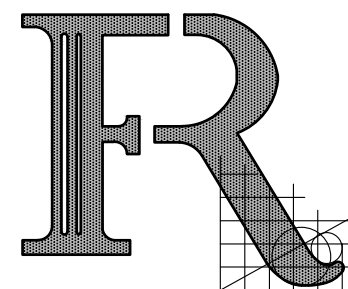
3. MINIMUM TREAD LENGTH = 11"

4. STAIR AND RAILINGS TO CONFORM WITH 2015 IBC AND 2017 SUPPLEMENT.

5. CONTRACTOR TO PRIME AND PAINT ALL EXPOSED STEEL CHANNELS, HANDRAILS, TREADS, RISERS, STRINGERS, CONDUITS. REFER TO MATERIAL LIST FOR PAINT COLOR INFORMATION.

6. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

7. PROVIDE 1 1/2" MINIMUM CLEARANCE BETWEEN HANDRAIL AND ADJACENT SURFACE.



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678.802.2094

MEP CONSULTANT:

**GAP ENGINEERING, P.C.**  
3 COLBY COURT  
DIX HILLS, NEW YORK 11746  
(631) 499-6599

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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:		
#	DATE	COMMENT
1	09/20	REVISED PER DOB COMMENTS
2	02/16/21	REVISED PER DOB COMMENTS
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ISSUE:		
#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
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CLIENT:

**SNL YONKERS LLC**  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

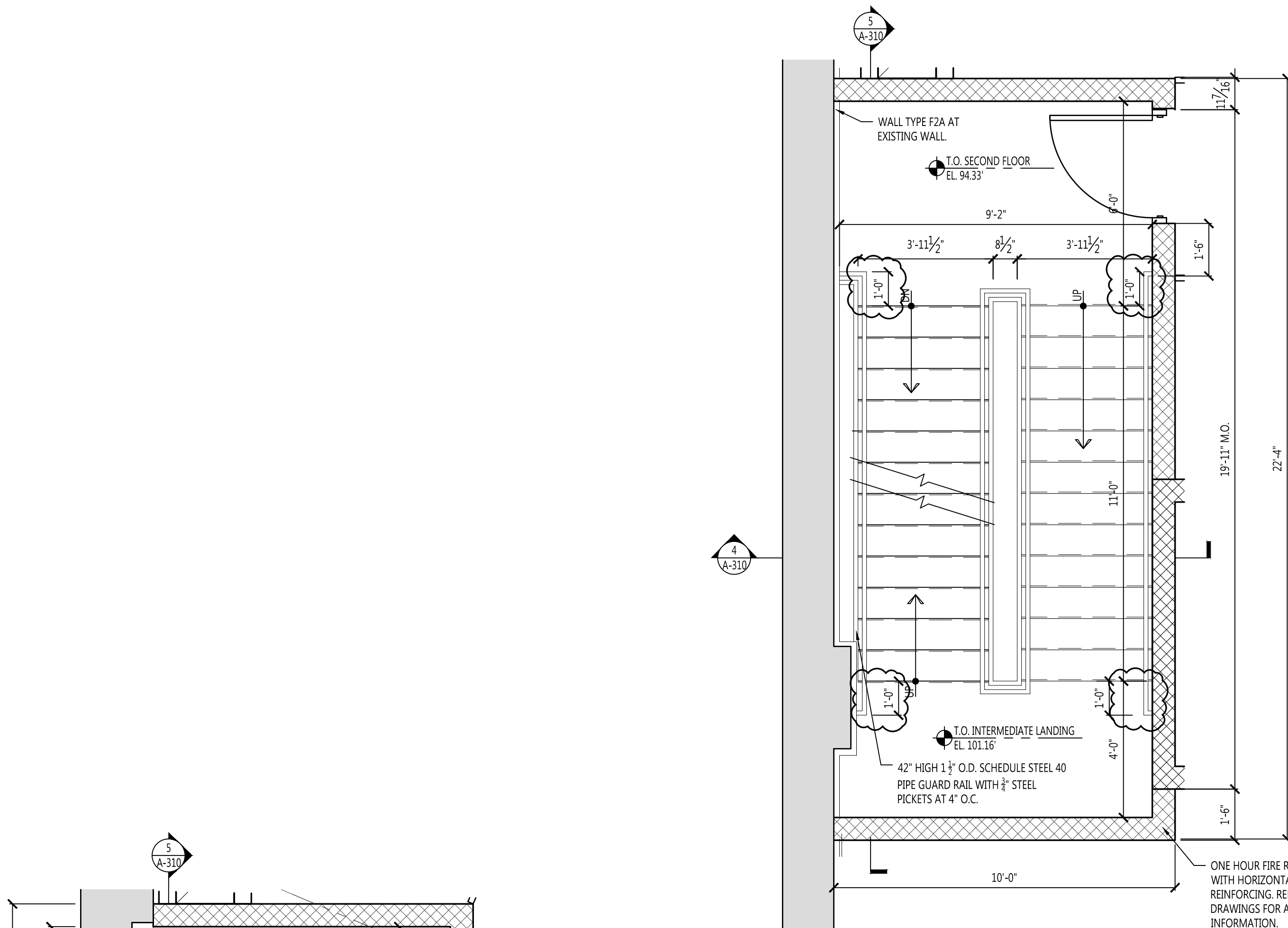
PROJECT:

**YONKERS SELF STORAGE**  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

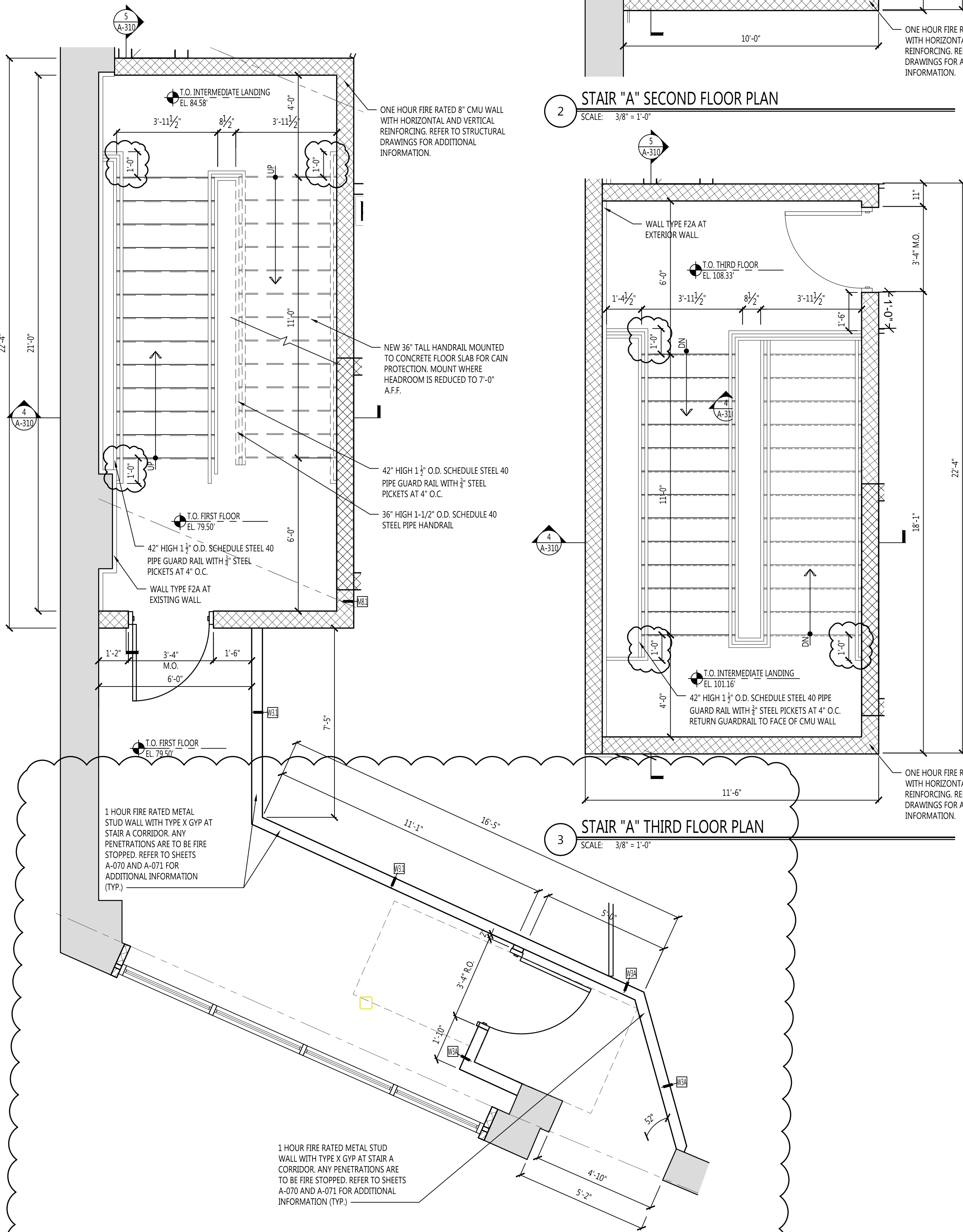
**ENLARGED STAIR "A" PLANS AND SECTIONS**

SEAL & SIGNATURE	DATE:	6/13/18
	PROJECT No.	18014
	DRAWING BY:	J.R.
	CHK BY:	J.N.
DWG. No.: <b>A-310.00</b>		
ALT		OF XX
DOB JOB NUMBER:		



2 STAIR "A" SECOND FLOOR PLAN

SCALE: 3/8" = 1'-0"

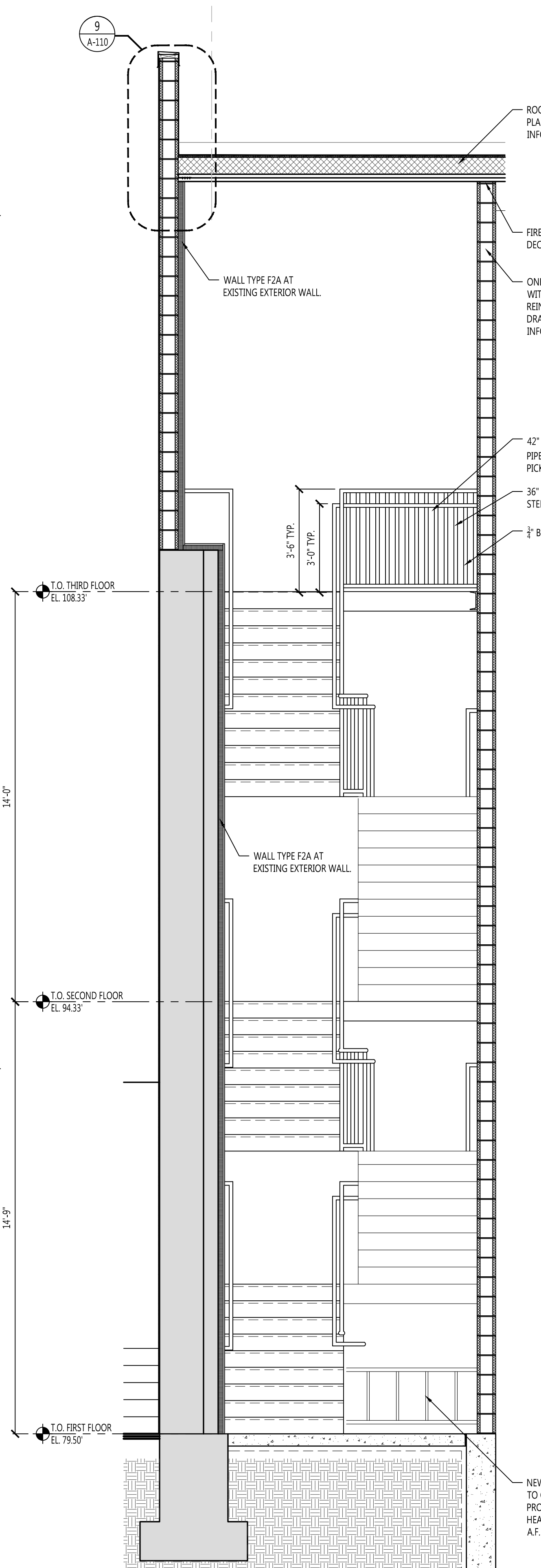


1 STAIR "A" FIRST FLOOR PLAN

SCALE: 3/8" = 1'-0"

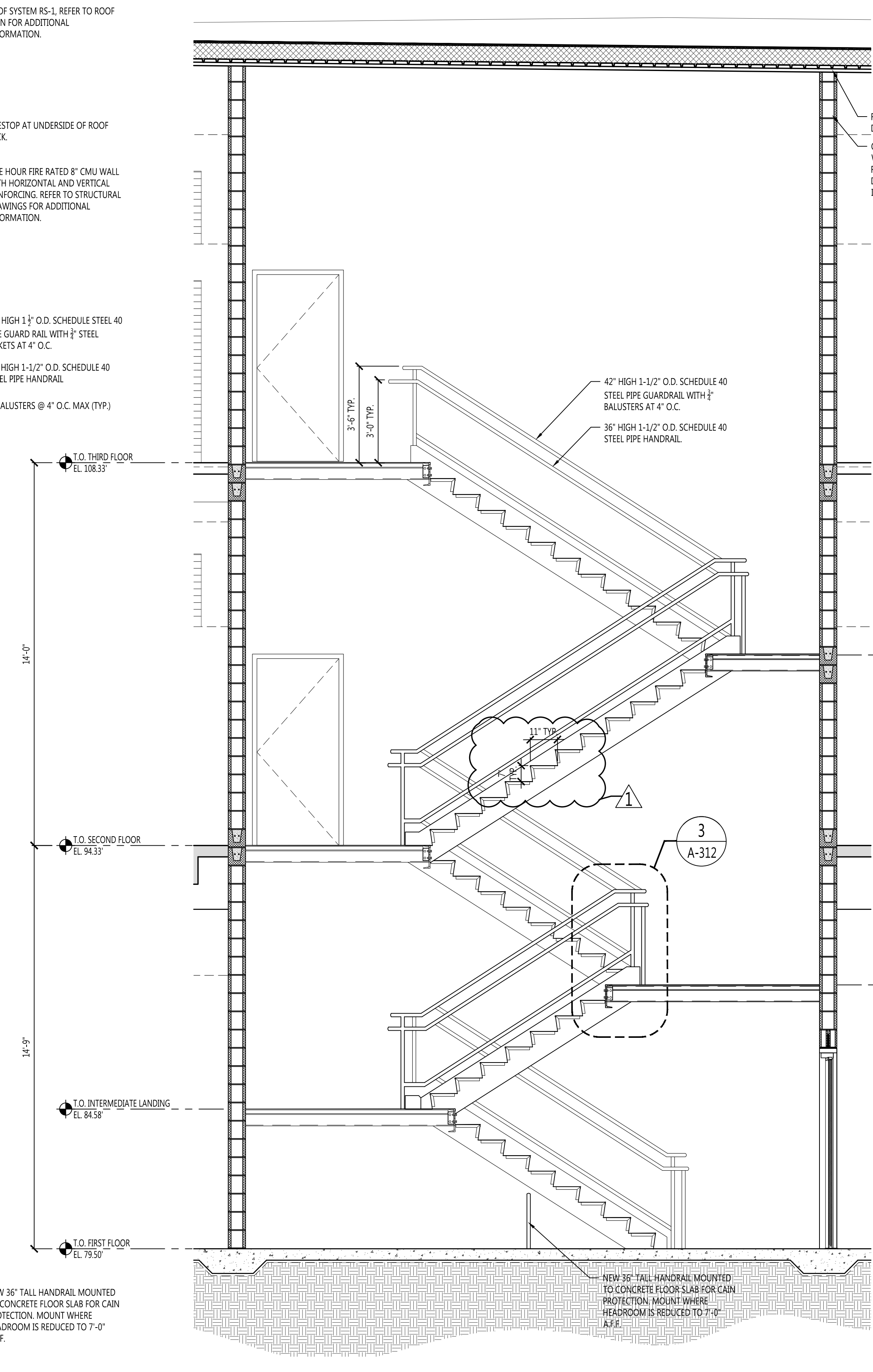
3 STAIR "A" THIRD FLOOR PLAN

SCALE: 3/8" = 1'-0"



4 STAIR "A" SECTION

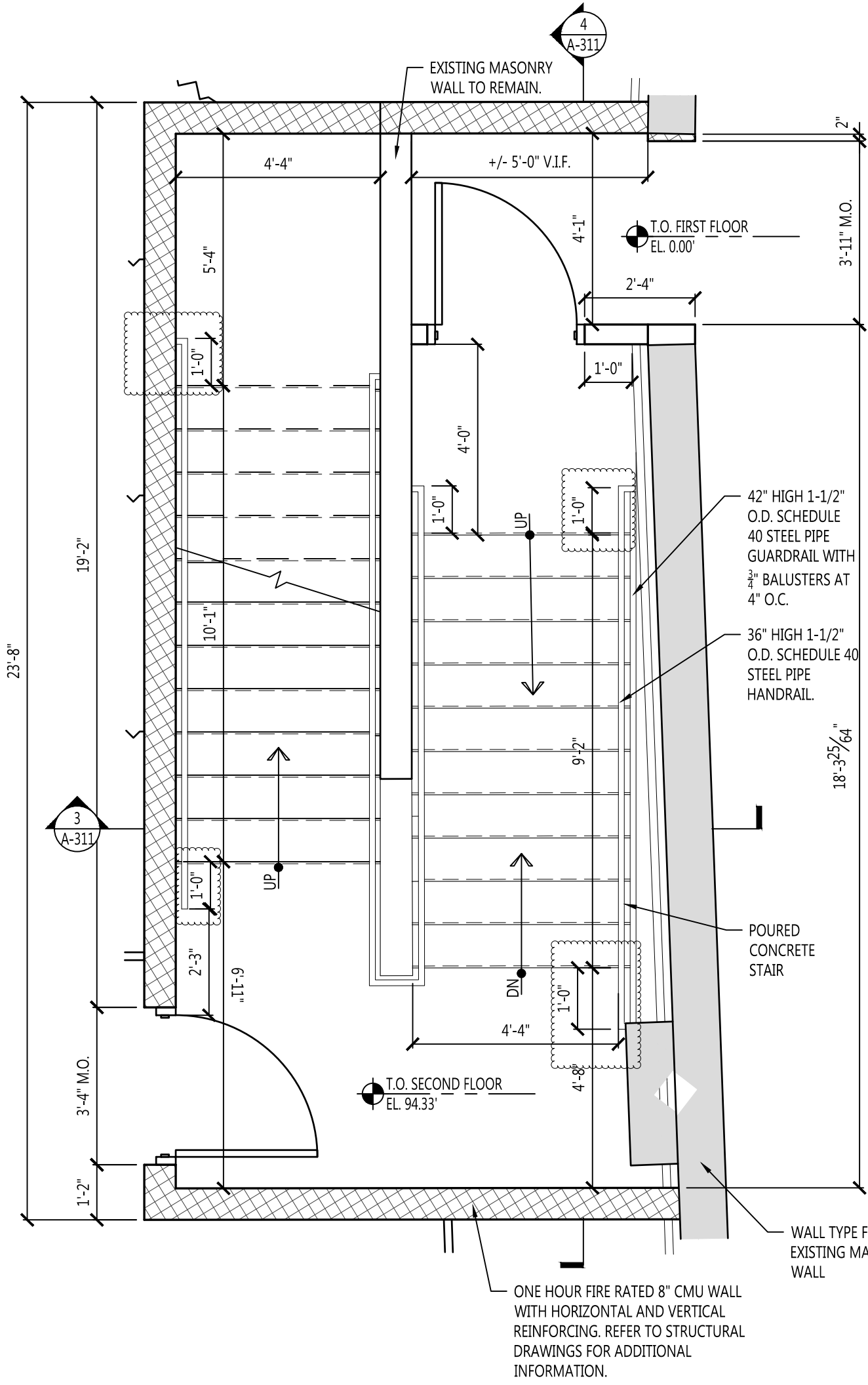
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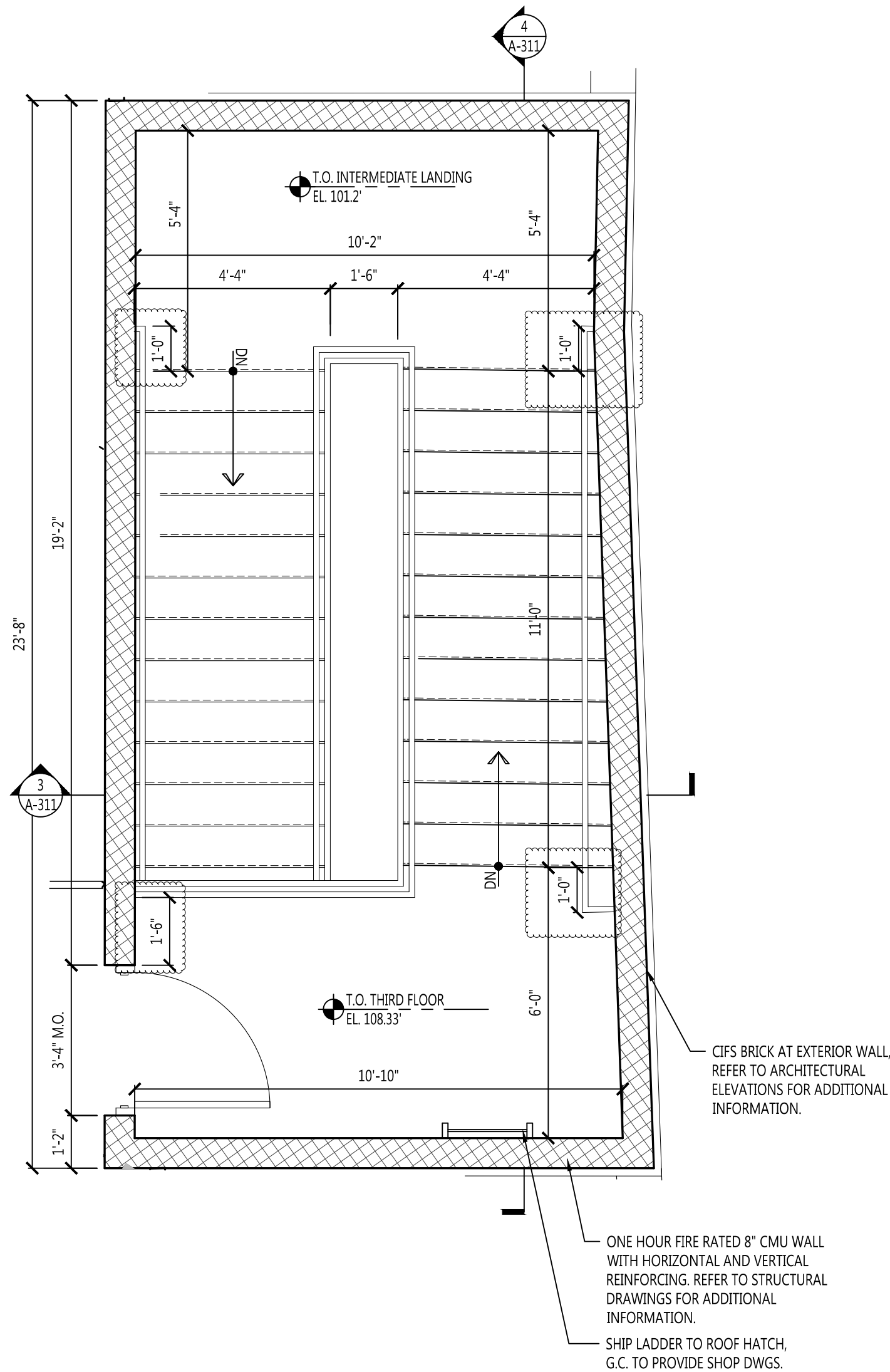
5 STAIR "A" SECTION

SCALE: 3/8" = 1'-0"

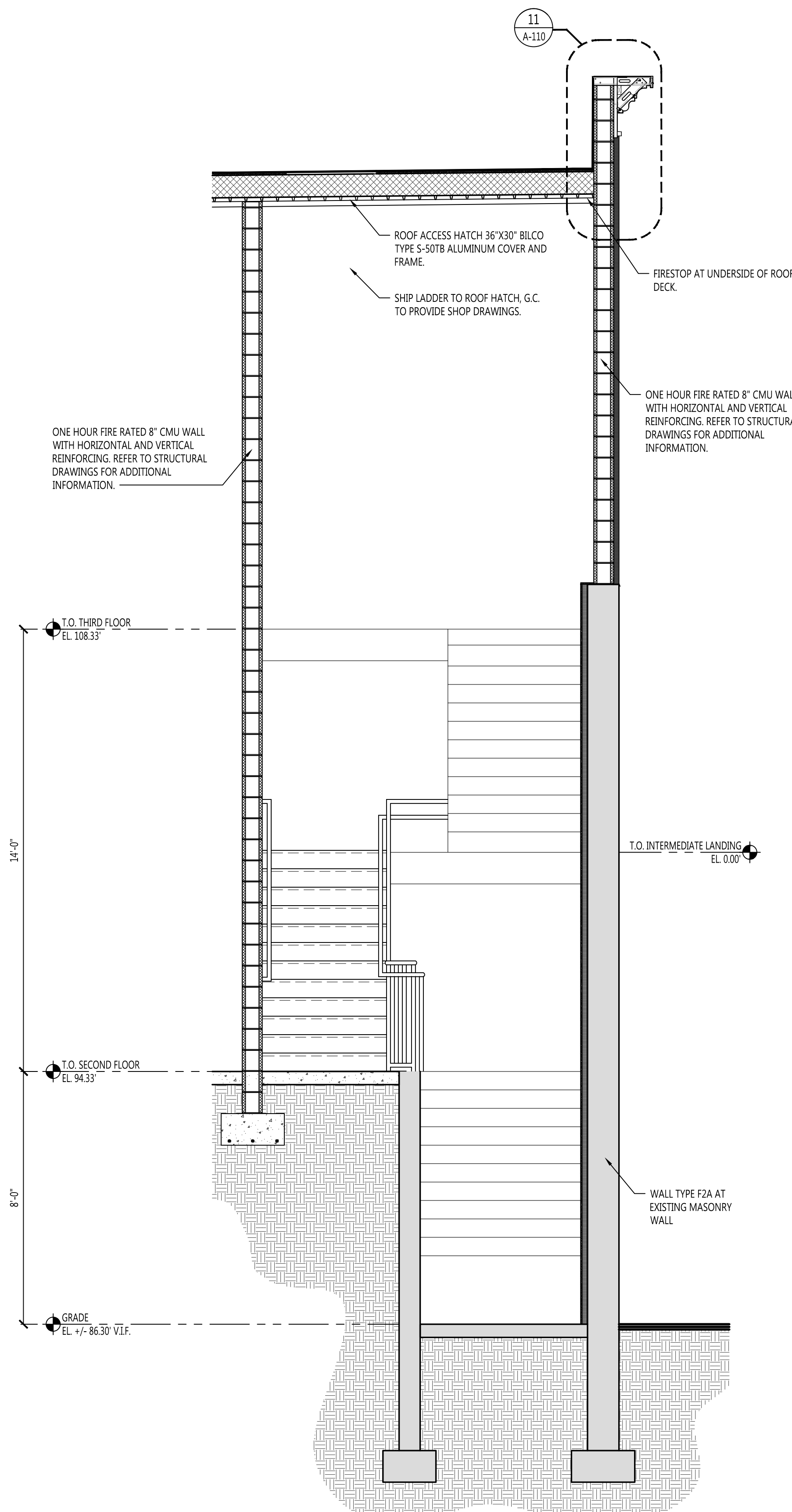




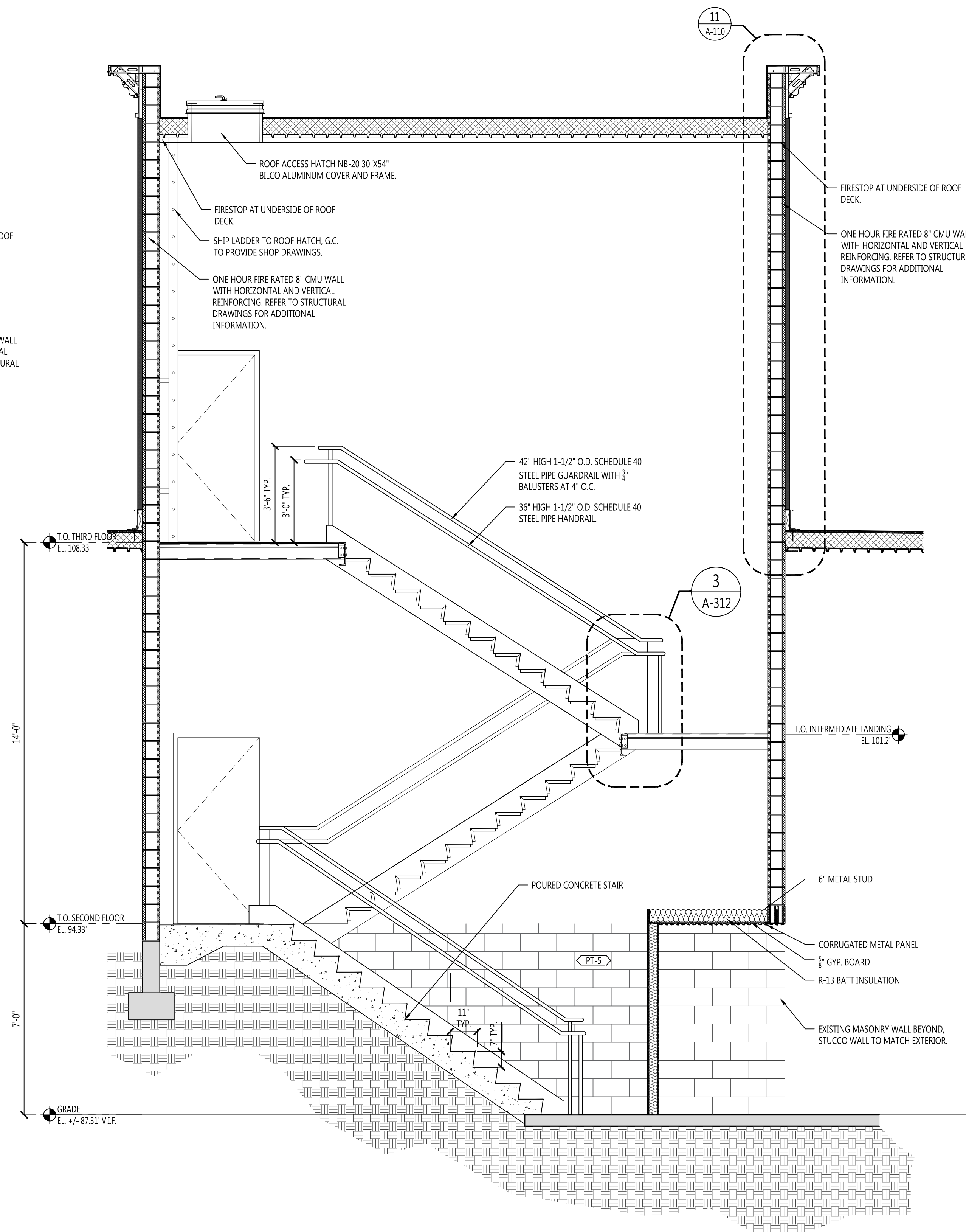
1 STAIR "B" SECOND FLOOR PLAN  
SCALE: 3/8" = 1'-0"



2 STAIR "B" THIRD FLOOR PLAN  
SCALE: 3/8" = 1'-0"



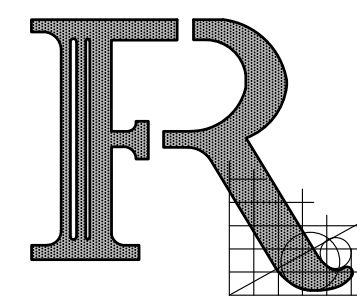
3 STAIR "B" SECTION  
SCALE: 3/8" = 1'-0"



4 STAIR "B" SECTION  
SCALE: 3/8" = 1'-0"

## STAIR NOTES

1. STAIR MANUFACTURER/FABRICATOR TO SUBMIT ENGINEERED SHOP DRAWINGS FOR STAIRS AND ALL ASSOCIATED COMPONENTS FOR ARCHITECTS APPROVAL.
2. MAXIMUM RISER HEIGHT = 7"
3. MINIMUM TREAD LENGTH = 11"
4. STAIR AND RAILINGS TO CONFORM WITH 2015 IBC AND 2017 SUPPLEMENT.
5. CONTRACTOR TO PRIME AND PAINT ALL EXPOSED STEEL CHANNELS, HANDRAILS, TREADS, RISERS, STRINGERS, CONDUITS, REFER TO MATERIAL LIST FOR PAINT COLOR INFORMATION.
6. ALL DIMENSIONS TO BE VERIFIED IN FIELD.
7. PROVIDE 1 1/2" MINIMUM CLEARANCE BETWEEN HANDRAIL AND ADJACENT SURFACE.



FRANK G. RELF ARCHITECT, P.C.  
35 PINELAWN ROAD, SUITE 207W  
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fax 631.271.4532  
www.fgrf.com

CONSULTANTS:

Terry W. Wall, Jr., P.E., S.E.  
Consulting Structural Engineering  
1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

MEP CONSULTANT:

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(631) 499-6599

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CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

ENLARGED STAIR "B"  
PLANS & SECTIONS

SEAL & SIGNATURE

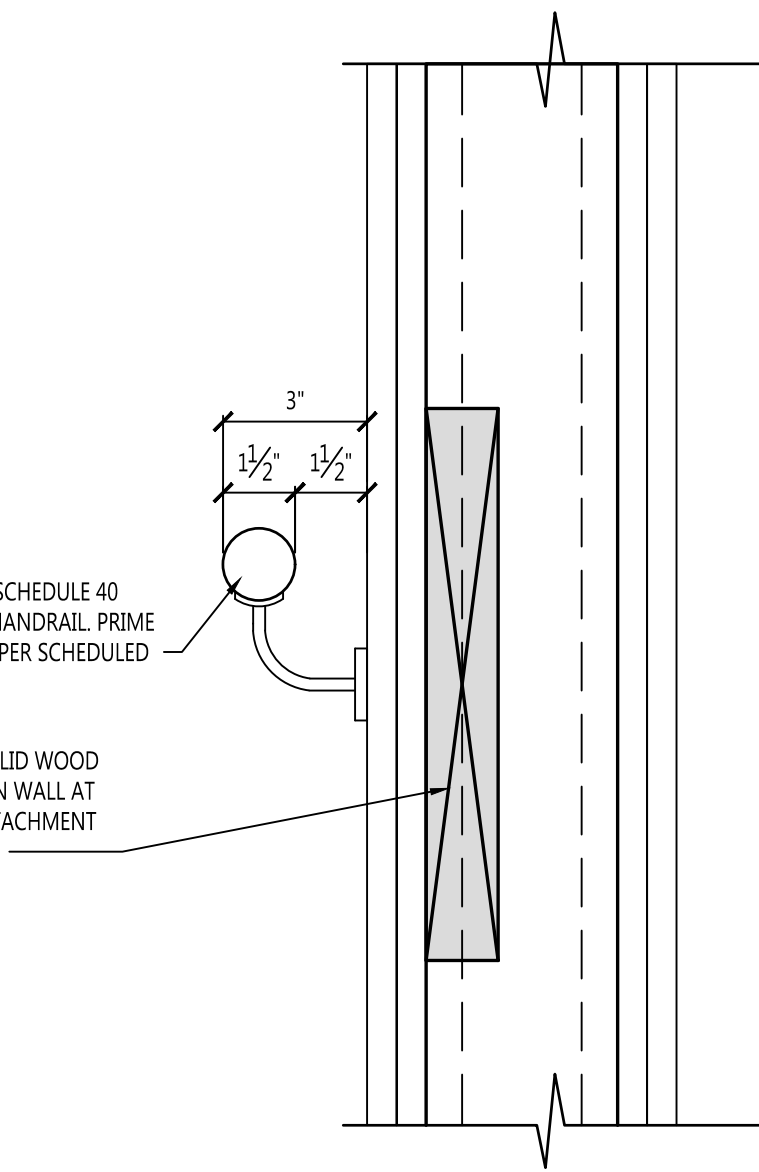
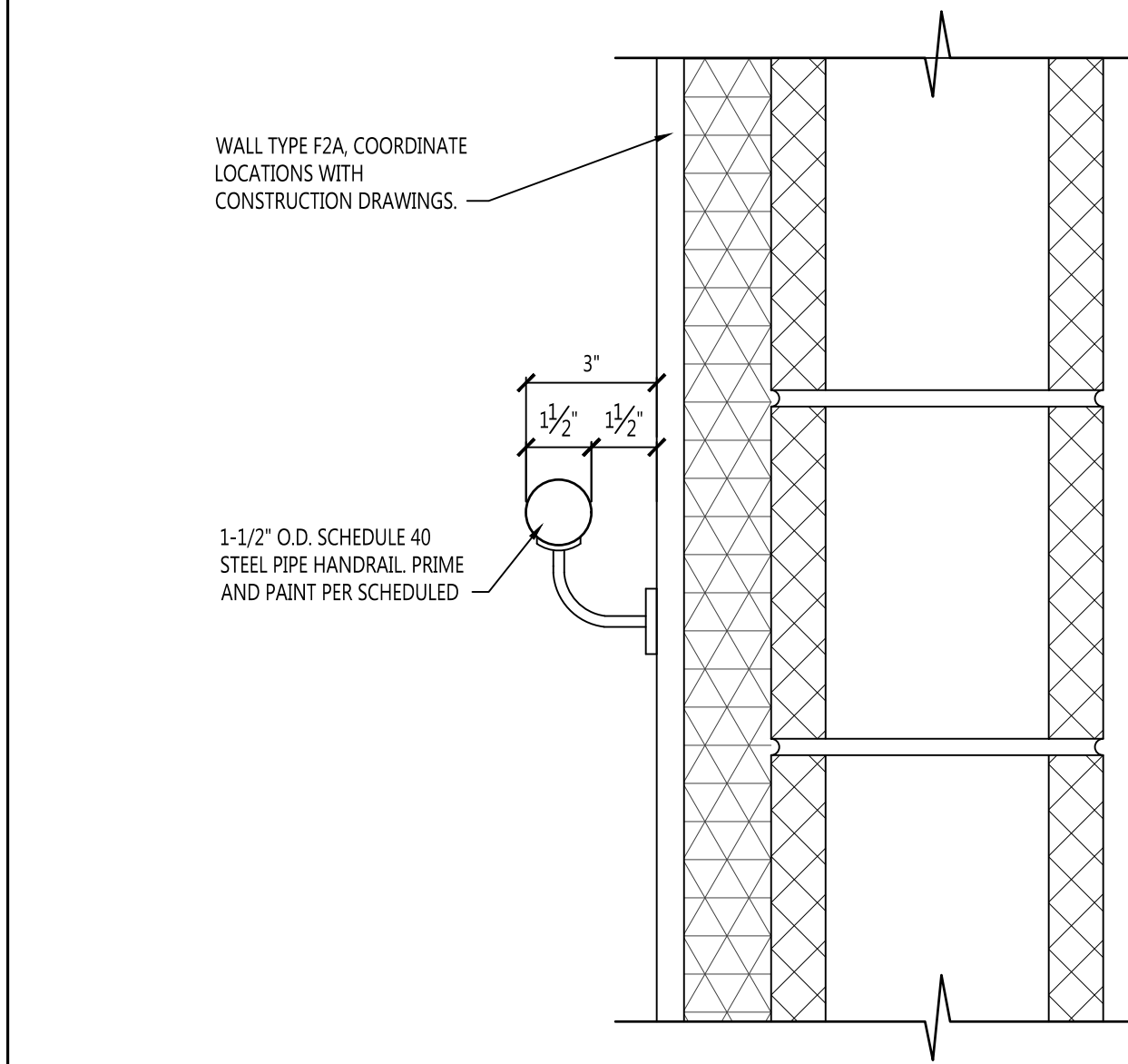
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

A-311.00

ALT 28 OF XX

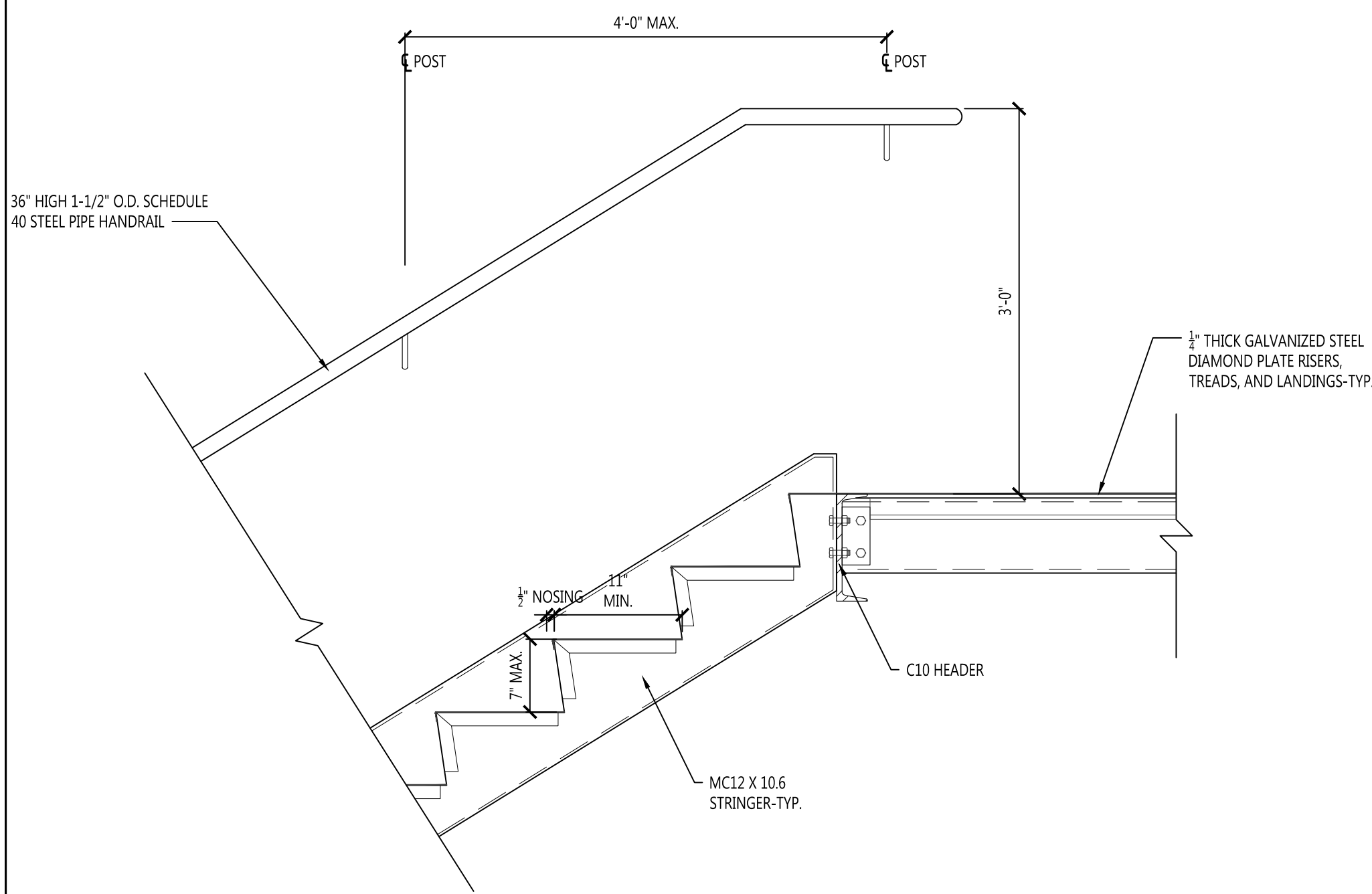
DOB JOB NUMBER:



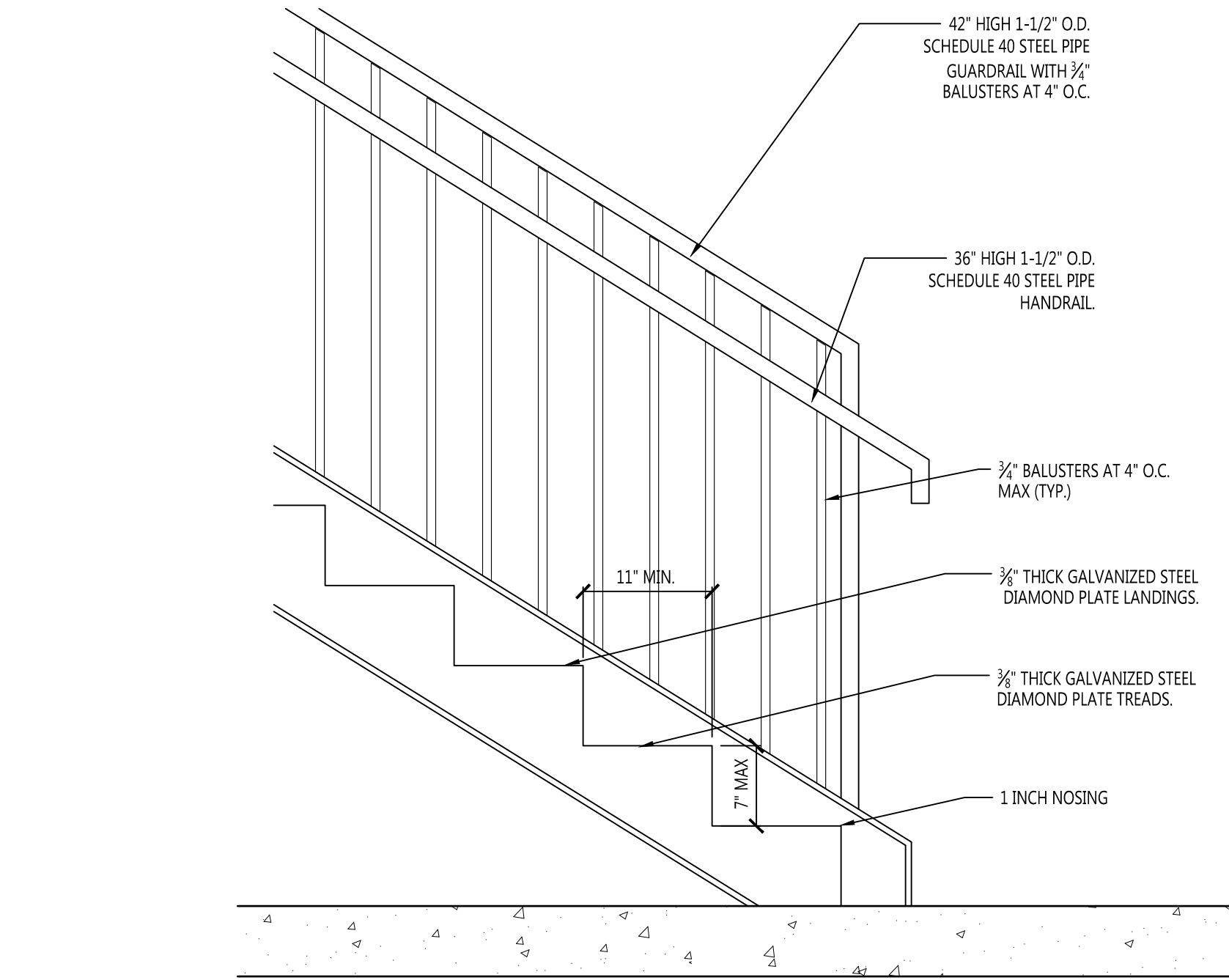


1 RAIL DETAIL AT CMU WALL  
SCALE: 3/4" = 1'-0"

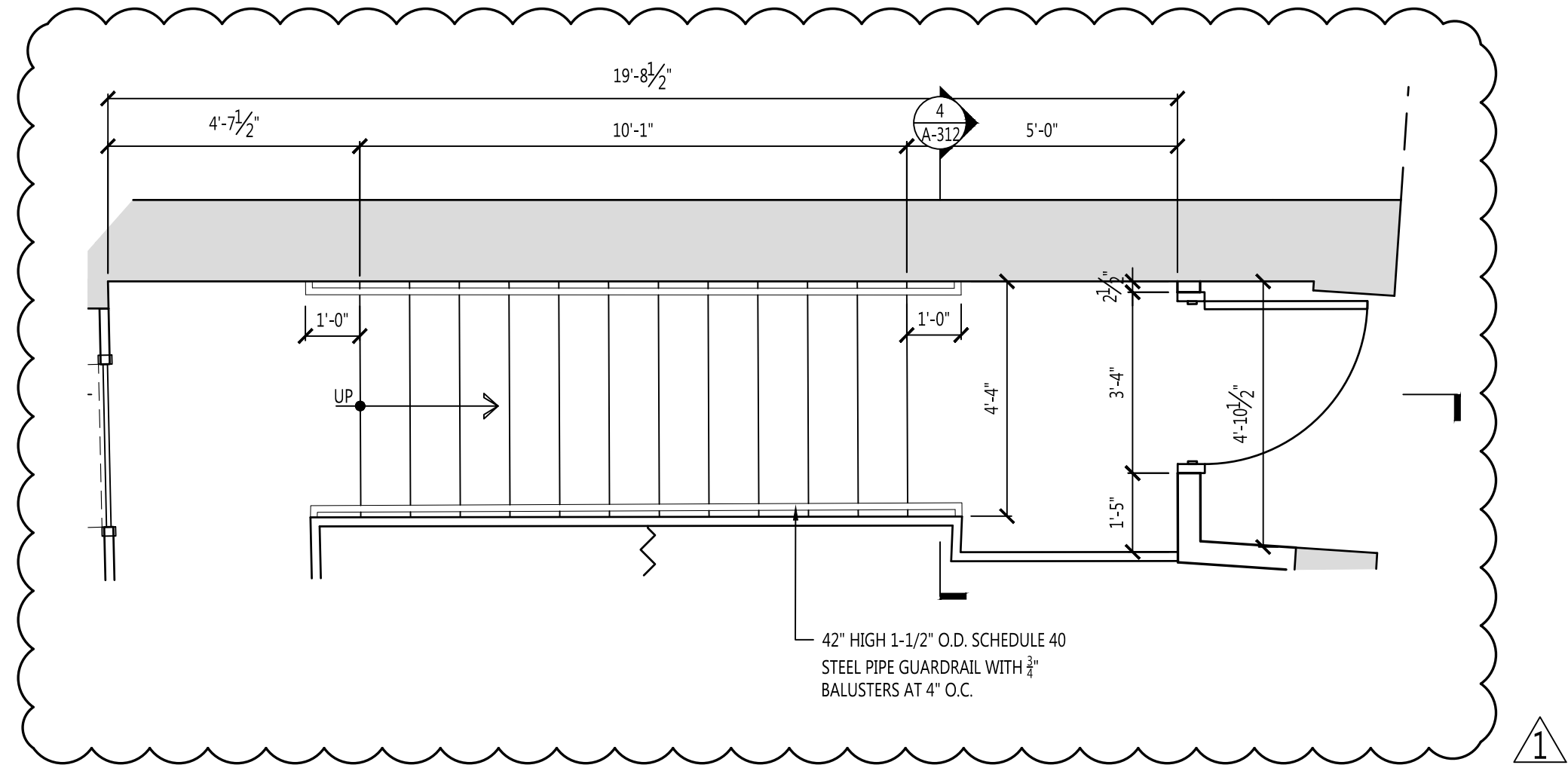
2 RAIL DETAIL AT STUD WALL  
SCALE: 1" = 1'-0"



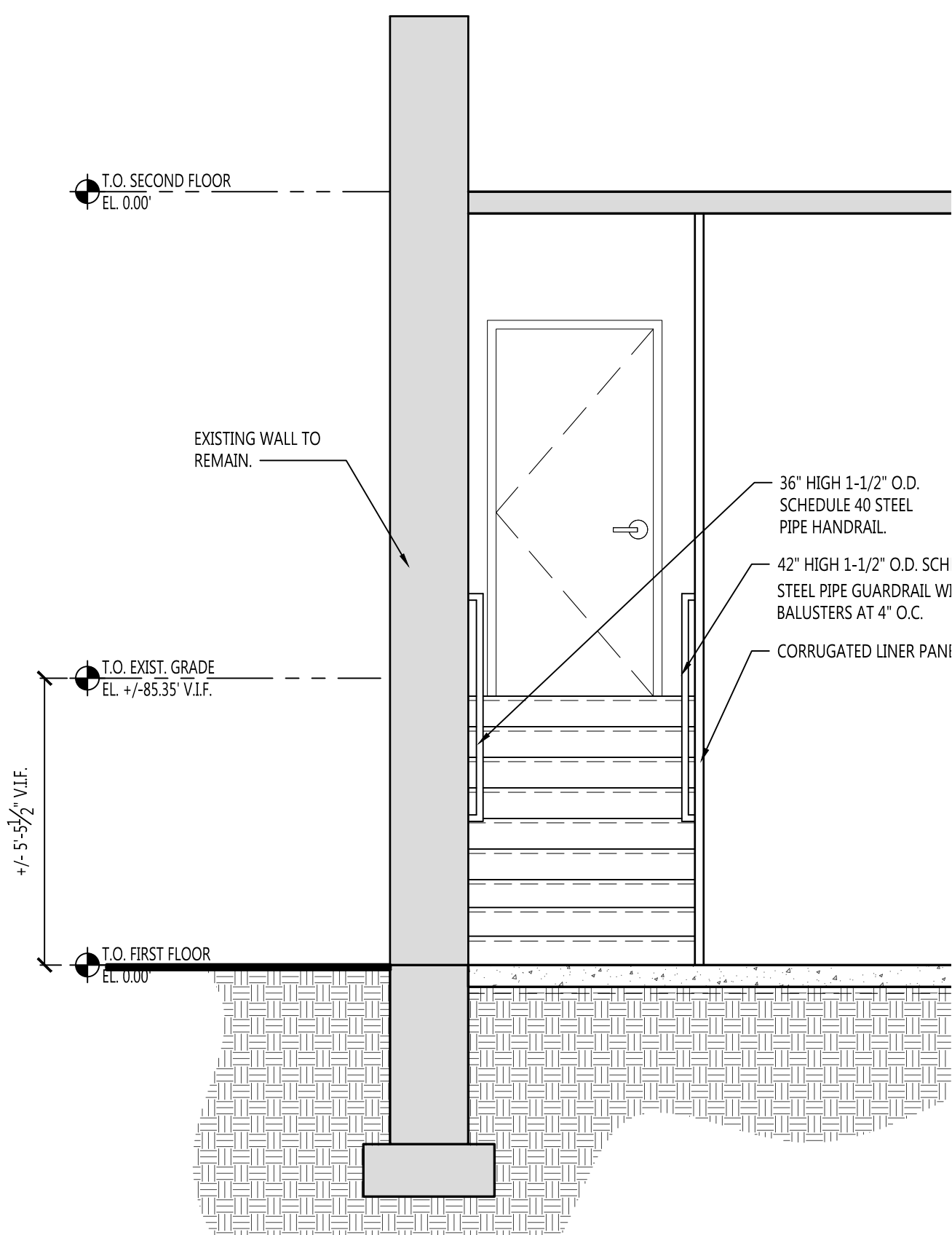
3 METAL STAIR DETAIL  
SCALE: 1" = 1'-0"



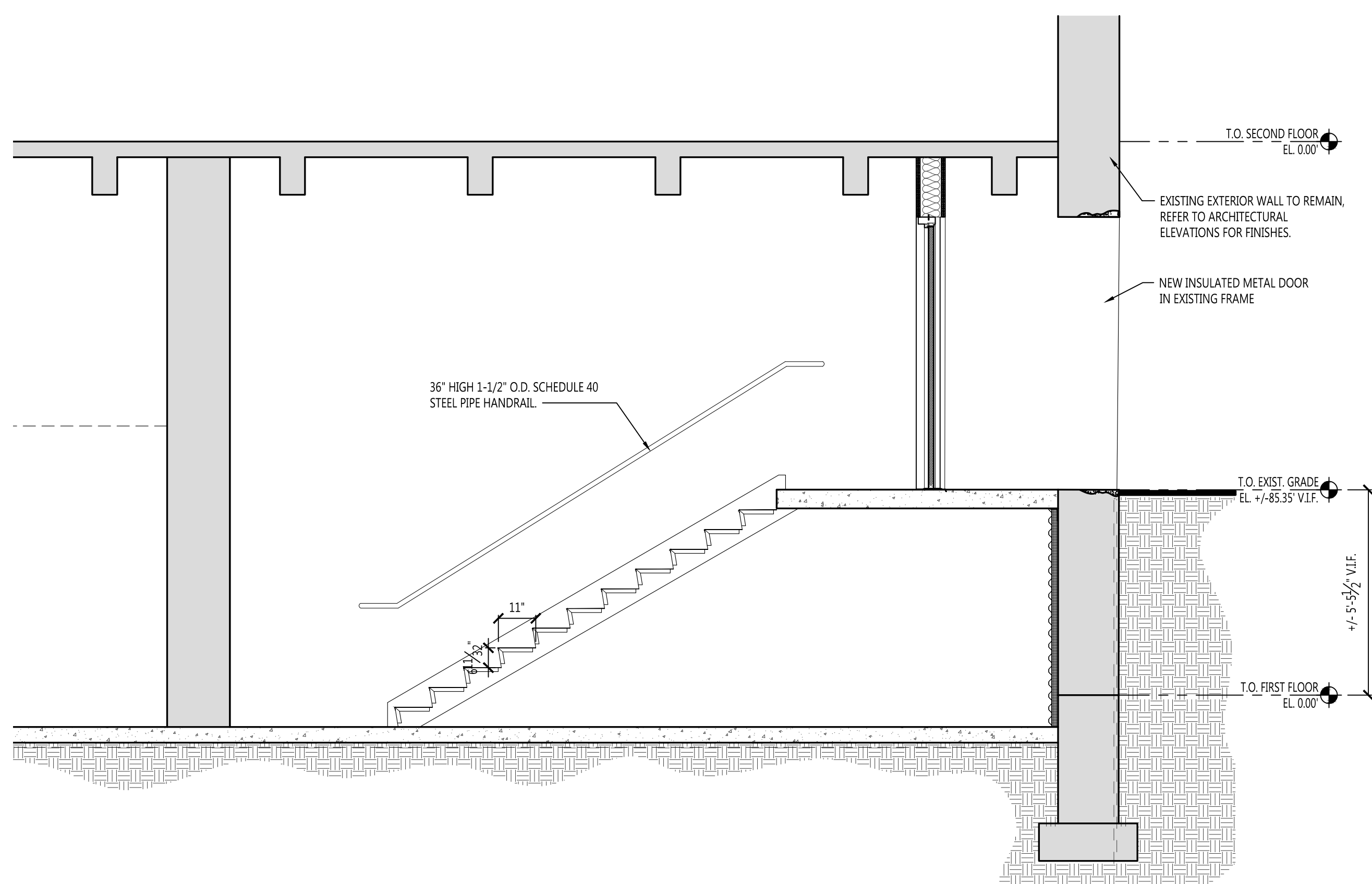
4 METAL STAIR DETAIL  
SCALE: 1" = 1'-0"



3 STAIR "C" FIRST FLOOR PLAN  
SCALE: 3/8" = 1'-0"



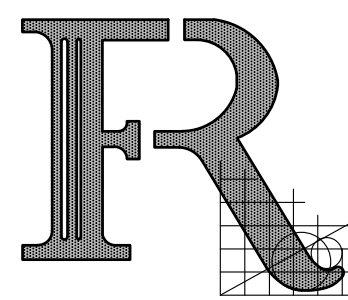
4 STAIR "C" SECTION  
SCALE: 3/8" = 1'-0"



5 STAIR "C" SECTION  
SCALE: 3/8" = 1'-0"

## STAIR NOTES

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4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

### CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

### PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

### TITLE DRAWING:

ENLARGED STAIR "C"  
PLANS & SECTIONS

### SEAL & SIGNATURE

DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

A-312.00

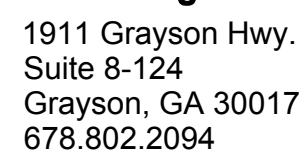
ALT 28  
OF XX

### DOB JOB NUMBER:



CONSULTANTS:

**Terry W. Wall, Jr., P.E., S.E.**  
**Consulting Structural Engineering**



MEP CONSULTANT:

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REVISIONS

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3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

## ENLARGED ELEVATOR "A" PLANS AND SECTIONS

SEAL &amp; SIGNATURE

DATE:	6/13/18
PROJECT No.	18014
DRAWING BY:	J.R.
CHK BY:	J.N.
DWG. No.:	

A-313.00

ALT 29 OF XX

DOB JOB NUMBER

ELEVATOR INFORMATION		
SPECIFICATION AND DATA		
CAR NO.	ELEVATOR   A	ELEVATOR   B
BASIS OF DESIGN	CANTON	CANTON
TYPE	HYDRAULIC	HYDRAULIC
CAPACITY	4000 LBS	4000 LBS
SPEED	100 FPM	100 FPM
NUMBER OF OPENINGS	3 AT FRONT	3 AT FRONT
NET TRAVEL	28'-9"	29'-7"
CAB MEASUREMENTS	PER PLAN	PER PLAN
CLEAR HEIGHT UNDER CEILING	8'-0" MIN.	8'-0" MIN.
DOOR SIZE	4'-0" WIDE X 7'-0" TALL	4'-0" WIDE X 7'-0" TALL
DOOR TYPE	TWO SPEED SIDE OPENING	TWO SPEED SIDE OPENING
DOOR PROTECTION	INFRARED DETECTOR	INFRARED DETECTOR
LOBBY AND ALTERNATE FLOOR	SEE NOTE 1	SEE NOTE 1
TECHNICAL DATA		
POWER SUPPLY	208 VOLTS, 60 HZ, 3 PHASE	208 VOLTS, 60 HZ, 3 PHASE
MOTOR H.P.	40 HORSEPOWER, 120 FLA, 671 LRA	40 HORSEPOWER, 120 FLA, 671 LRA

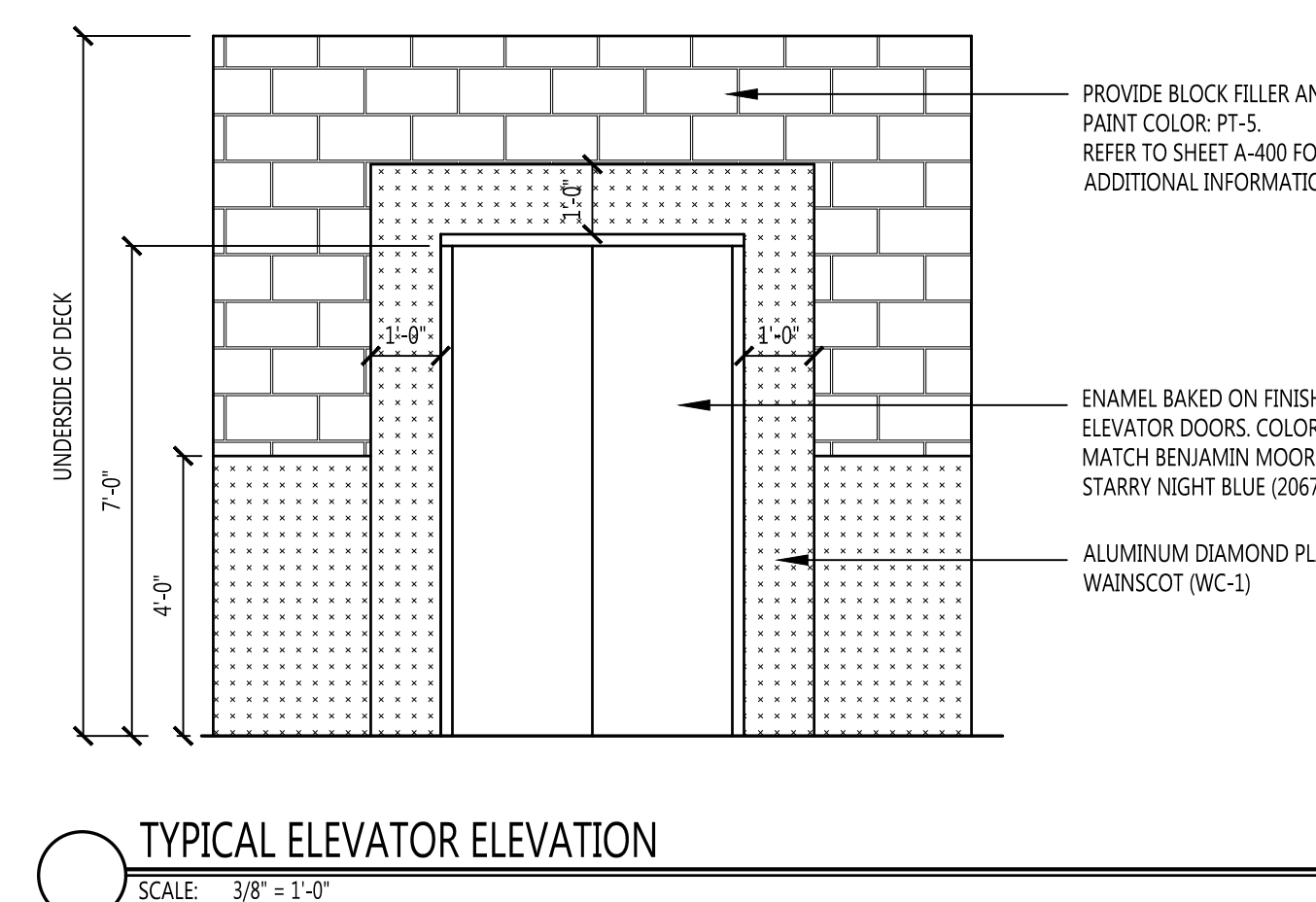
NOTE:

1. PROVISION FOR ACCESS CONTROL, KEYPAD IN CAR (CUSTOMER MUST ENTER CODE BEFORE ELEVATOR MOVES)
2. ELEVATOR FIT SHALL BE PROPERLY WEATHERPROOFED
3. ELEVATOR SUPPLIER TO PROVIDE OPERATION MANUEL AND SHOP DRAWINGS
4. MUST MEET ADA AND BUILDING CODE REQUIREMENTS.
5. ELEVATOR TO HAVE PROVISIONS FOR DOOR HOLD OPEN BUTTON ON CONTROL, OPERATING PANEL
6. ELEVATOR TO HAVE UPGRADED TRAVELER CABLES TO ACCOMMODATE ACCESS CONTROL, LOW VOLTAGE AND SECURITY CAMERAS
7. PROVIDE SINGLE SPEED FAN, ONY OFF LIGHT SWITCH, REMOTE ELEVATOR MONITORING, CAR STALL PROTECTION, FIREFIGHTERS SERVICE PANEL, BATTERY LOWERING

ALL ELEVATOR COMPONENTS TO BE VERIFIED AND COORDINATED WITH MFR. PRIOR TO ORDERING; THESE COMPINMENTS INCLUDE BUT ARE NOT LIMITED TO:

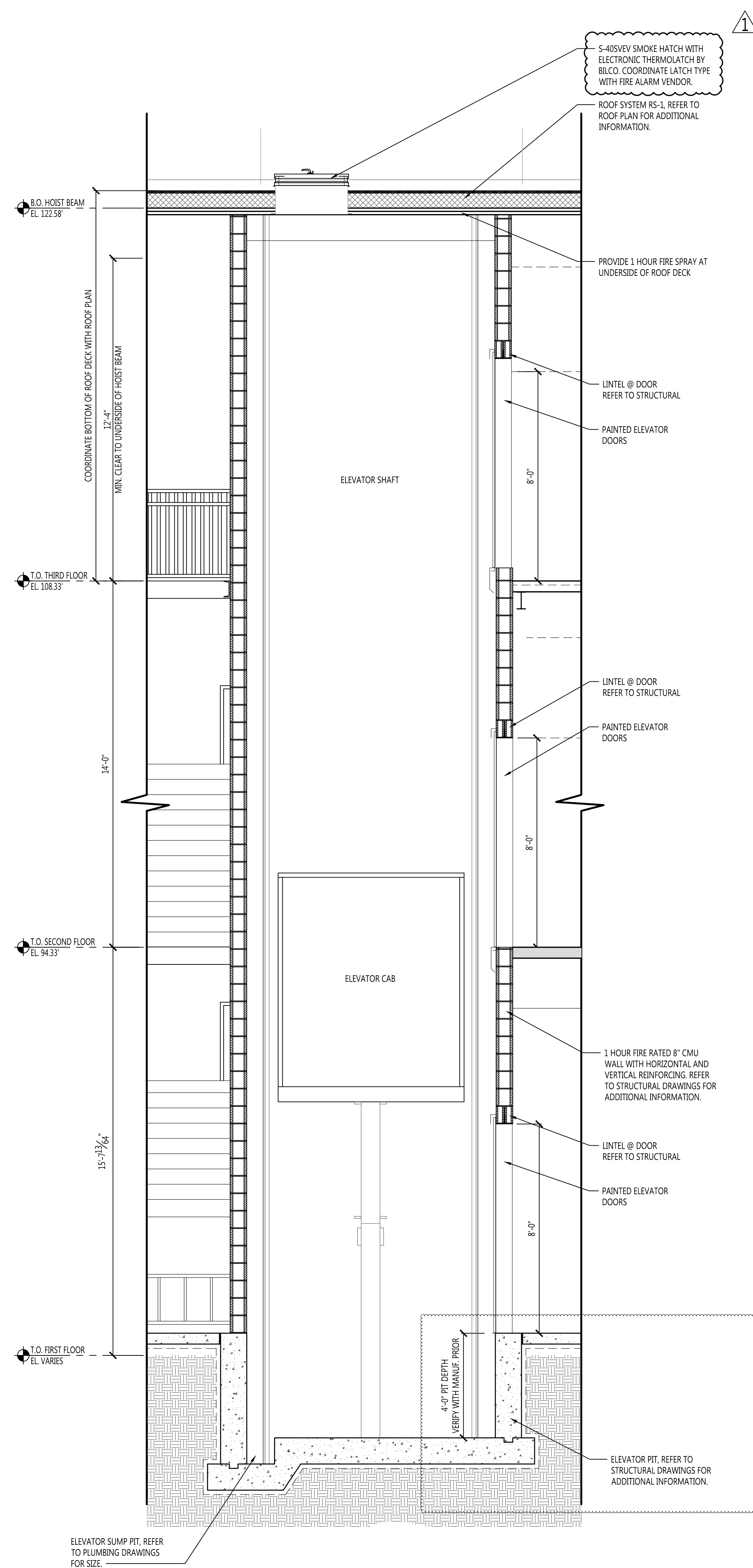
- PIT DEPTH
- DOOR OPENINGS
- OVERHEAD HOIST' WAY CLEARANCES
- EQUIPMENT SIZING
- POWER REQUIREMENTS

ELEVATOR CAB FINISH SCHEDULE				
MATERIAL NUMBER	MATERIAL	MATERIAL	MODEL/ COLOR	REMARKS/ LOCATION
M-1	CEILING PANELS	PER MAN.	PAINTED CEILING PANELS WITH ROUND LED	ELEVATOR CEILING
M-2	WALL PANELS	STAINLESS STEEL	POLISHED DIAMOND PLATE	ELEVATOR WALLS
F-1	FLOORING	WALK OFF CARPET	WALK OFF CARPET TO MATCH STORAGE AISLES	ELEVATOR FLOOR
H-1	HANDRAILS	STAINLESS STEEL	ROUND STEEL	CAB HANDRAILS



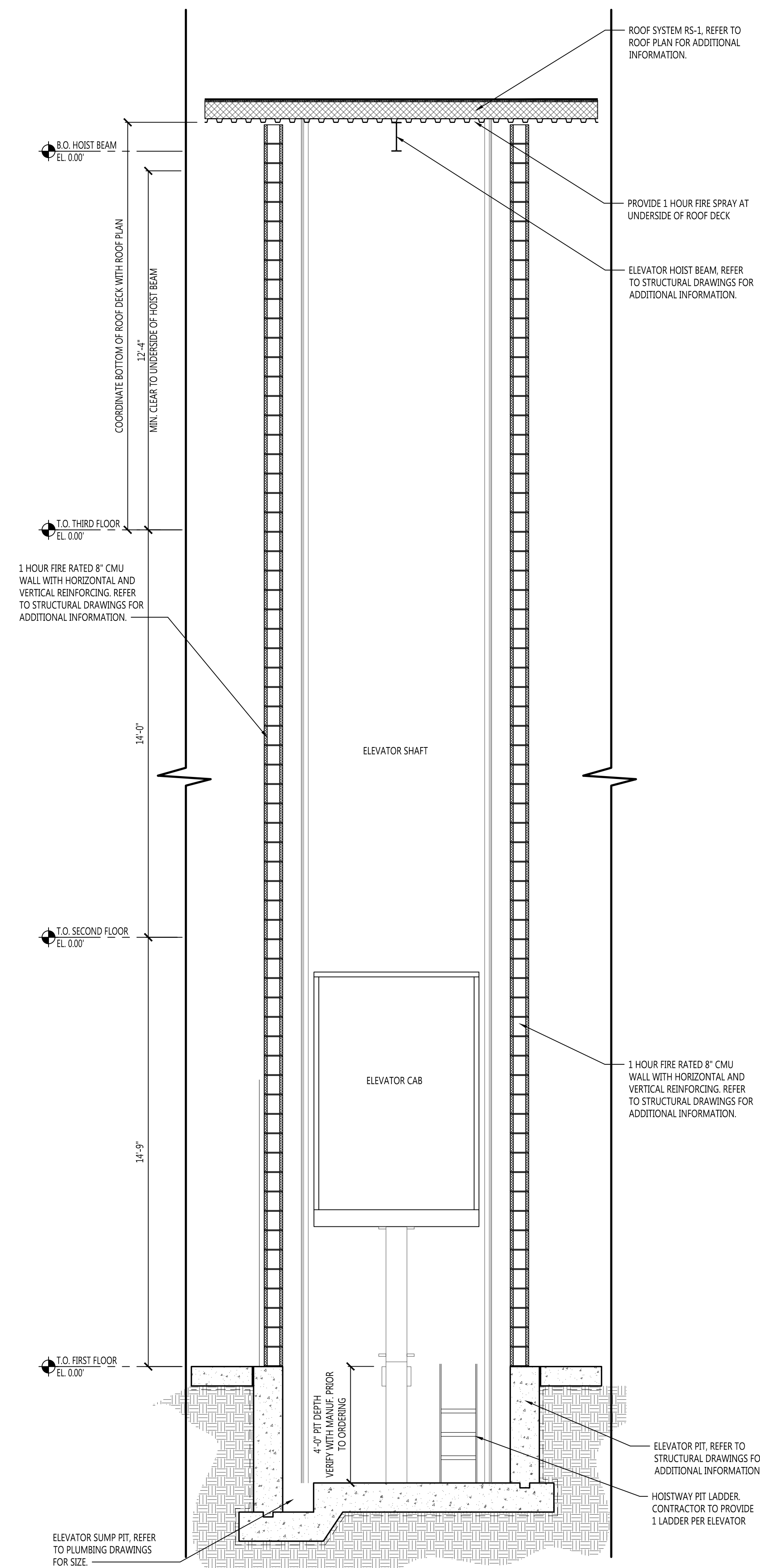
### TYPICAL ELEVATOR ELEVATION

SCALE:  $3/8" = 1'-0"$



TYPICAL ELEVATOR SECTION

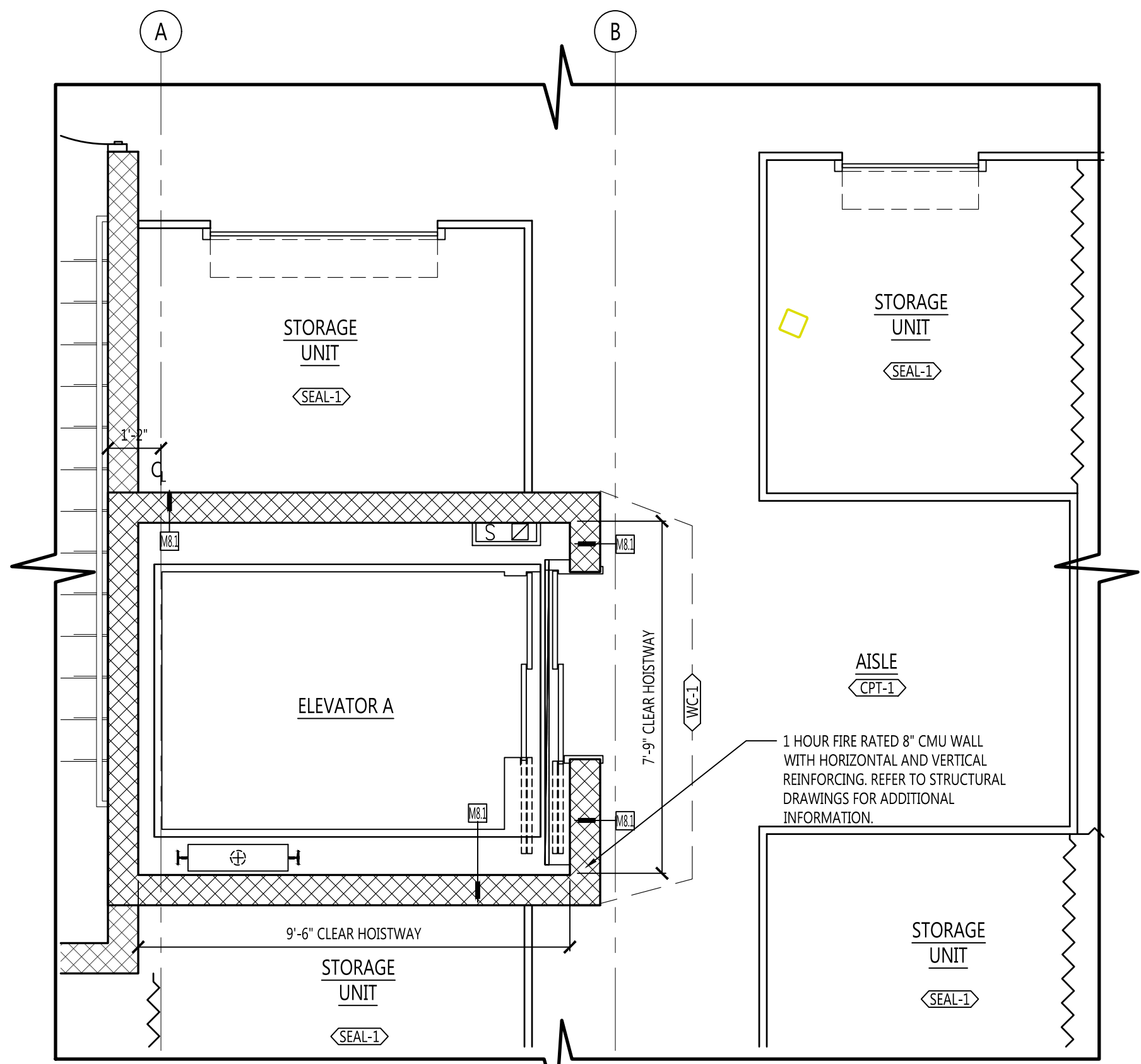
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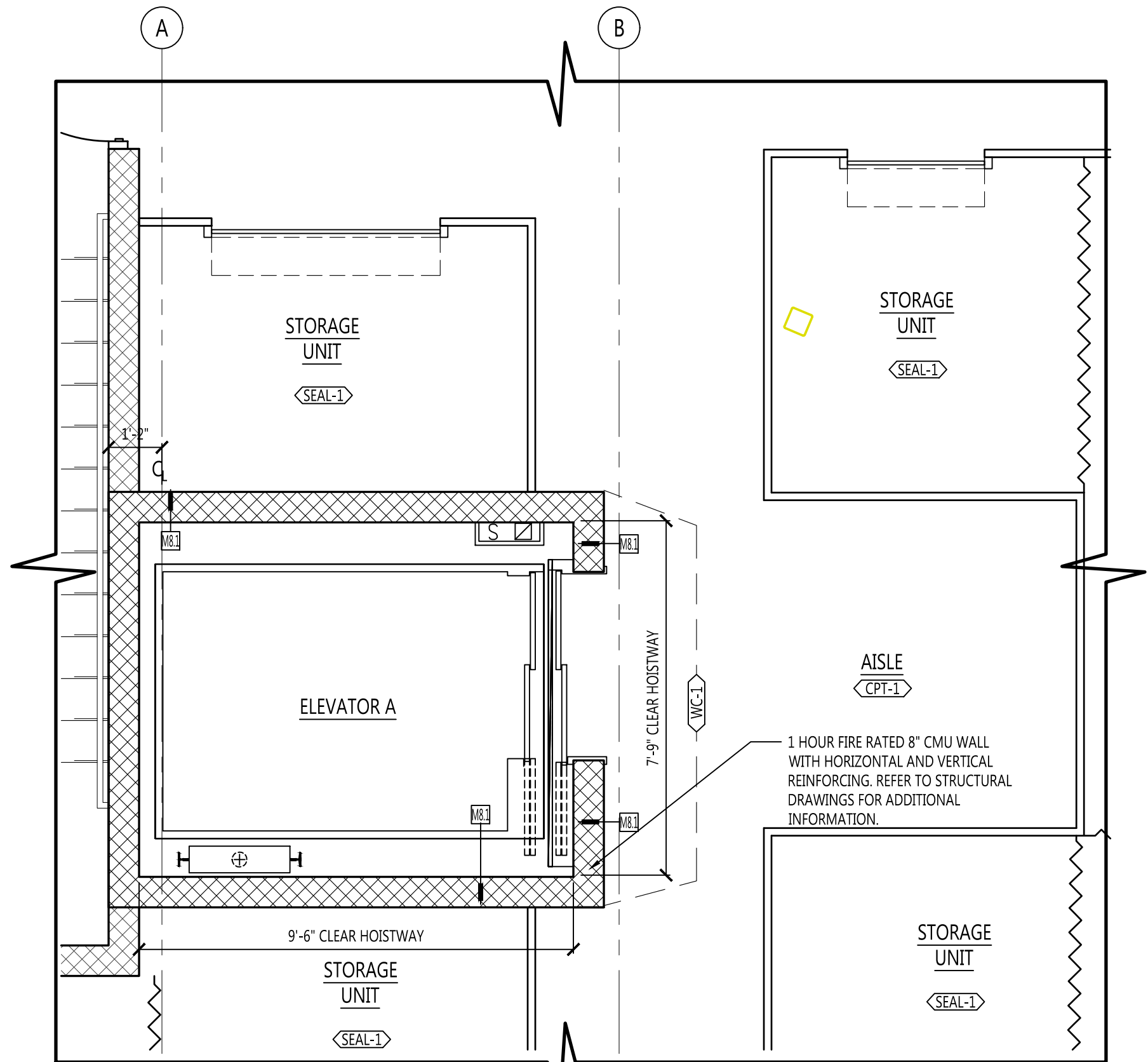
TYPICAL ELEVATOR SECTION

SCALE:  $3/8" = 1'-0"$

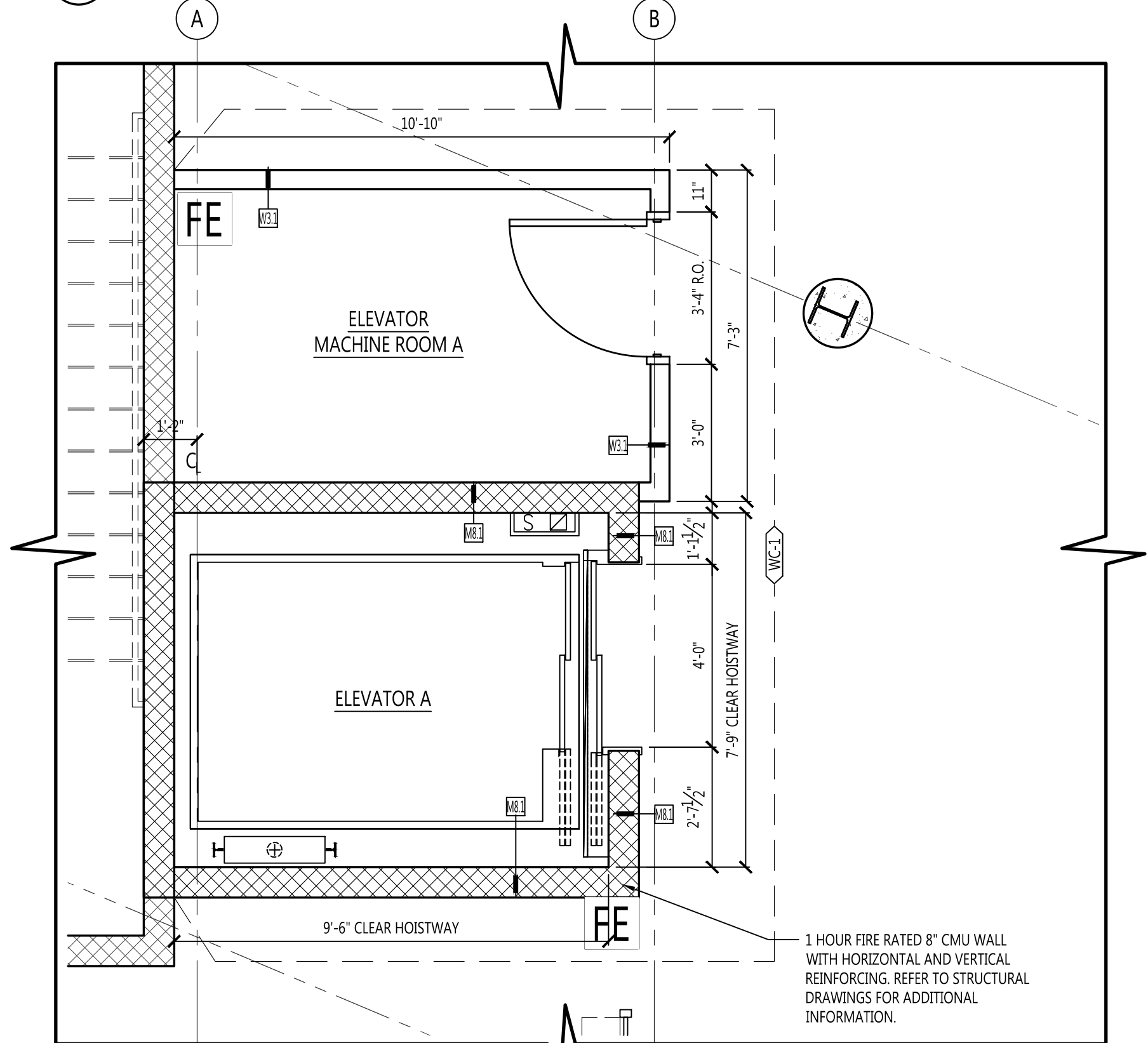




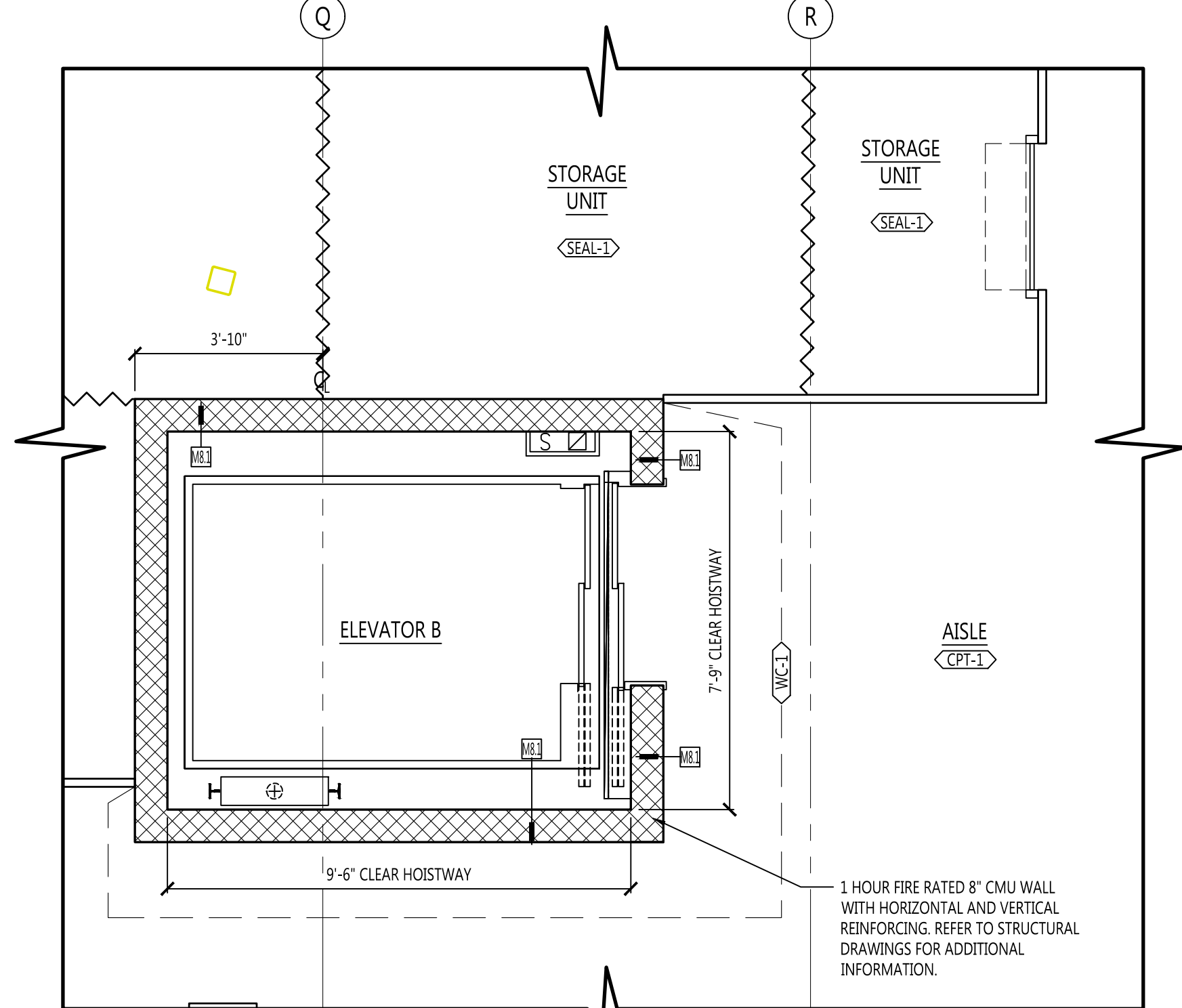
3 ELEVATOR A THIRD FLOOR PLAN  
SCALE: 3/8" = 1'-0"



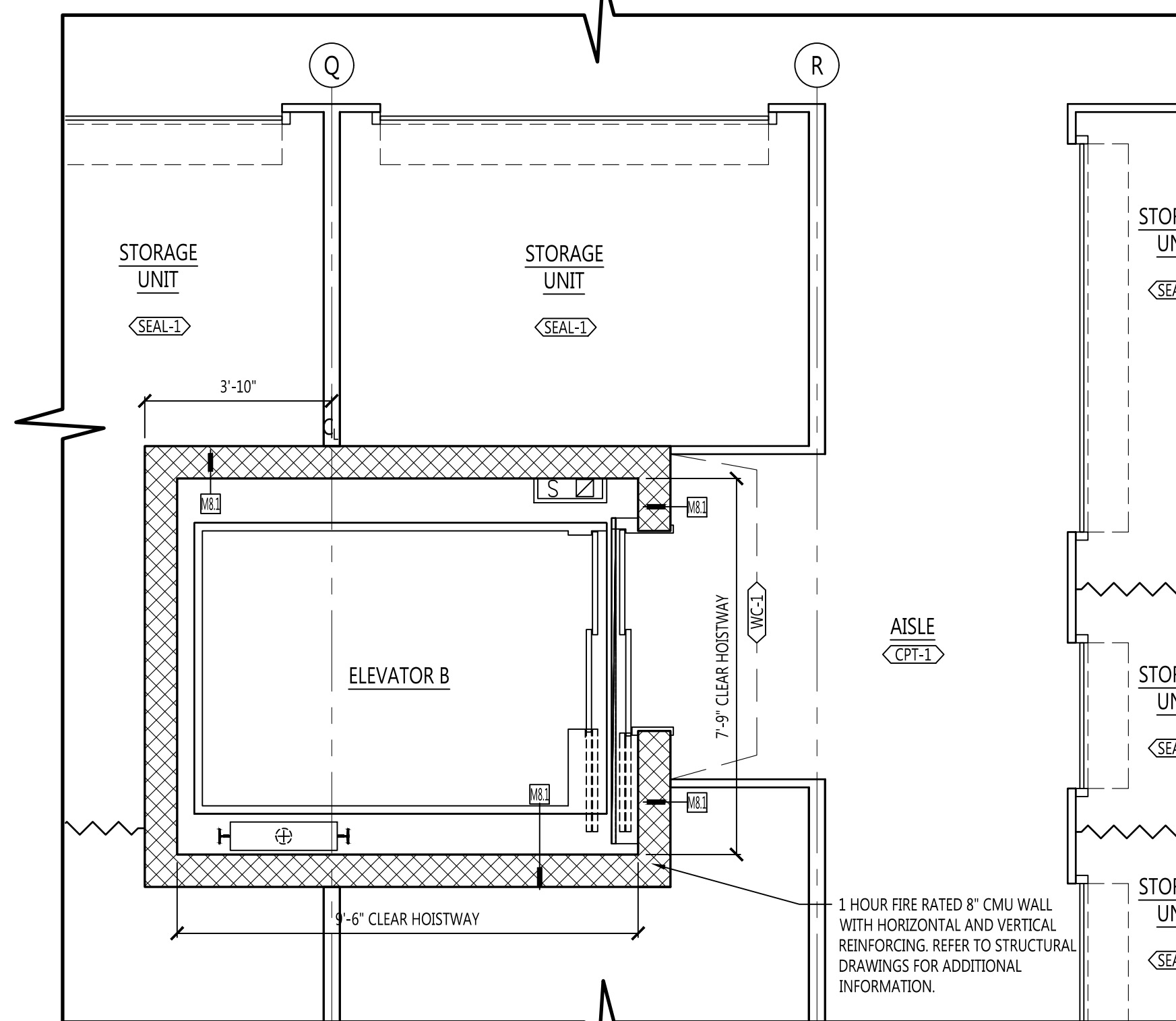
2 ELEVATOR A SECOND FLOOR PLAN  
SCALE: 3/8" = 1'-0"



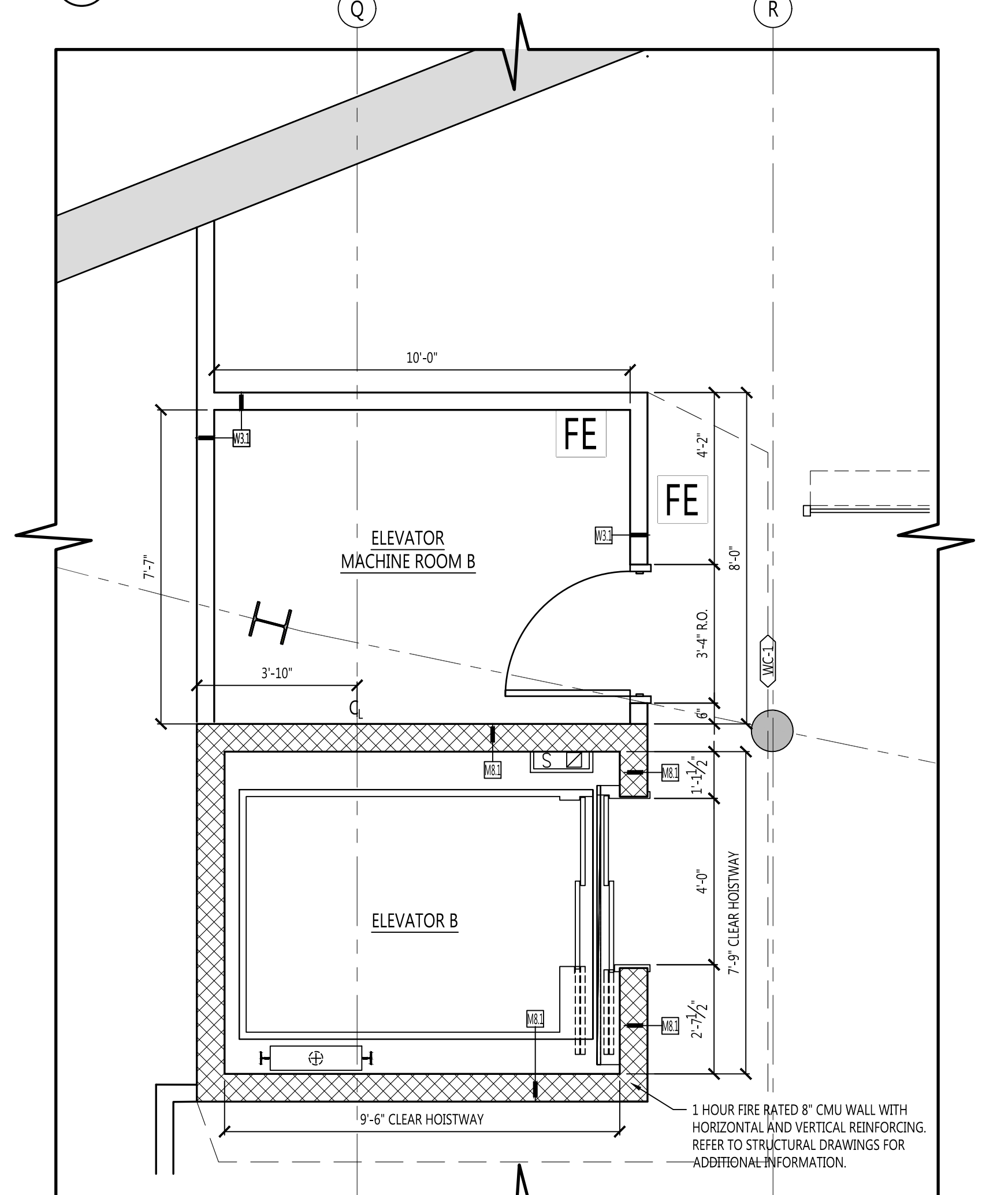
1 ELEVATOR A FIRST FLOOR PLAN  
SCALE: 3/8" = 1'-0"



6 ELEVATOR THIRD FLOOR PLAN  
SCALE: 3/8" = 1'-0"



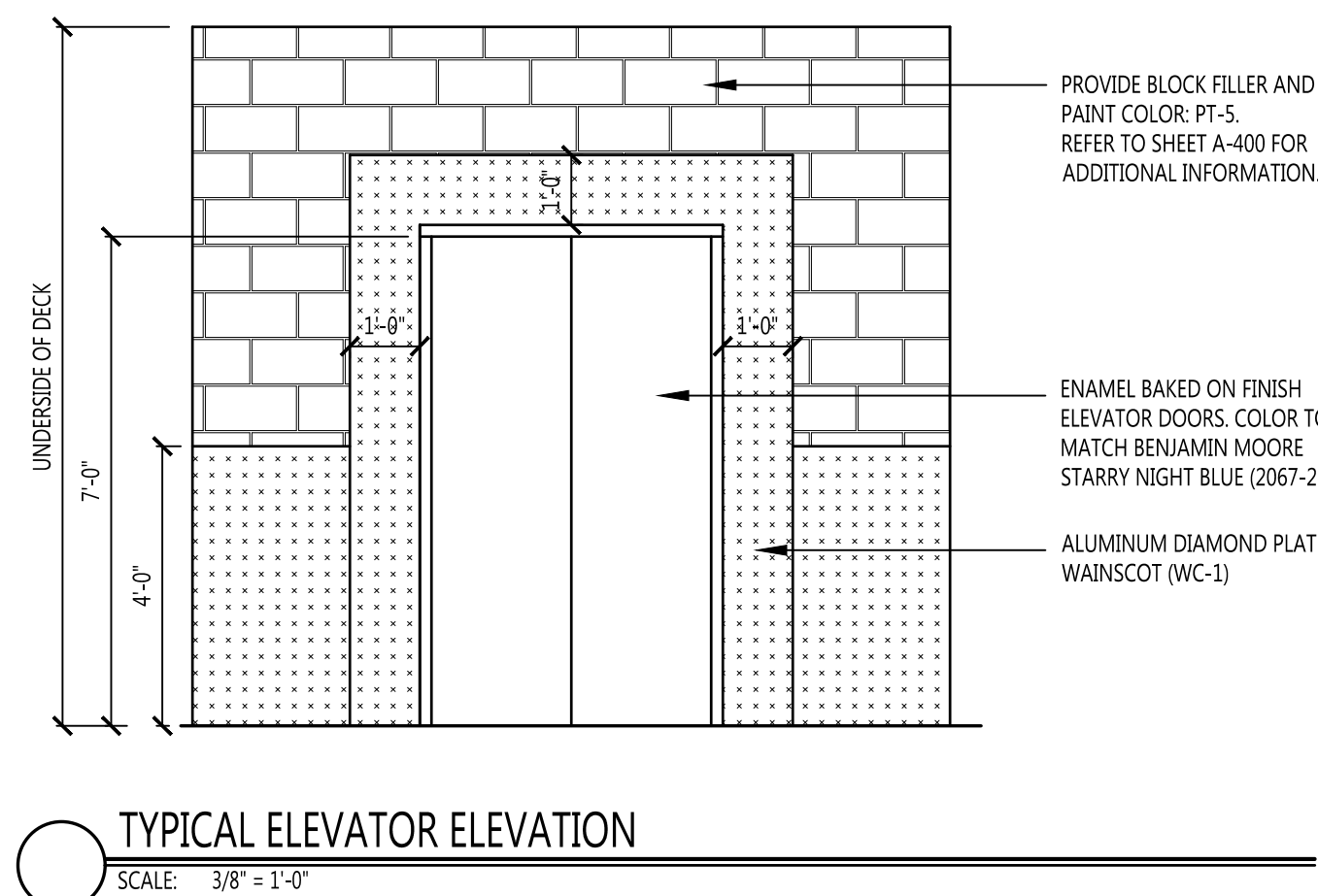
5 ELEVATOR B SECOND FLOOR PLAN  
SCALE: 3/8" = 1'-0"



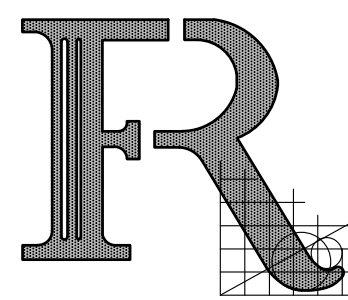
4 ELEVATOR B FIRST FLOOR PLAN  
SCALE: 3/8" = 1'-0"

ELEVATOR INFORMATION		
SPECIFICATION AND DATA		
CAR NO.	ELEVATOR A	ELEVATOR B
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TYPE	HYDRAULIC	HYDRAULIC
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DOOR TYPE	TWO SPEED SIDE OPENING	TWO SPEED SIDE OPENING
DOOR PROTECTION	INFRARED DETECTOR	INFRARED DETECTOR
LOBBY AND ALTERNATE FLOOR	SEE NOTE 1	SEE NOTE 1
TECHNICAL DATA		
POWER SUPPLY	208 VOLTS, 60 HZ, 3 PHASE	208 VOLTS, 60 HZ, 3 PHASE
MOTOR H.P.	40 HORSEPOWER, 120 FLA, 671 LRA	40 HORSEPOWER, 120 FLA, 671 LRA
NOTE:		
1. PROVISION FOR ACCESS CONTROL KEYPAD IN CAR (CUSTOMER MUST ENTER CODE BEFORE ELEVATOR MOVES)		
2. ELEVATOR PIT SHALL BE PROPERLY WEATHERPROOFED		
3. ELEVATOR SUPPLIER TO PROVIDE OPERATION MANUAL AND SHOP DRAWINGS		
4. MUST MEET ADA AND BUILDING CODE REQUIREMENTS		
5. ELEVATOR TO HAVE PROVISIONS FOR DOOR HOLD OPEN BUTTON ON CONTROL OPERATING PANEL		
6. ELEVATOR TO HAVE UPGRADED TRAVELER CABLES TO ACCOMMODATE ACCESS CONTROL, LOW VOLTAGE AND SECURITY CAMERAS.		
7. PROVIDE SINGLE SPEED FAN, ON/OFF LIGHT SWITCH, REMOTE ELEVATOR MONITORING, CAR STALL PROTECTION, FIREFIGHTERS SERVICE PANEL, BATTERY LOWERING		
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PIT DEPTH		
DOOR OPENINGS		
OVERHEAD HOIST WAY CLEARANCES		
EQUIPMENT SIZING		
POWER REQUIREMENTS		

ELEVATOR CAB FINISH SCHEDULE				
MATERIAL NUMBER	MATERIAL	MATERIAL	MODEL/ COLOR	REMARKS/ LOCATION
M-1	CEILING PANELS	PER MAN.	PAINTED CEILING PANELS WITH ROUND LED	ELEVATOR CEILING
M-2	WALL PANELS	STAINLESS STEEL	POLISHED DIAMOND PLATE	ELEVATOR WALLS
F-1	FLOORING	WALK OFF CARPET	WALK OFF CARPET TO MATCH STORAGE AISLES	ELEVATOR FLOOR
H-1	HANDRAILS	STAINLESS STEEL	ROUND STEEL	CAB HANDRAILS



TYPICAL ELEVATOR ELEVATION  
SCALE: 3/8" = 1'-0"



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ISSUE:

#	DATE	COMMENT
1	12/23/20	ISSUE FOR 50% REVIEW
2	1/24/20	ISSUE FOR 75% REVIEW
3	4/6/20	ISSUE FOR PERMIT
4	5/15/20	ISSUE FOR BID
5	2/16/21	ISSUE FOR PERMIT

CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
ENLARGED ELEVATOR "B"  
PLANS AND SECTIONS

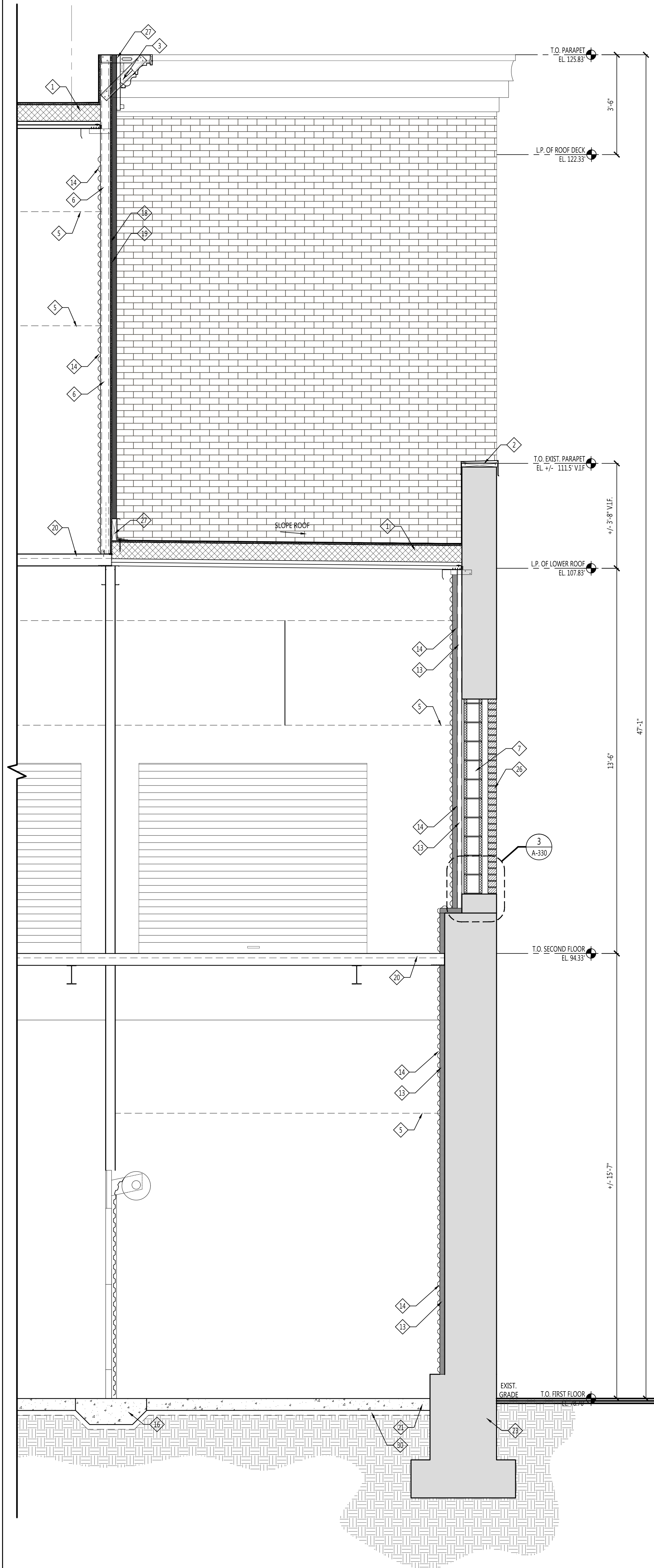
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DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.:

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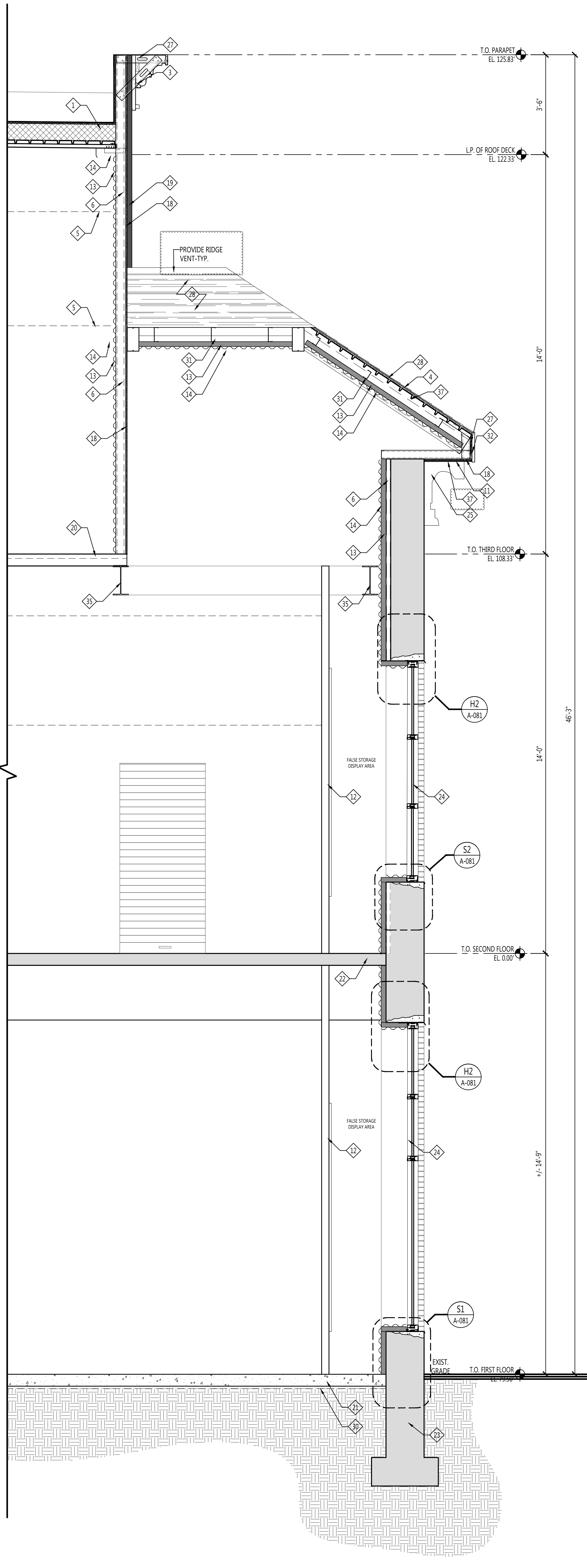
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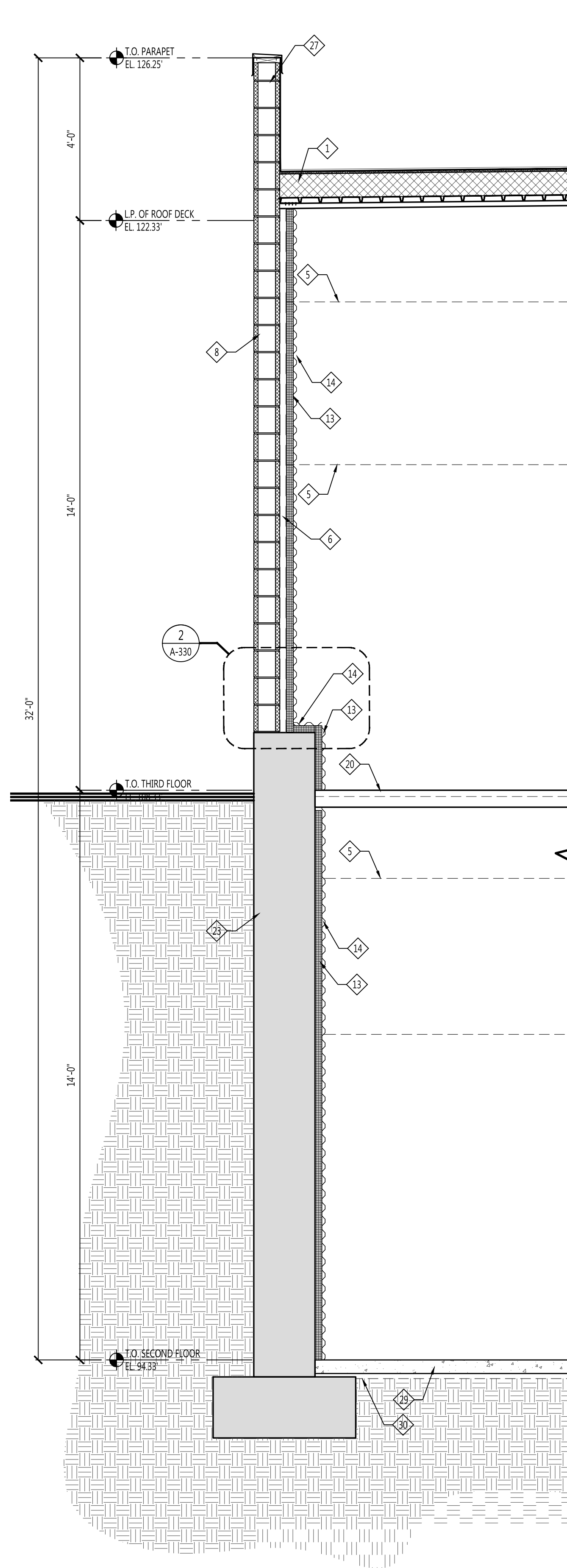




1 ENLARGED WALL SECTION  
SCALE: 1/2" = 1'-0"

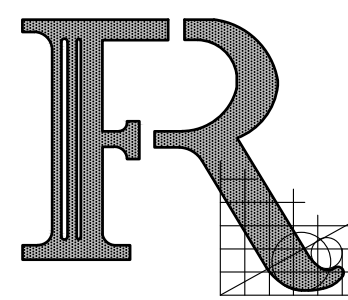


2 ENLARGED WALL SECTION  
SCALE: 1/2" = 1'-0"



3 ENLARGED WALL SECTION  
SCALE: 1/2" = 1'-0"

KEYED CONSTRUCTION NOTES	
TAG #	REMARKS
1	ROOF SYSTEM RS-1, REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
2	METAL CORING AS MANUFACTURED BY FIRESTONE, REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.
3	BREAK METAL TRIM CORNICE, REFER TO ARCHITECTURAL ELEVATIONS AND ROOF DETAILS FOR ADDITIONAL INFORMATION.
4	3/4" FIRE TREATED PLYWOOD.
5	WIRE MESH AT THE TOP OF STORAGE UNITS.
6	METAL STUD, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7	NEW CMU BLOCK INFILL, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
8	NEW 8" CMU BLOCK, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
9	STEEL LINTEL, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
10	NEW STRUCTURAL STEEL, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
11	MASTERWALL STUCCO, REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.
12	FAUX UNITS.
13	2" THERMAX SHEATHING (R-13).
14	CORRUGATED LINER PANEL.
15	1 LAYER OF 1" GYP. BD. PRIMED AND PAINTED, REFER TO FINISH PLANS FOR ADDITIONAL INFORMATION.
16	NEW HAUNCH FOOTING, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
17	NEW STEEL TUBE COLUMN, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18	1/2" DENS GLASS.
19	MASTERWALL CFS BRICK INSTALLED PER MANUFACTURER SPECIFICATIONS.
20	NEW 5" ELEVATED POURED CONCRETE FLOOR SLAB OVER METAL DECK, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
21	NEW SLAB ON GRADE, TOP OF FIRST FLOOR SLAB VARIES, REFER TO SLAB PLAN.
22	EXISTING CONCRETE FLOOR SLAB TO REMAIN, PATCH AND REPAIR AS REQUIRED.
23	EXISTING FOUNDATION WALL AND FOOTING.
24	NEW STOREFRONT GLAZING, REFER TO SHEET A-080 FOR ADDITIONAL INFORMATION.
25	NEW WOOD CORBELS TO MATCH EXISTING.
26	NEW BRICK VENEER, REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.
27	PROVIDE 2X FRT WOOD BLOCKING.
28	#15 FELT ASPHALT ROOF SHINGLES, REFER TO ARCHITECTURAL ELEVATIONS FOR COLOR.
29	NEW SLAB ON GRADE AT SECOND FLOOR, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
30	INSTALL 10 MIL VAPOR BARRIER BY STEGOWRAP BELOW NEW FIRST AND SECOND FLOOR SLAB ON GRADE. INSTALL VAPOR BARRIER PER MANUFACTURER SPECIFICATIONS, REFER TO SHEET A-330 FOR ADDITIONAL INFORMATION.
31	NEW ROOF SYSTEM RS-2, REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
32	1X AZEK TRIM BOARD, REFER TO ARCHITECTURAL ELEVATIONS FOR COLOR.
33	ROOF SYSTEM RS-3, REFER TO ROOF PLAN AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
34	NEW HEADER, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
35	NEW STRUCTURAL STEEL BEAM, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
36	METAL ROOF DECK-REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
37	VENTED SOFFIT BY VERSATEX, REFER TO ROOF DETAILS FOR ADDITIONAL INFORMATION.



FRANK G. RELF ARCHITECT, P.C.  
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CONSULTANTS:

Terry W. Wall, Jr., P.E., S.E.  
Consulting Structural Engineering  
1911 Grayson Hwy.  
Suite 8-124  
Grayson, GA 30017  
678.802.2094

MEP CONSULTANT:

GAP ENGINEERING, P.C.  
3 COLBY COURT  
DIX HILLS, NEW YORK 11746  
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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

#	DATE	COMMENT
1	2/18/21	REVISED PER DOB COMMENTS
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CLIENT:  
SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE  
200, LAKE SUCCESS, NY, 11042

PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

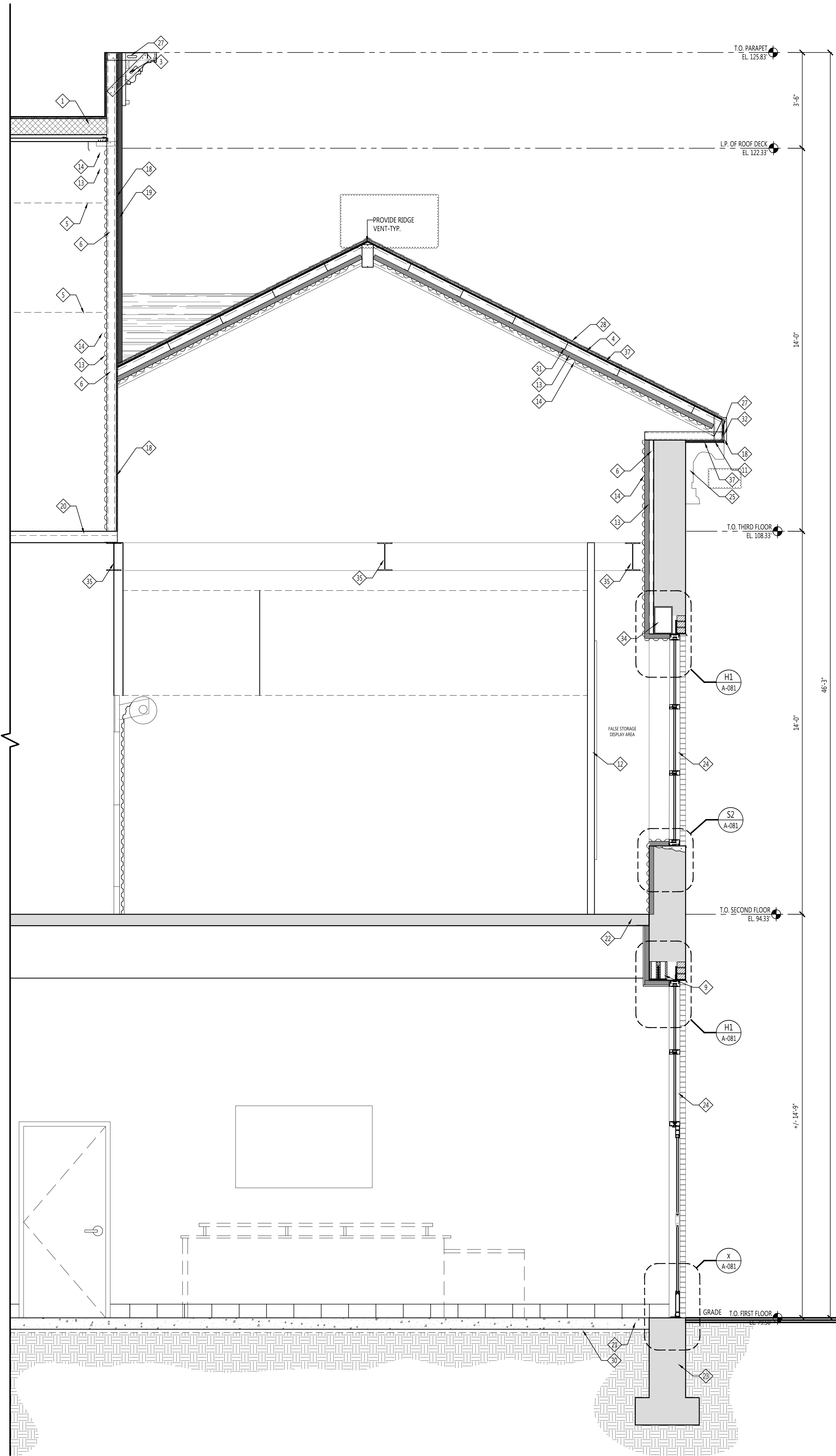
TITLE DRAWING:  
ENLARGED WALL SECTIONS

SEAL & SIGNATURE  
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-320.00

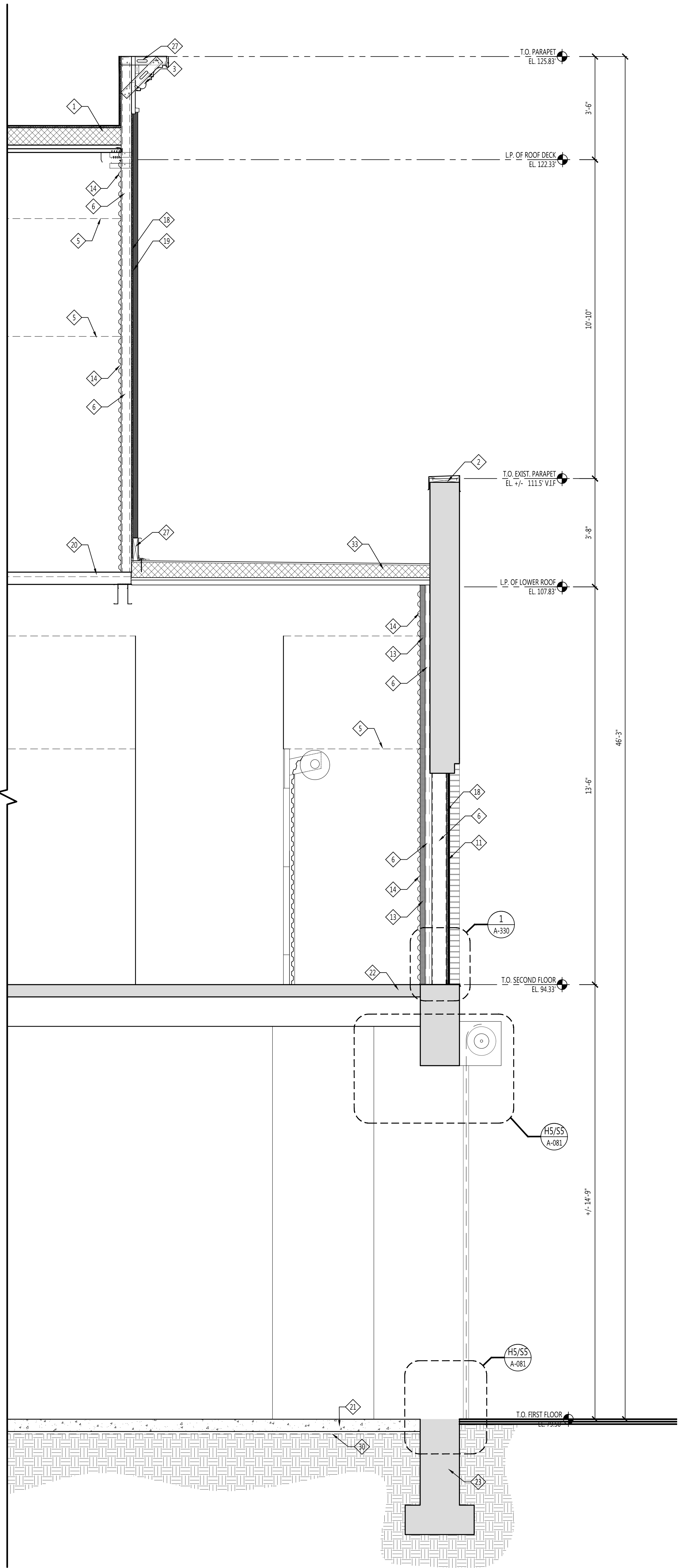
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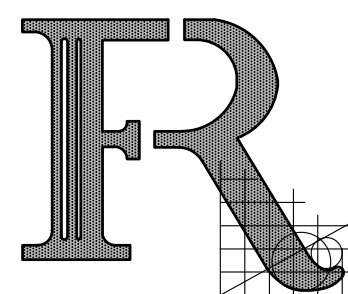


1 ENLARGED WALL SECTION  
SCALE: 1/2" = 1'-0"



2 ENLARGED WALL SECTION  
SCALE: 1/2" = 1'-0"

KEYED CONSTRUCTION NOTES	
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26	NEW BRICK VENEER, REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.
27	PROVIDE 2X FRT WOOD BLOCKING. <span style="border: 1px solid black; padding: 2px;">1</span>
28	#15 FELT ASPHALT ROOF SHINGLES, REFER TO ARCHITECTURAL ELEVATIONS FOR COLOR.
29	NEW SLAB ON GRADE AT SECOND FLOOR, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
30	INSTALL 10 MIL VAPOR BARRIER BY STEGOWRAP BELOW NEW FIRST AND SECOND FLOOR SLAB ON GRADE. INSTALL VAPOR BARRIER PER MANUFACTURER SPECIFICATIONS, REFER TO SHEET A-350 FOR ADDITIONAL INFORMATION.
31	NEW ROOF SYSTEM RS-2, REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
32	1X AZEK TRIM BOARD, REFER TO ARCHITECTURAL ELEVATIONS FOR COLOR.
33	ROOF SYSTEM RS-3, REFER TO ROOF PLAN AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
34	NEW HEADER, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
35	NEW STRUCTURAL STEEL BEAM, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
36	METAL ROOF DECK, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
37	VENTED SOFFIT BY VERSATEX, REFER TO ROOF DETAILS FOR ADDITIONAL INFORMATION.



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FRANK G. RELF ARCHITECT, P.C.

REVISIONS:

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1	09/20	REVISED PER DOB COMMENTS
2	2/18/21	REVISED PER DOB COMMENTS
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ISSUE:

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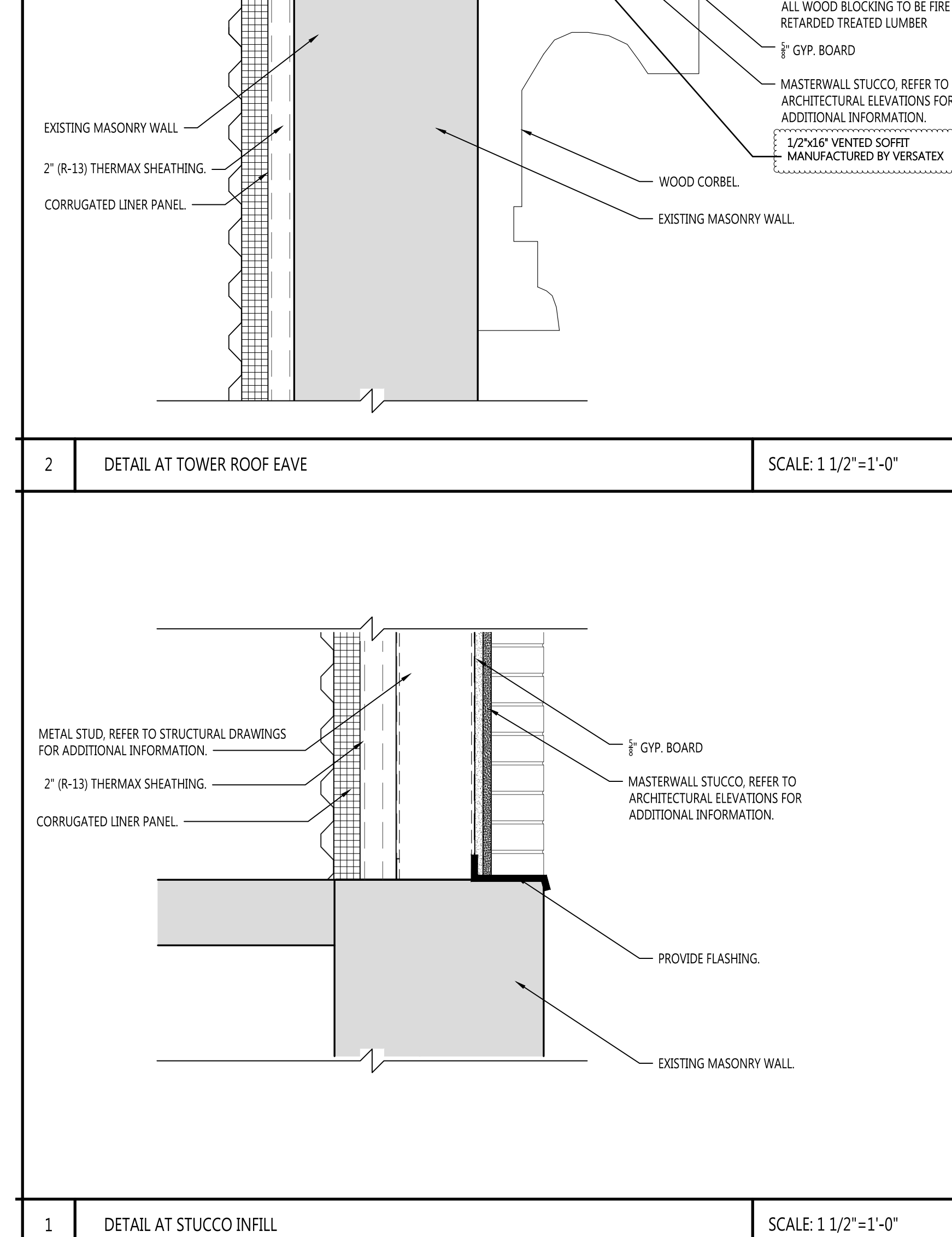
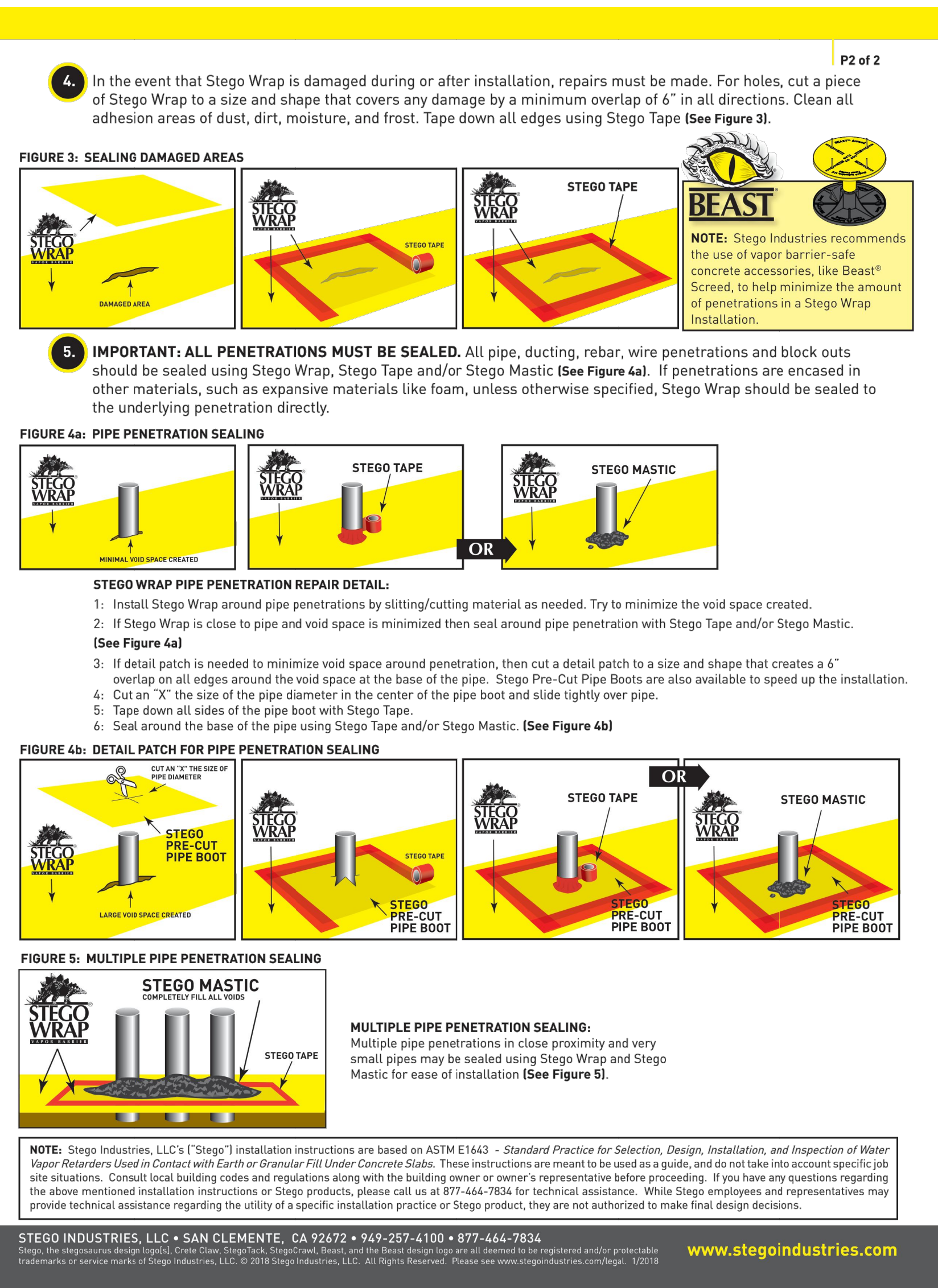
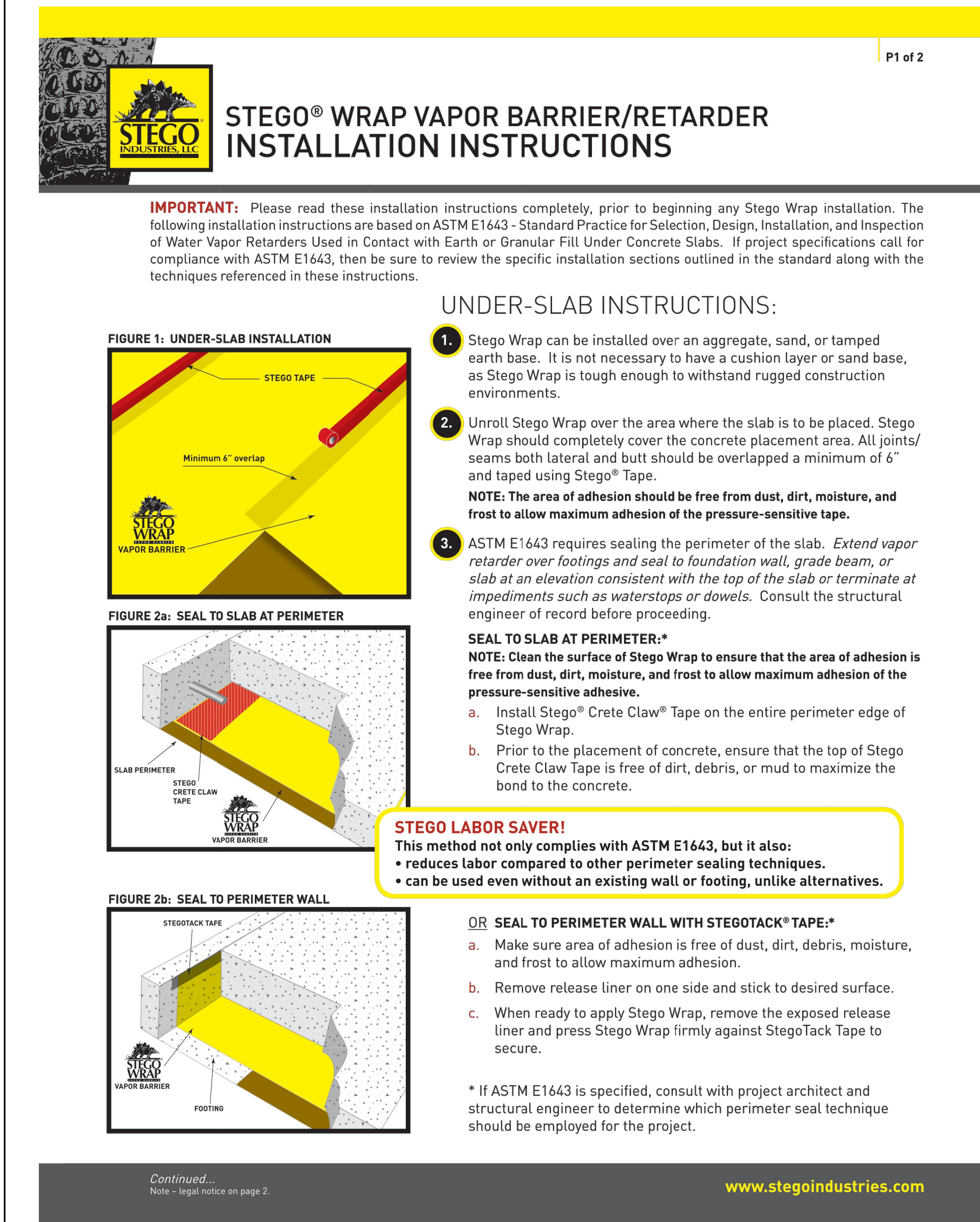
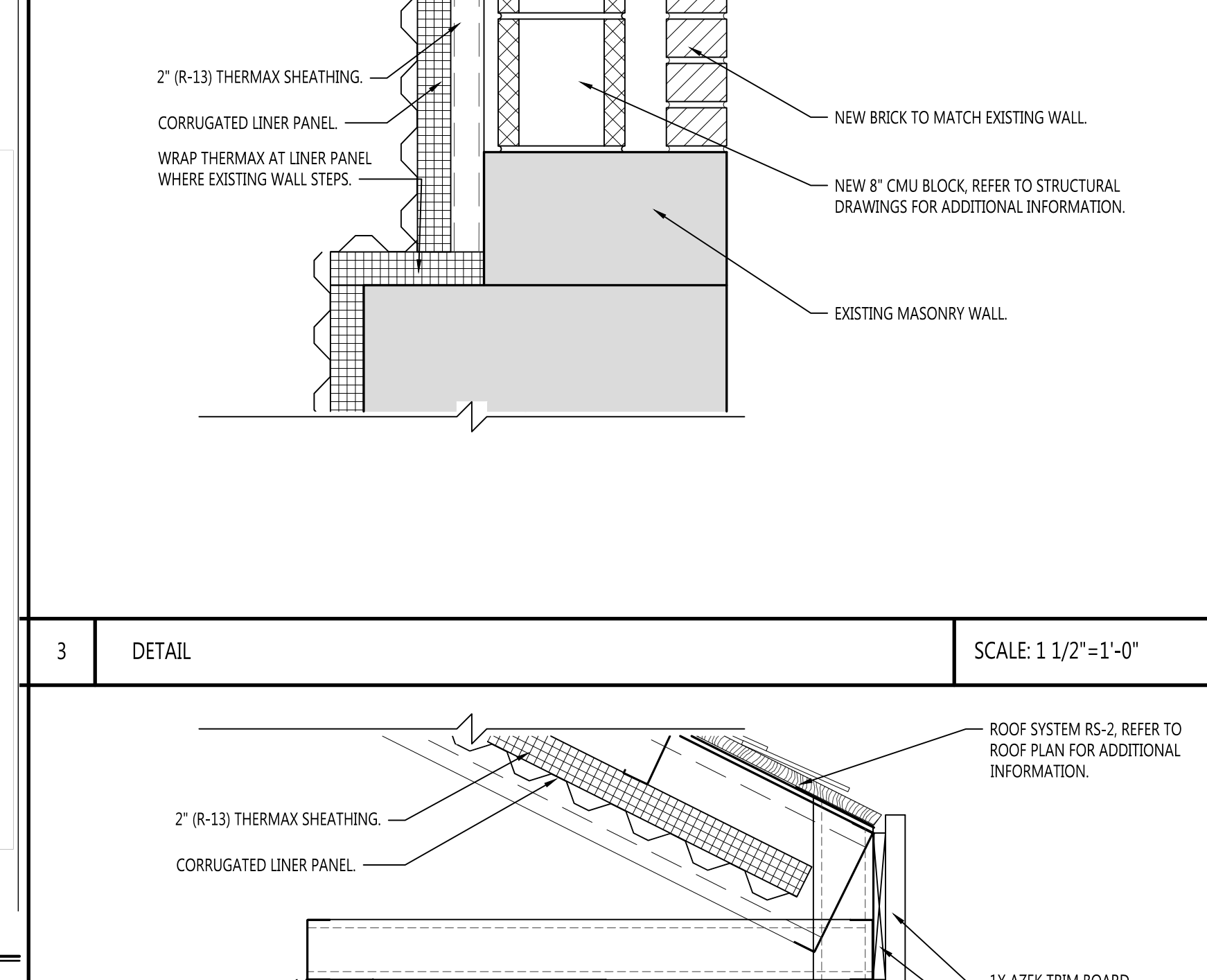
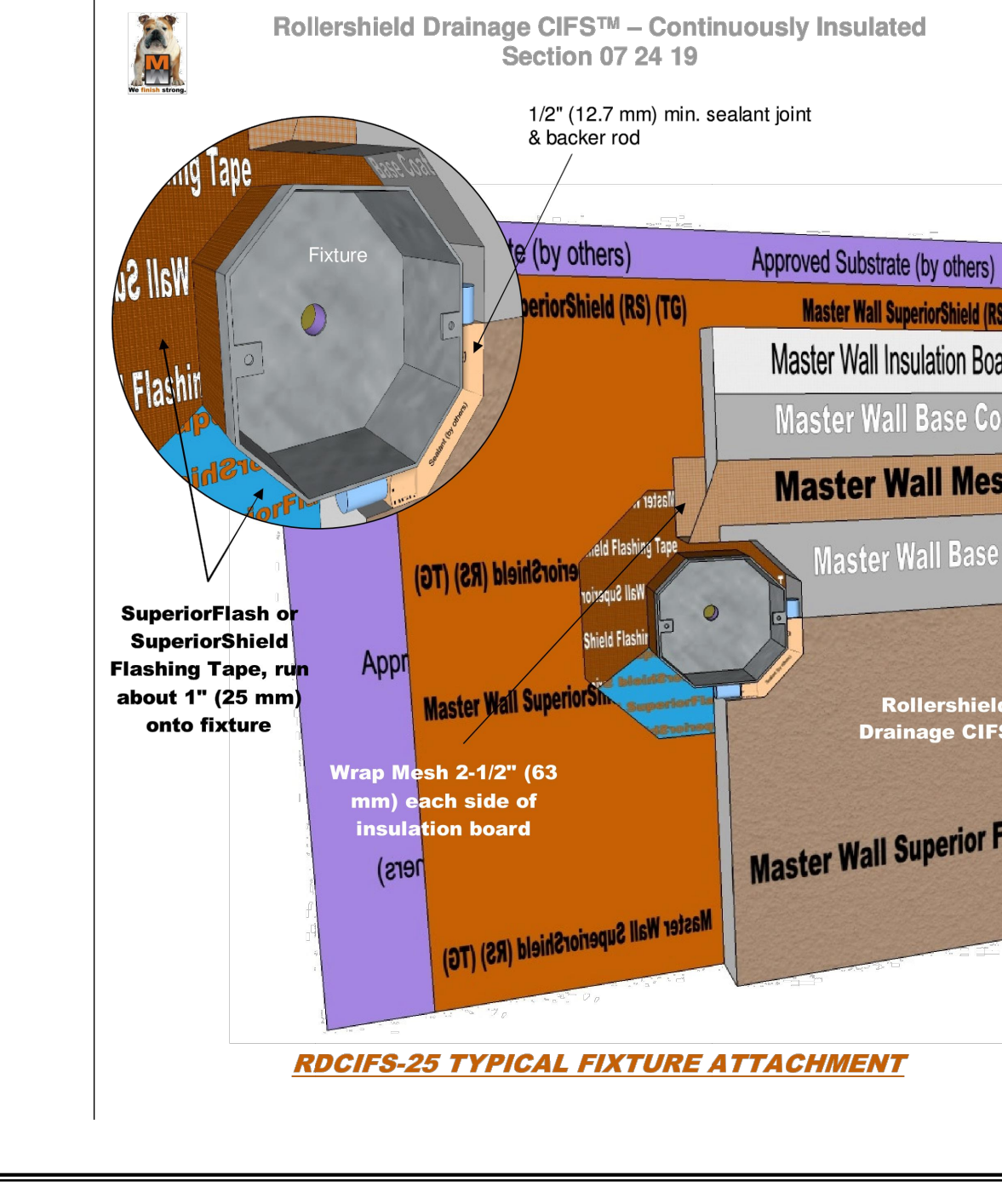
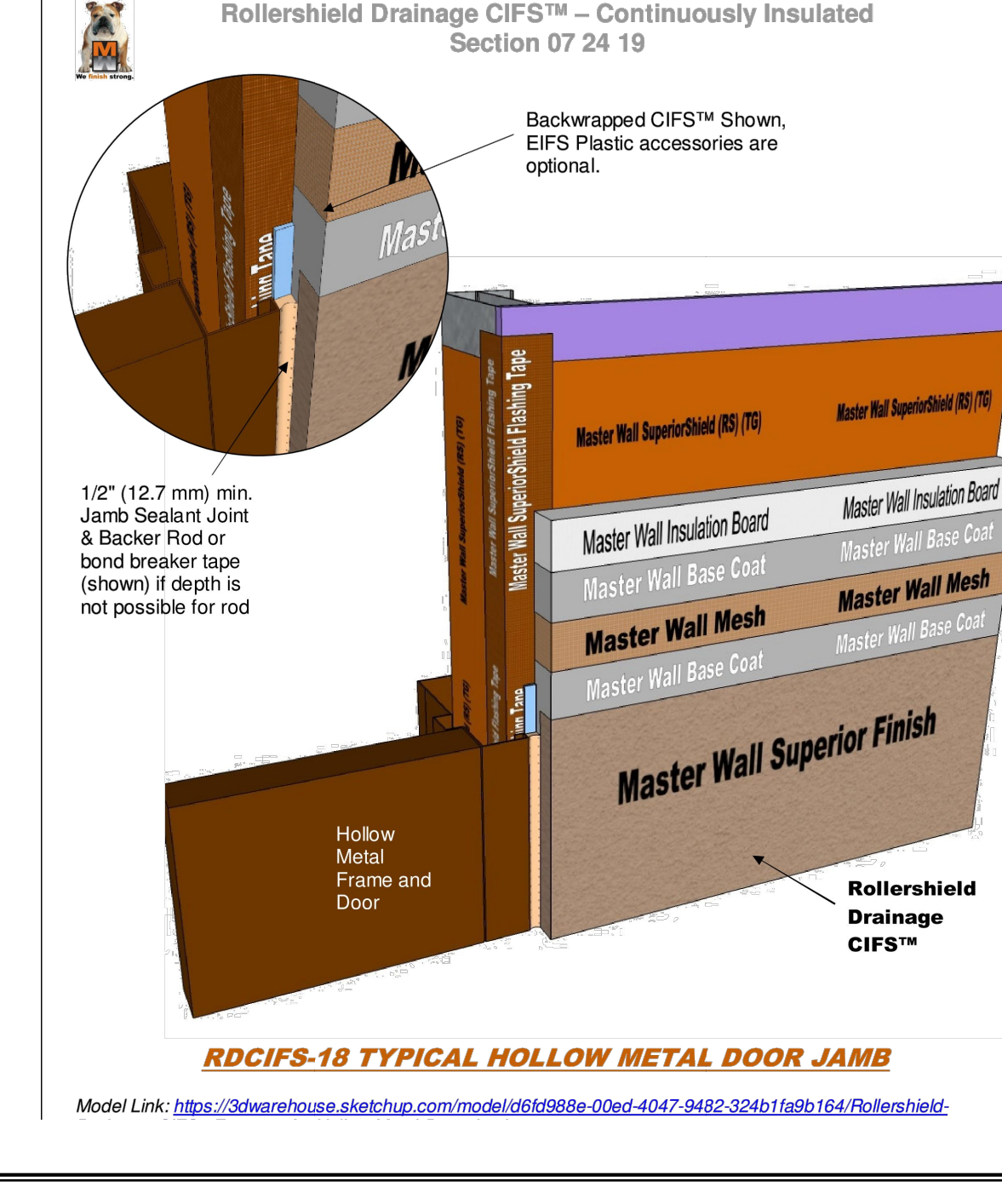
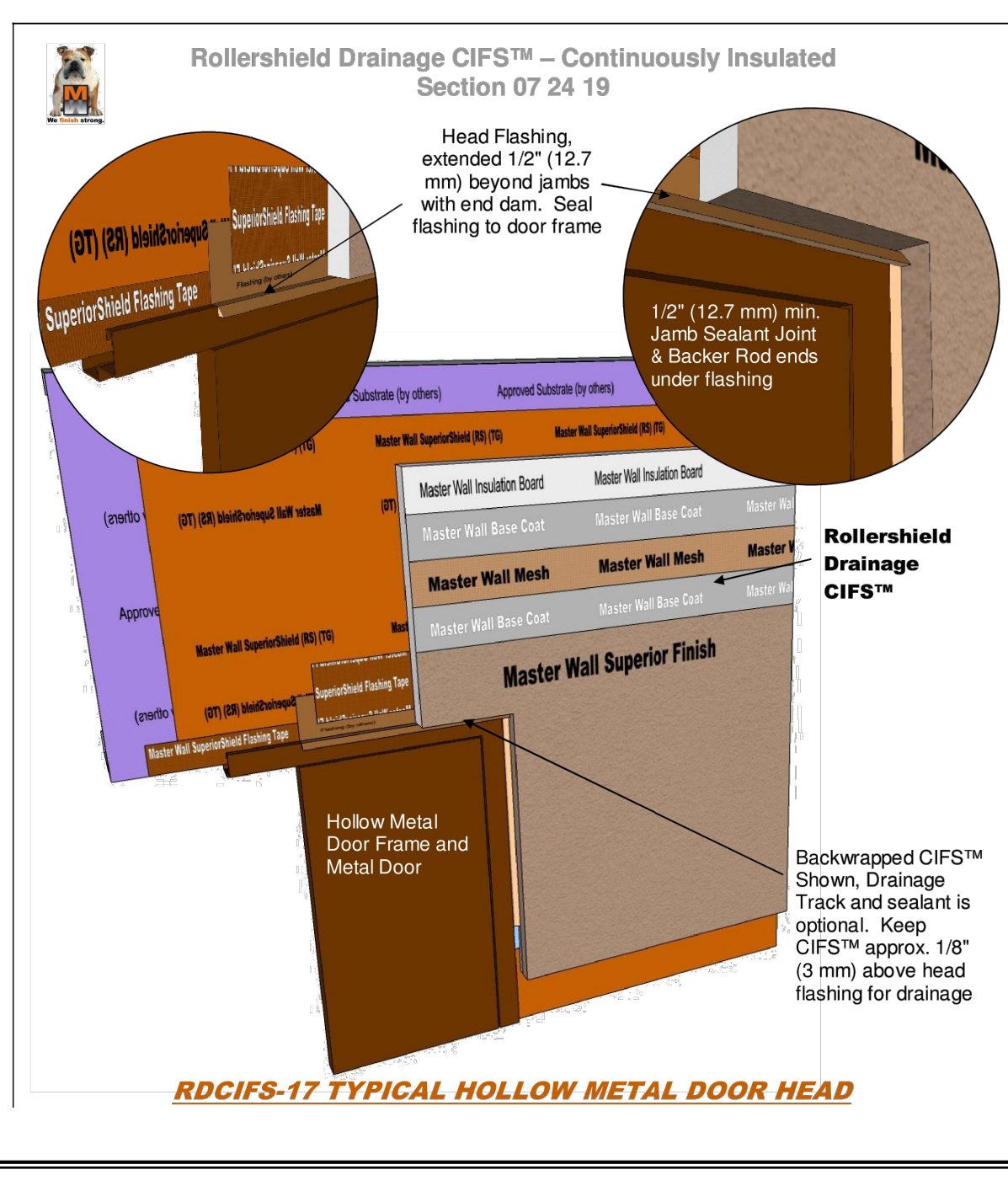
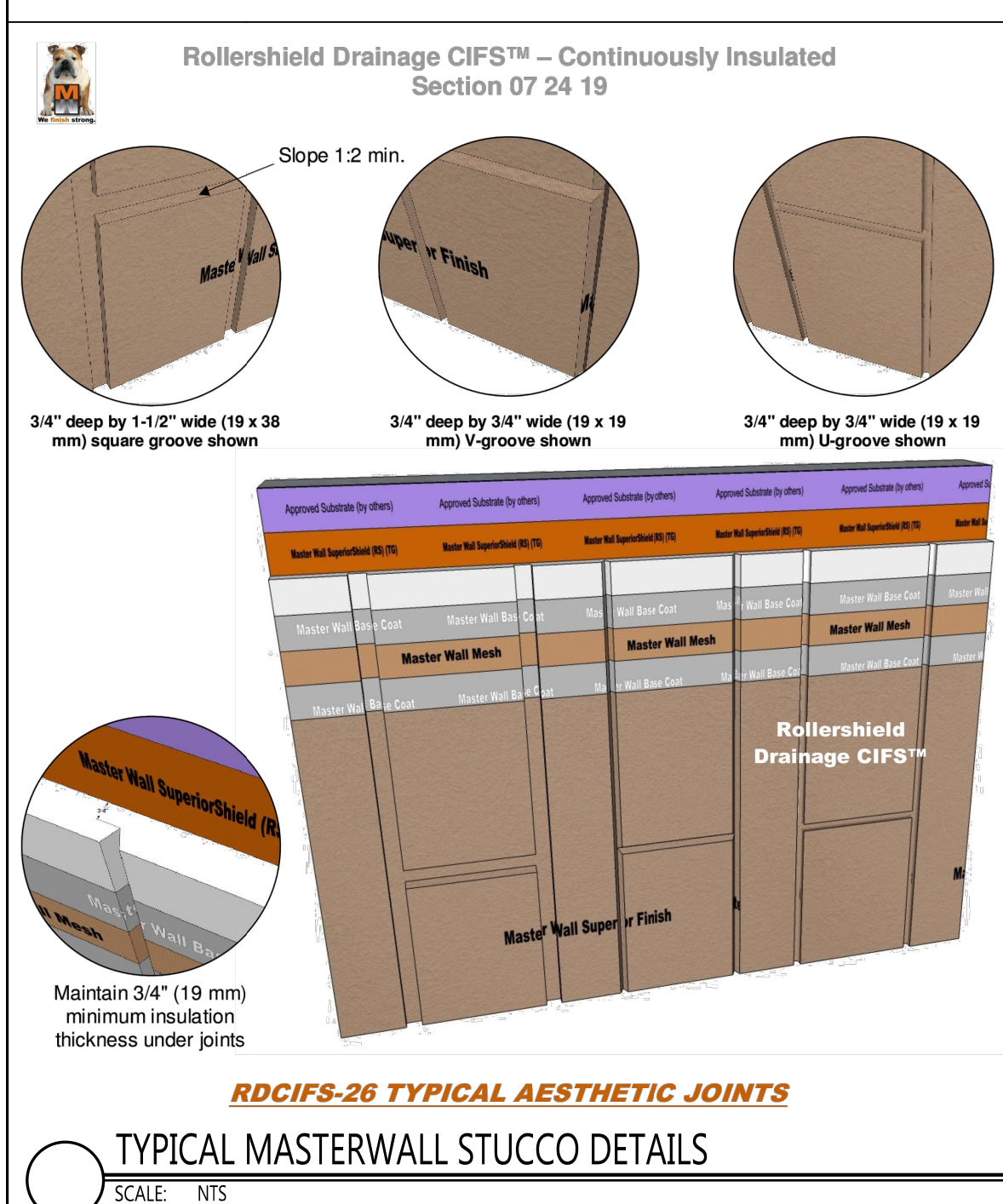
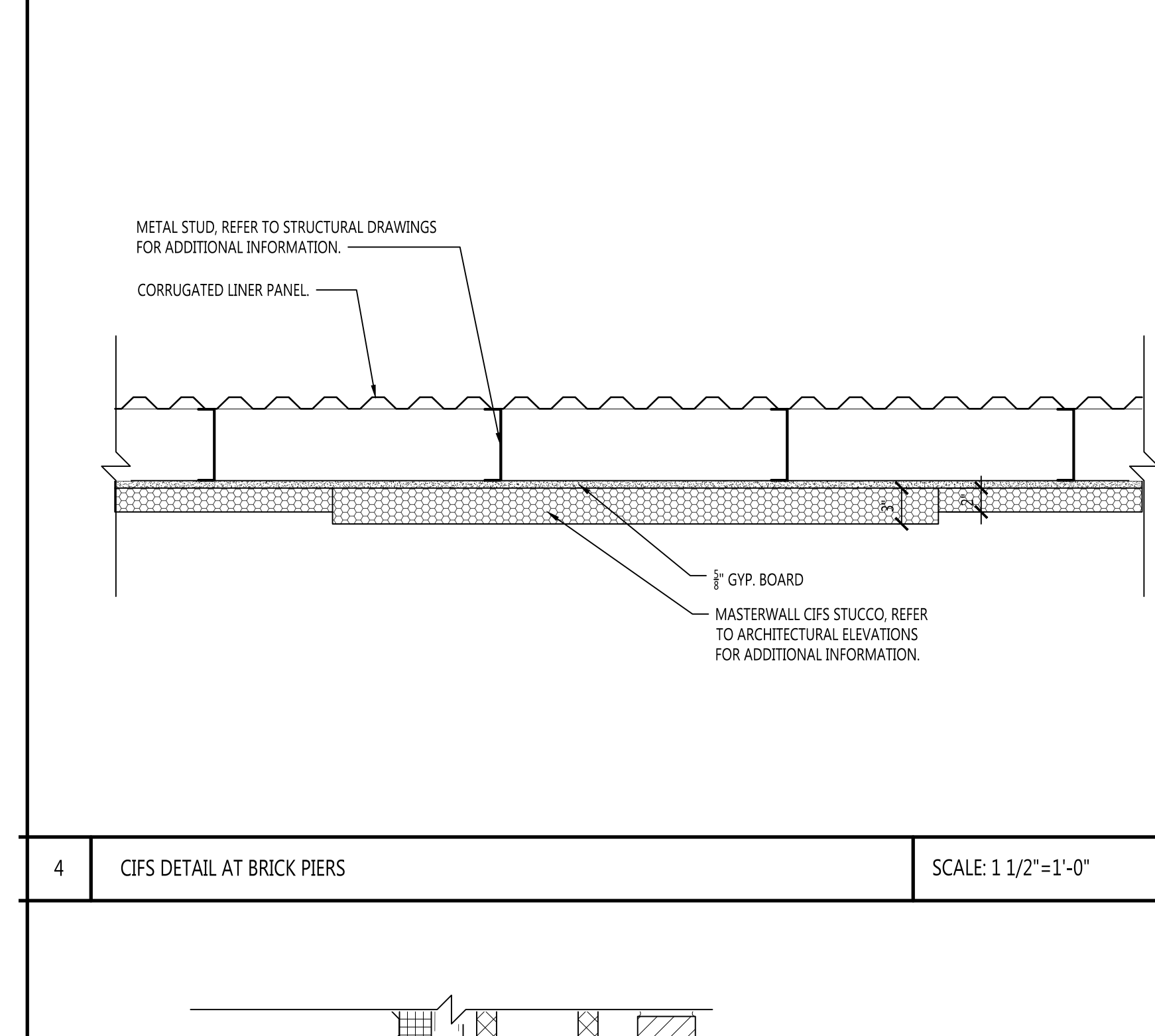
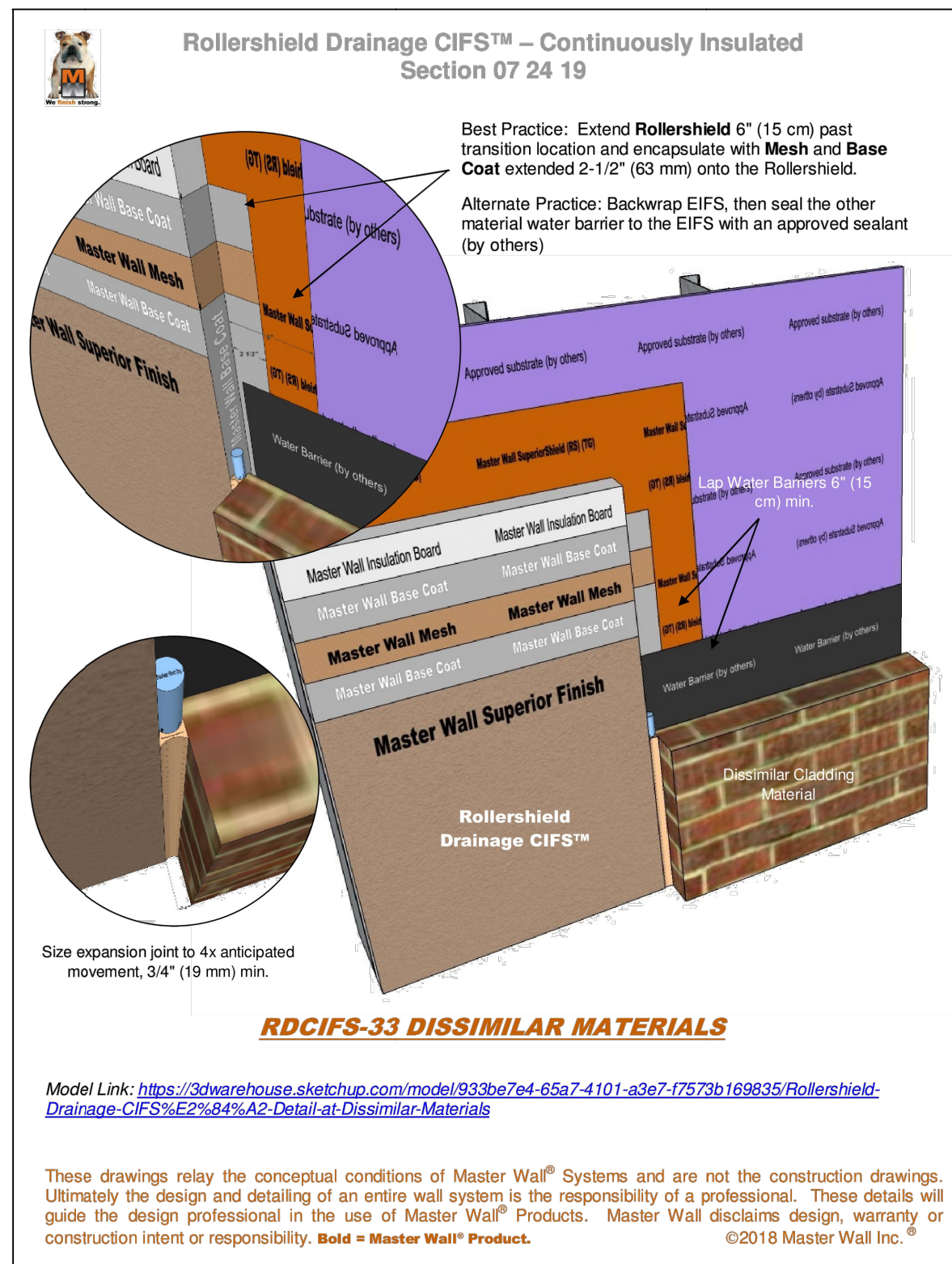
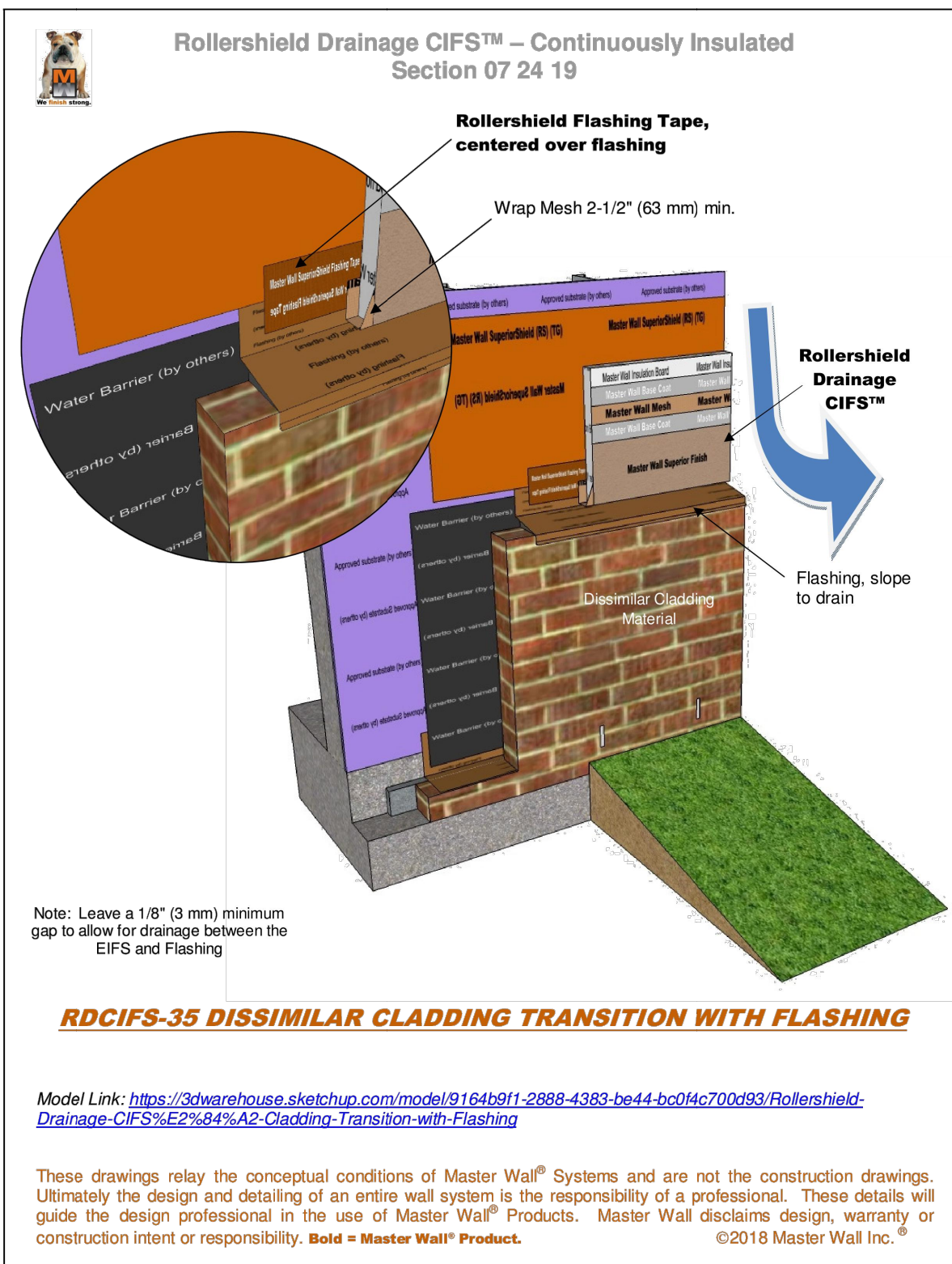
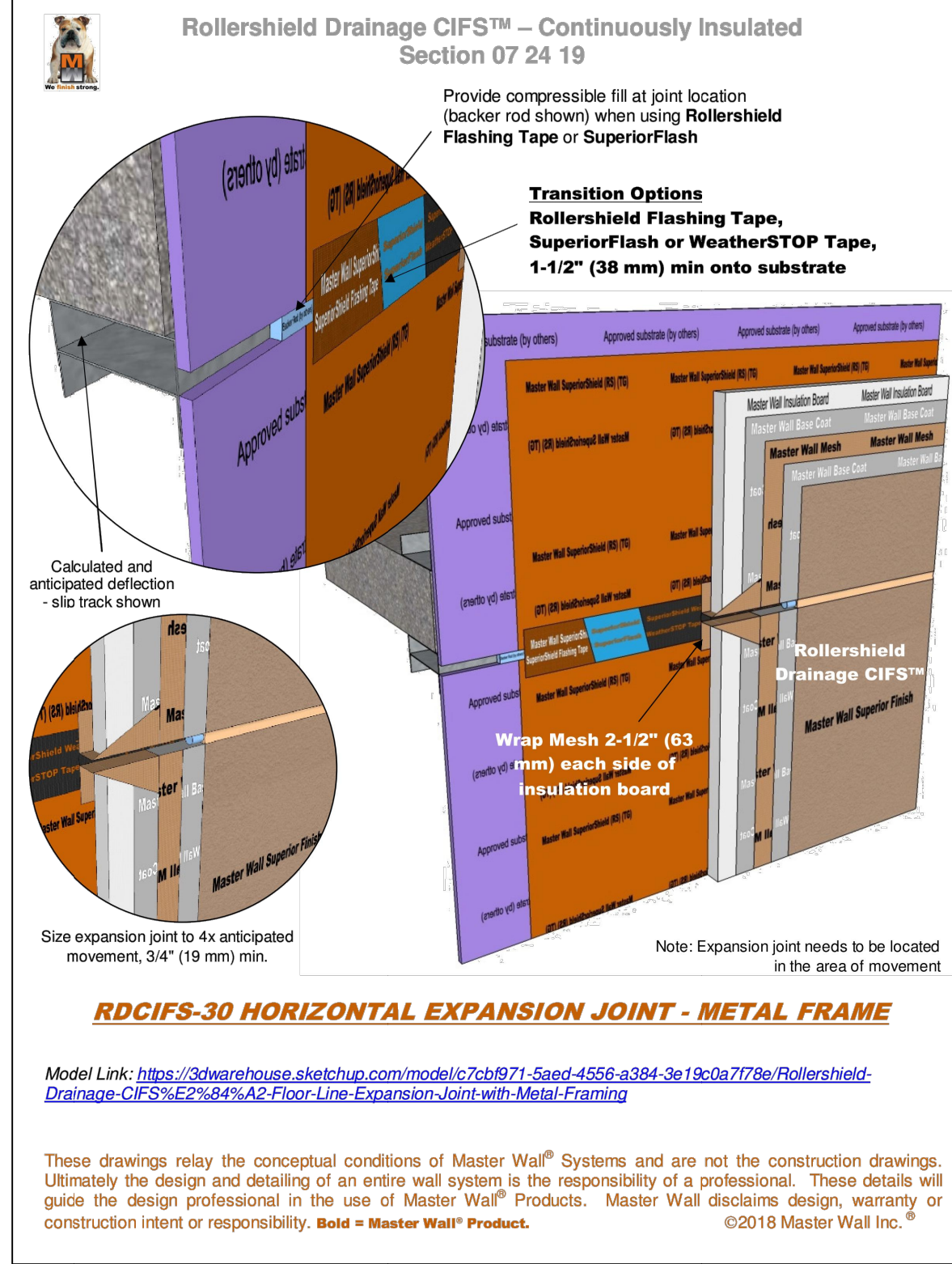
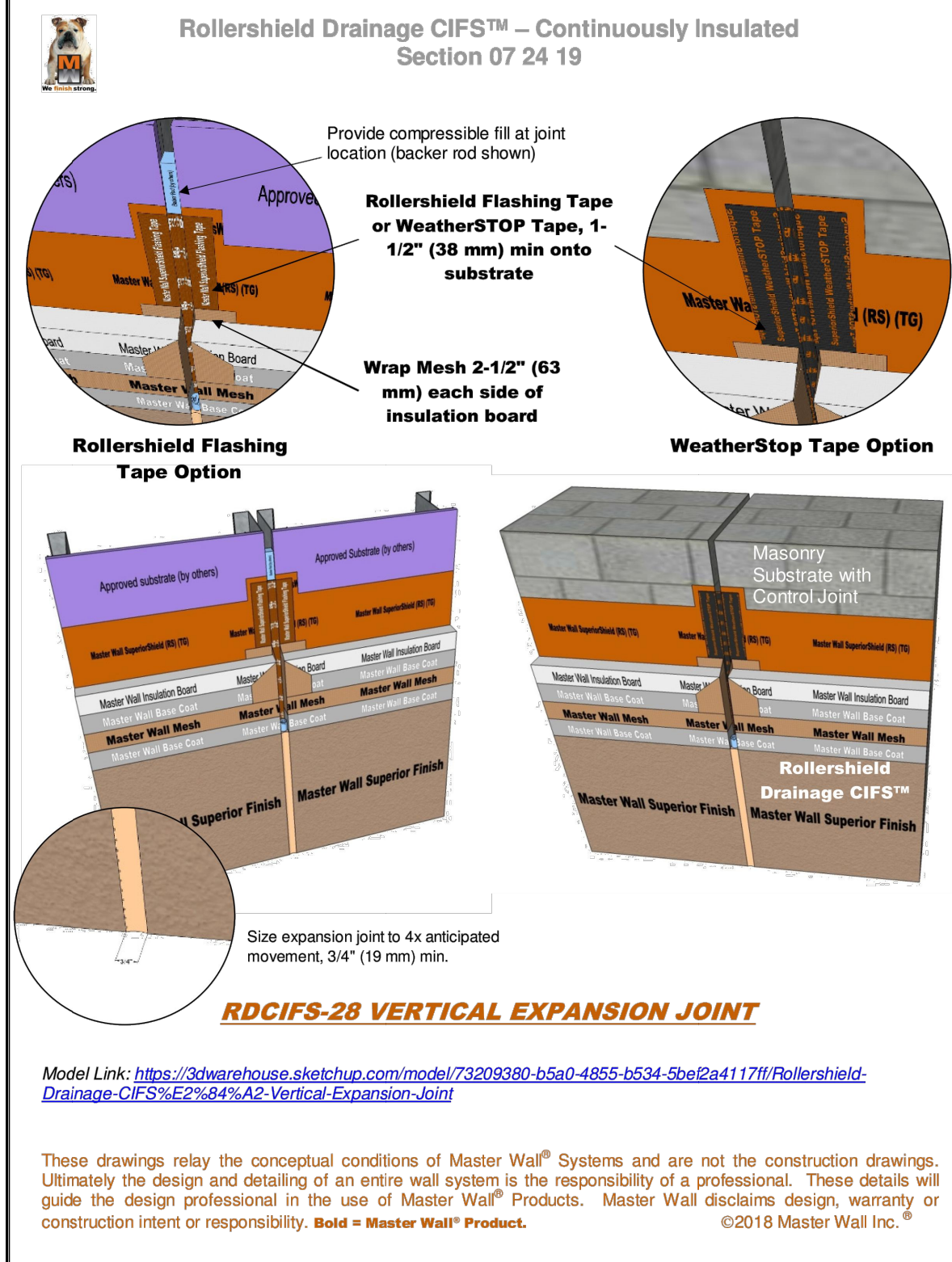
TITLE DRAWING:  
ENLARGED WALL SECTIONS

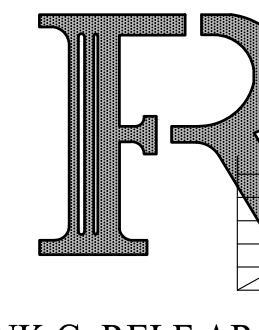

SEAL & SIGNATURE  
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-321.00

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DOB JOB NUMBER:





<div></div> <div>FRANK G. RELF ARCHITECT, P.C. 35 PINELAWN ROAD, SUITE 207W MELVILLE, N.Y. 11747 tel 631.271.4432 fax 631.271.4532 www.fgrlf.com</div>		
CONSULTANTS:		
<div><div><div>Terry W. Wall, Jr., P.E., S.E.</div><div>Consulting Structural Engineering</div><div></div></div><div>1911 Grayson Hwy. Suite 8-124 Grayson, GA 30017 678.802.2094</div></div>		
MEP CONSULTANT:		
<div>GAP ENGINEERING, P.C. 3 COLBY COURT DIX HILLS, NEW YORK 11746 (631) 499-6599</div>		
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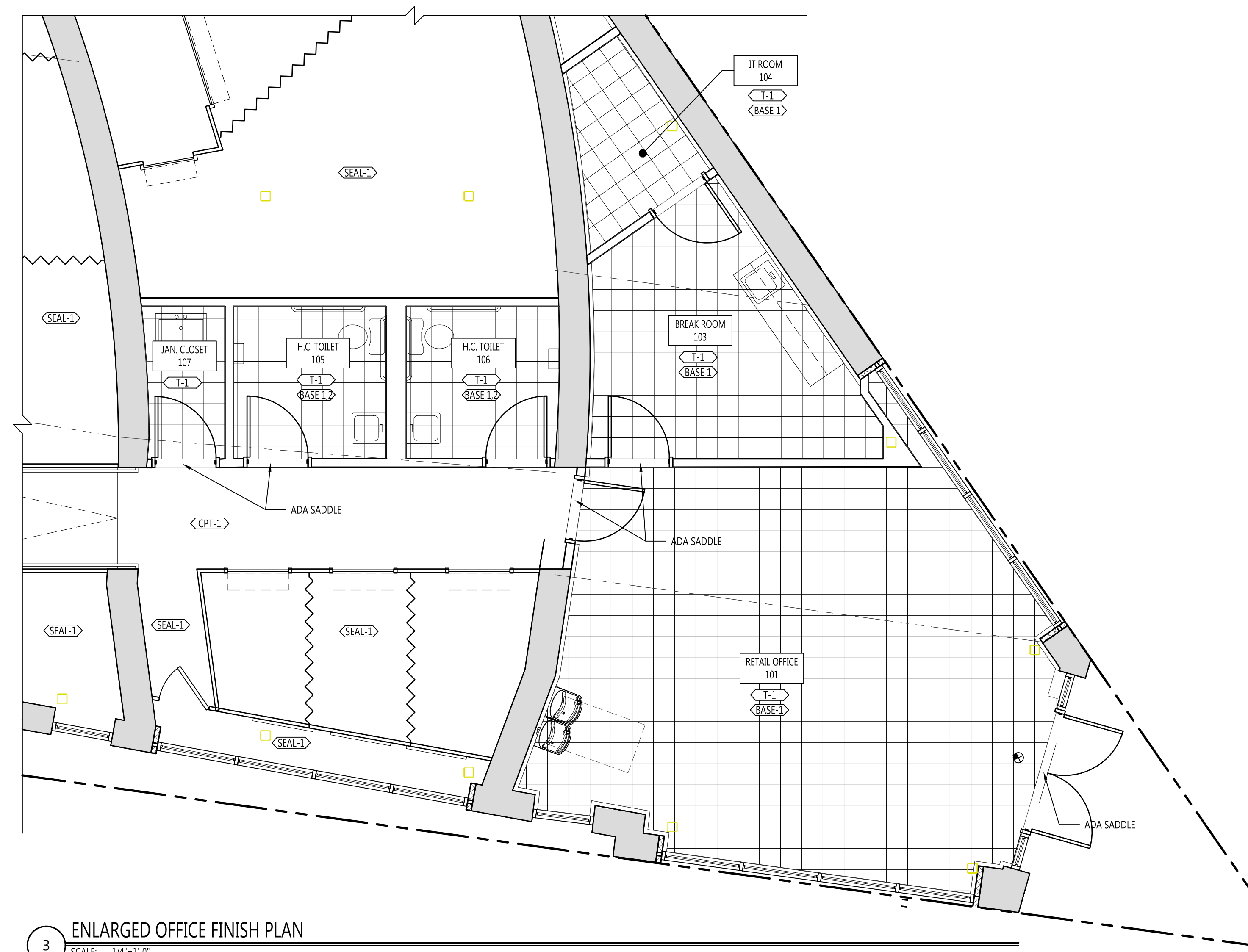
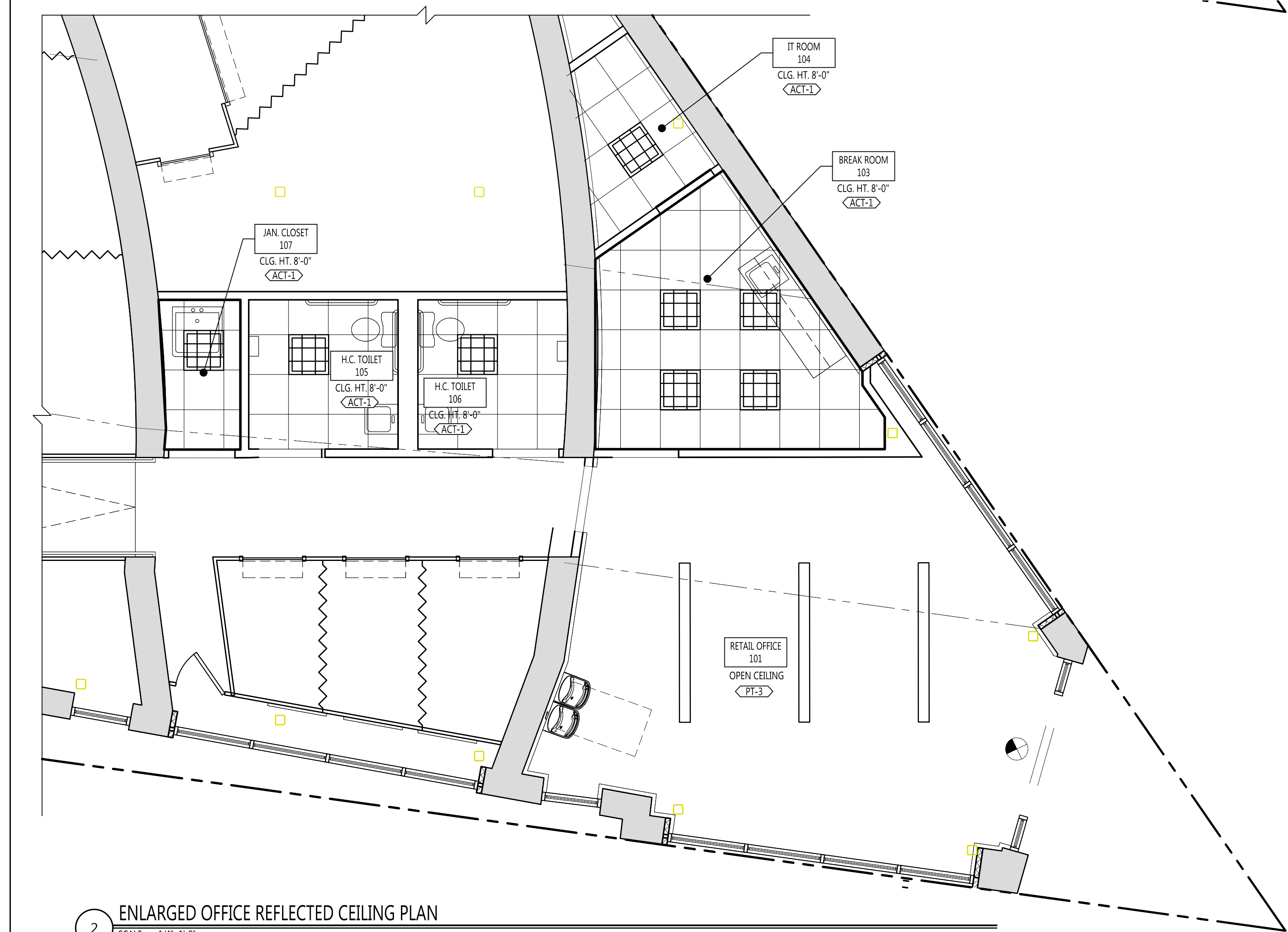
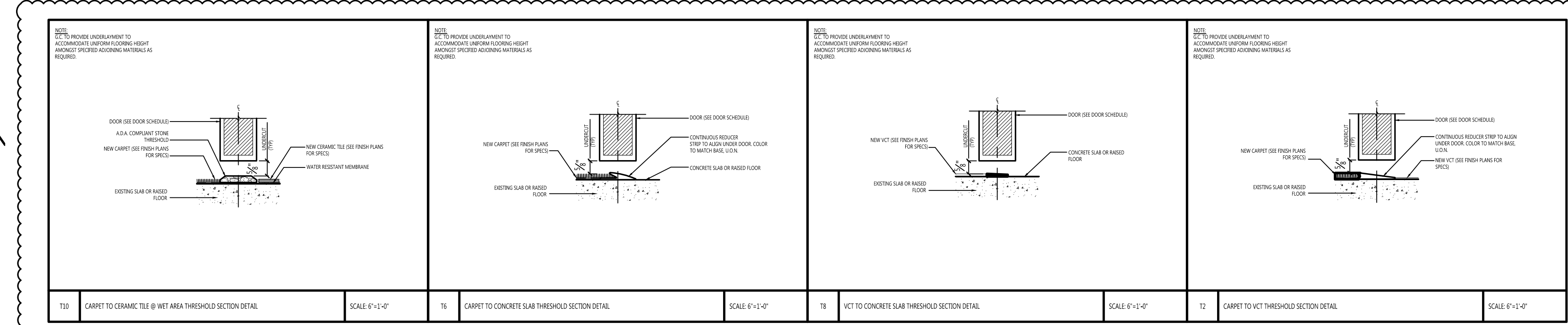
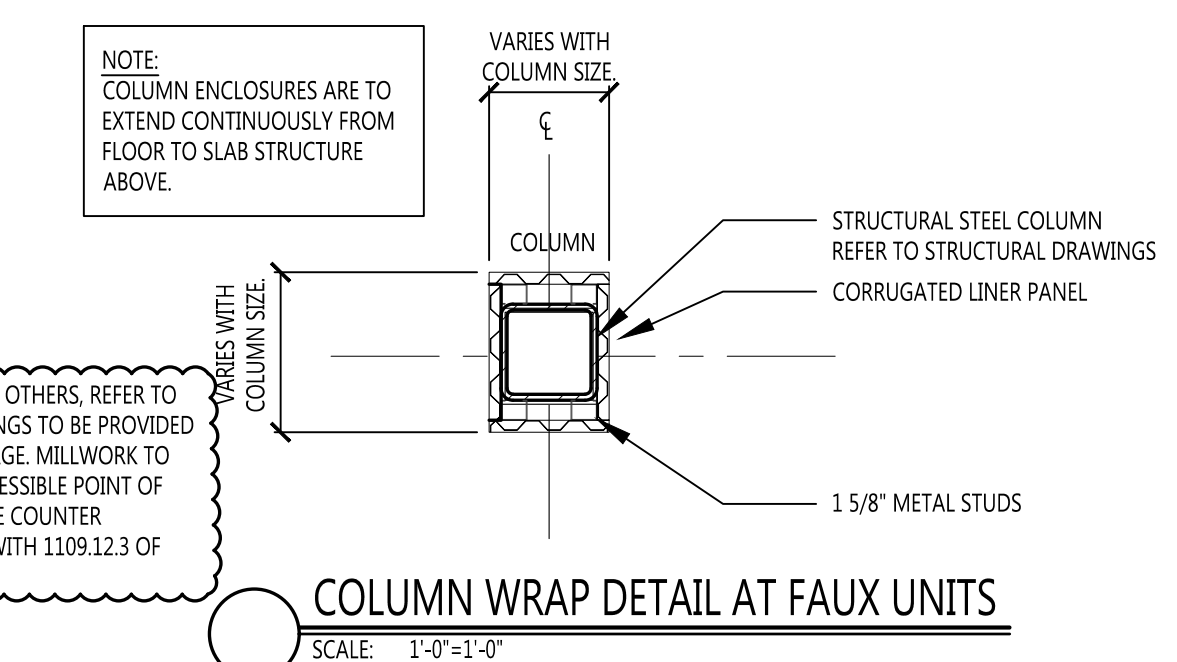
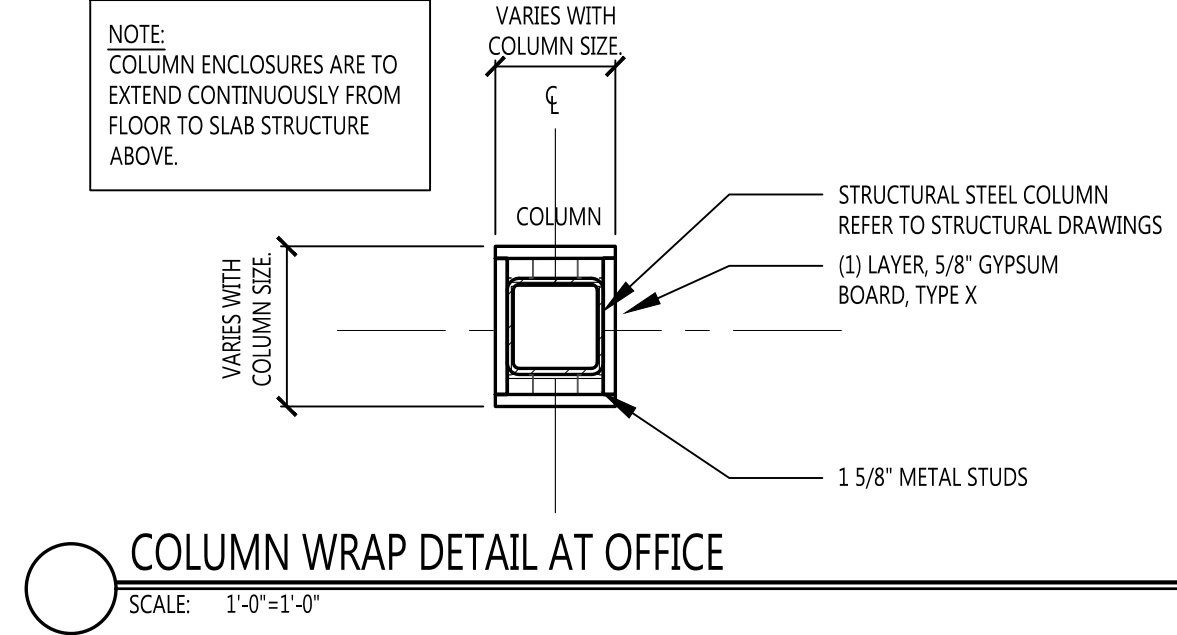
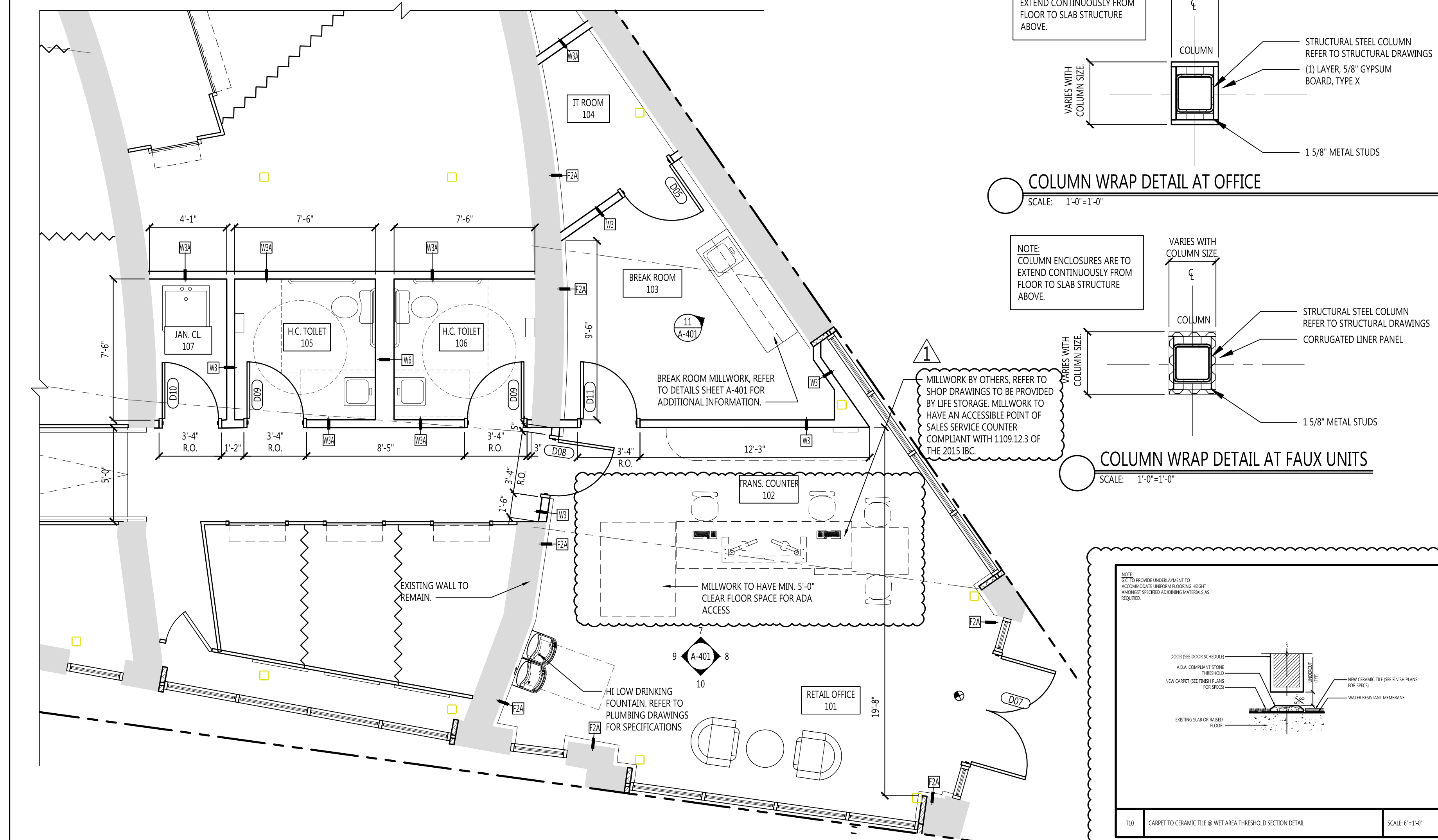
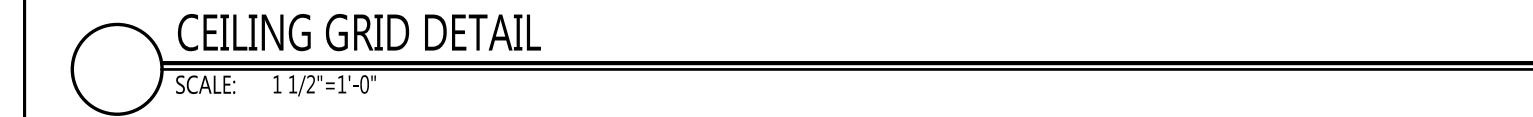


OFFICE FINISH SCHEDULE									
ROOM #	ROOM NAME	FLOOR	BASE	WALLS	DOORS	DOOR FRAME	WINDOW FRAME	CEILING	REMARKS
101	RETAIL	T-1	BASE-1	PT-1, 3, 4	PT-2	PT-2	ANODIZED ALUM.	OPEN	
102	TRANSACTION DESK	T-1	BASE-1	PT-1, 3, 4	PT-2	PT-2	ANODIZED ALUM.	OPEN	
103	BREAK ROOM	T-1	BASE-1	PT-1	PT-2	PT-2	N/A	ACT-1	
104	IT ROOM	T-1	BASE-1	PT-1	PT-2	PT-2	N/A	ACT-1	
105	H.C. TOILET #1	T-1	BASE-1, 2	T-1, 2	PT-6	PT-6	N/A	ACT-1	
106	H.C. TOILET#2	T-1	BASE-1, 2	T-1, 2	PT-6	PT-6	N/A	ACT-1	
107	JANITORS CLOSET	T-1	N/A	FRP	PT-6	PT-6	N/A	ACT-1	
NOTES: 1. ALL MATERIALS TO BE INSTALLED AS PER MANUFACTURER REQUIREMENTS. 2. PROVIDE SAMPLES FOR ARCHITECT APPROVAL. 3. ALL DIMENSIONS TO BE VERIFIED IN FIELD. 4. PROVIDE BLOCKING AS REQUIRED FOR MILLWORK AND WALL MOUNTED EQUIPMENT.									

REFLECTED CEILING LEGEND	
SYMBOL	DESCRIPTION
	CEILING REGISTER SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
	CEILING SUPPLY DIFFUSER SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
	EXIT SIGN SEE ELECTRICAL DRAWINGS
	CEILING GRID- SEE FINISH PLAN AND FINISH LEGEND FOR MORE INFORMATION
	8'-0" LIGHT FIXTURE IN SALES OFFICE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
	8'-0" EMERGENCY LIGHT FIXTURE IN SALES OFFICE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
	2'x2' LAY IN CEILING FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
	2'x2' LAY IN EMERGENCY CEILING FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

GENERAL NOTES	
1.	G.C. TO PROVIDE AND COORDINATE WITH OWNER FOR FINAL SELECTIONS OF FURNITURE, SIGNS AND EQUIPMENT.
2.	G.C. TO COORDINATE APPLIANCE HOOK-UP PER MANUFACTURER'S REQUIREMENTS.

MATERIALS LIST					
NO.	MATERIAL	MANUFACTURER	STYLE/NO.	COLOR	REMARKS
ACT-1	24"x24" ACOUSTICAL CEILING TILE-GRID	ARMSTRONG	#1733	WHITE	USED IN BATHROOM, BREAKROOM, IT CLOSET, JAN. CLOSET
CPT-1	CARPET	MAIN STREET FLOOR & SHADE	AMARCO DIAGONAL TILE (OR APPROVED EQUAL)	STEEL BLUE (OR APPROVED EQUAL)	USED AT ALL AISLES AND ELEVATOR LOBBIES
FRP	FIBERGLASS REINFORCED PANELS			WHITE	FULL HEIGHT IN JANITOR'S CLOSET
PL-1	PLASTIC LAMINATE	WILSONART	10776 60	KENSINGTON MAPLE	BREAKROOM CABINETRY
PL-2	PLASTIC LAMINATE	WILSONART	1864 / HD FINISH	SARENTINO NERO	BREAKROOM COUNTERTOP AND BACKSPLASH
PL-3	MELAMINE			BLACK	BREAKROOM CABINET INTERIORS AND TOSKICK
PT-1	EGGSHELL PAINT	SHERWIN WILLIAMS	SW #7063	NEBULOUS WHITE	USED AT OFFICE, IT CLOSET, AND BREAK ROOM WALLS BELOW CEILING LINE (J.N.C.), SEE MATERIAL SCHEDULE FOR ADDITIONAL INFORMATION
PT-2	SEMI-GLOSS PAINT	SHERWIN WILLIAMS	SW #7067	CITYSCAPE	USED AT DOORS AND TRIM IN OFFICE, EGRESS STAIRS
PT-3	EGGSHELL PAINT	SHERWIN WILLIAMS	SW #6238	TRICORN BLACK	WALLS ABOVE CEILING LINE, DUCT WORK, ETC. SEE MATERIAL SCHEDULE FOR ADDITIONAL INFORMATION
PT-4	EGGSHELL PAINT	BENJAMIN MOORE	2067-20	STARRY NIGHT BLUE	OFFICE ACCENT WALL BEHIND DESK
PT-5	EGGSHELL PAINT	BENJAMIN MOORE	2112-50	STORMY MONDAY	ALL MASONRY WALLS THAT ARE EXPOSED OR VISIBLE FROM THE AISLES AND ENTRY IN STORAGE AREA
PT-6	SEMI-GLOSS PAINT	SHERWIN WILLIAMS	CUSTOM BLEND	UNCLE BOB'S YELLOW	USED AT NONSTORAGE DOORS AND TRIM IN STORAGE AREA
T-1	TILE	STYLE SELECTIONS	12"x12"	SKYROS GRAY (SMOOTH)	GROUT - MAPEI #38 AVALANCHE SANDED GROUT #27725
T-2	TILE	DALTILE	NATURAL HUES / QH46	BLUEBERRY	12"x12" / GROUT - MAPEI #38 AVALANCHE SANDED GROUT #27725
SEAL-1	FLOOR SEALER	BUCKEYE	PROCLAIM	2 COATS	PROVIDE INSIDE STORAGE UNITS AT FIRST FLOOR ONLY
BASE-1	TILE	STYLE SELECTIONS	6"x12" (FIELD CUT)	SKYROS GRAY (SMOOTH)	GROUT - MAPEI #38 AVALANCHE SANDED GROUT #27725 WITH L-CHANNEL IN STAIN ANODIZED ALUMINUM
BASE-2	TILE	DALTILE	NATURAL HUES / QH46	BLUEBERRY	GROUT - MAPEI #38 AVALANCHE SANDED GROUT #27725 WITH L-CHANNEL IN STAIN ANODIZED ALUMINUM
WC-1	WAINSCOTT	DIAMOND PLATE	18 GA	MIRRORED FINISH	INSTALL IN LOADING AREAS AND AROUND ELEVATORS
NOTES: 1. ALL MATERIALS TO BE INSTALLED AS PER MANUFACTURER REQUIREMENTS. 2. PROVIDE SAMPLES FOR ARCHITECT APPROVAL. 3. ALL DIMENSIONS TO BE VERIFIED IN FIELD. 4. PROVIDE BLOCKING AS REQUIRED FOR ALL DISPLAY FIXTURES AND RACKS.					



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CLIENT:

SNL YONKERS LLC  
3333 NEW HYDE PARK ROAD, SUITE 200, LAKE SUCCESS, NY, 11042

PROJECT:

YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:

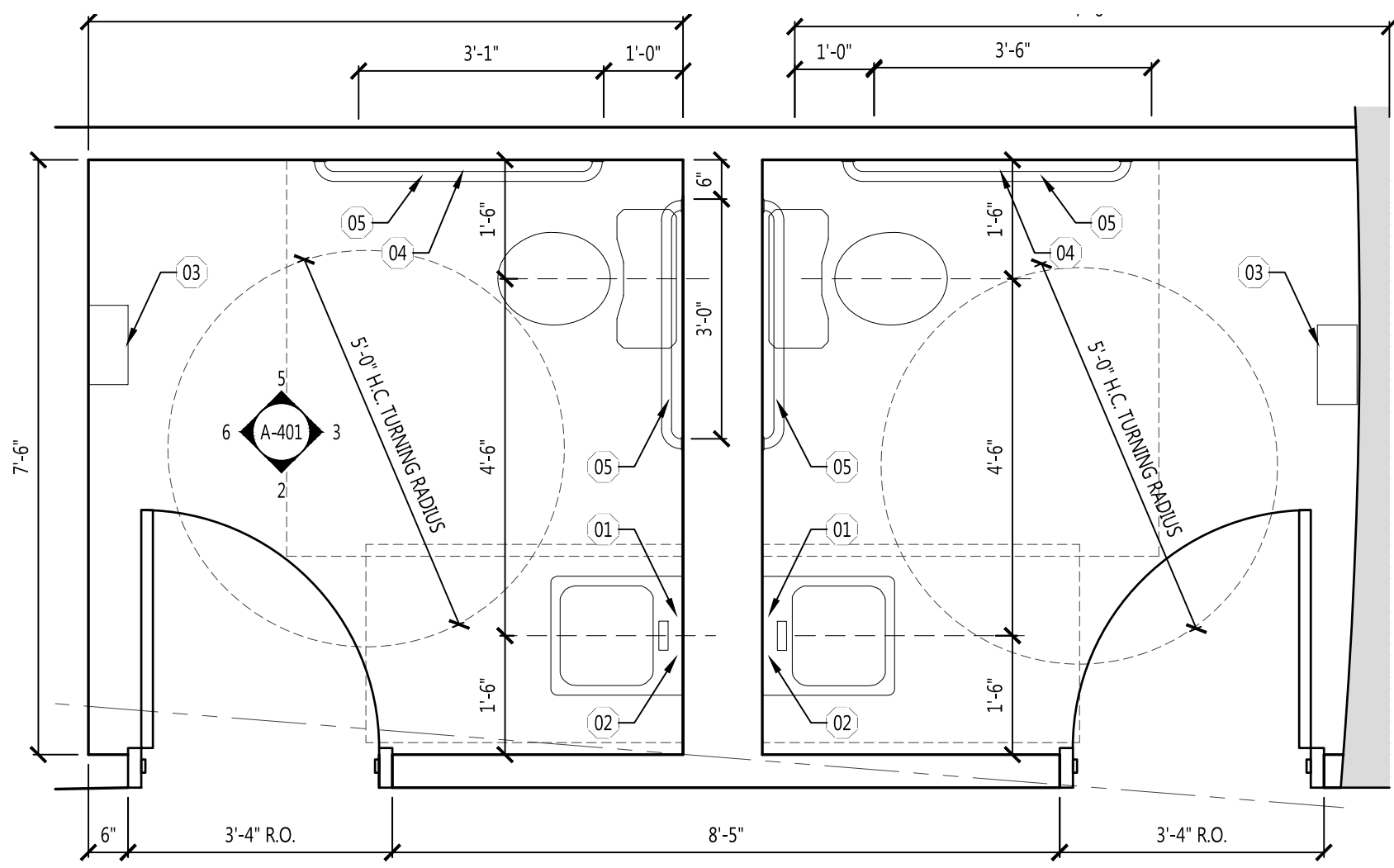
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SEAL & SIGNATURE:

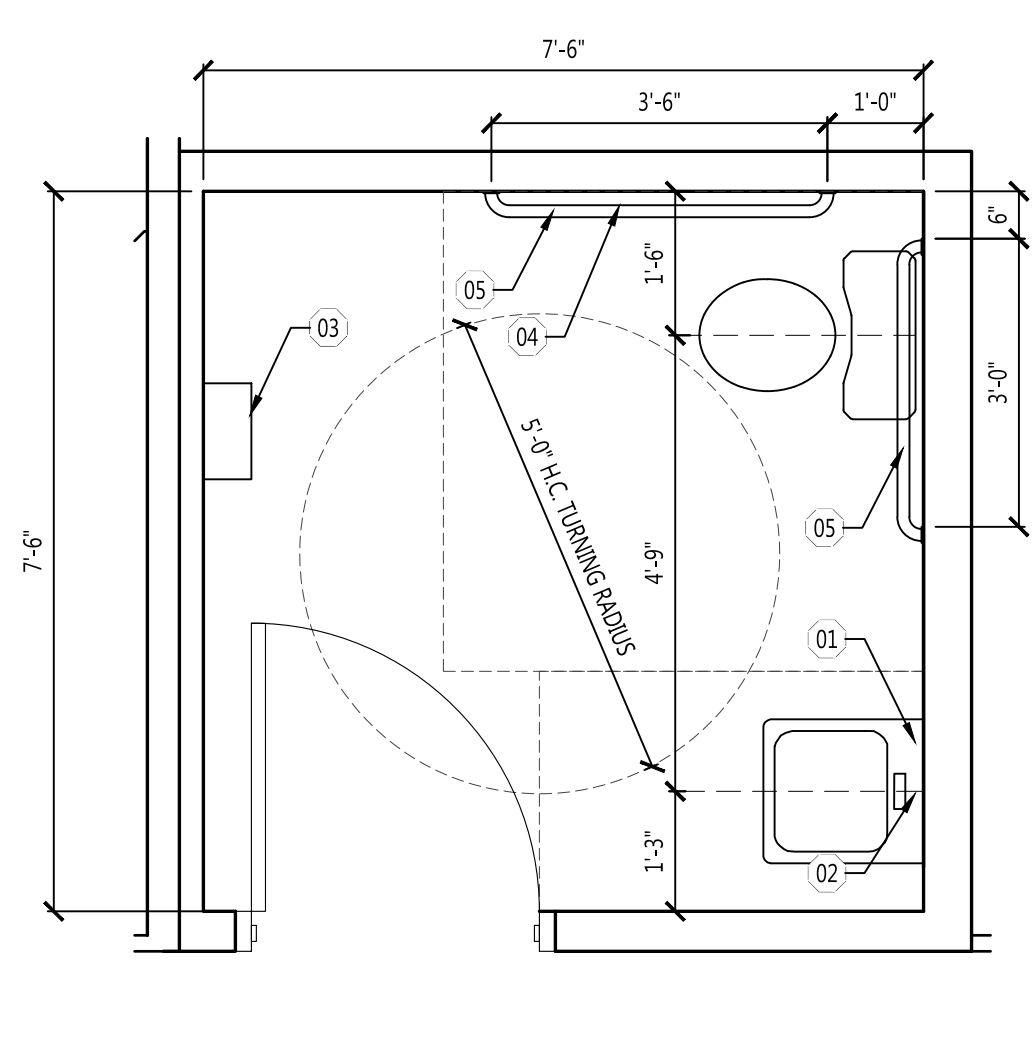
DATE: 6/13/18  
PROJECT No. 18014  
DRAWING BY: J.R.  
CHK BY: J.N.  
DWG. No.: A-400.00  
ALT OF XX

DOB JOB NUMBER:

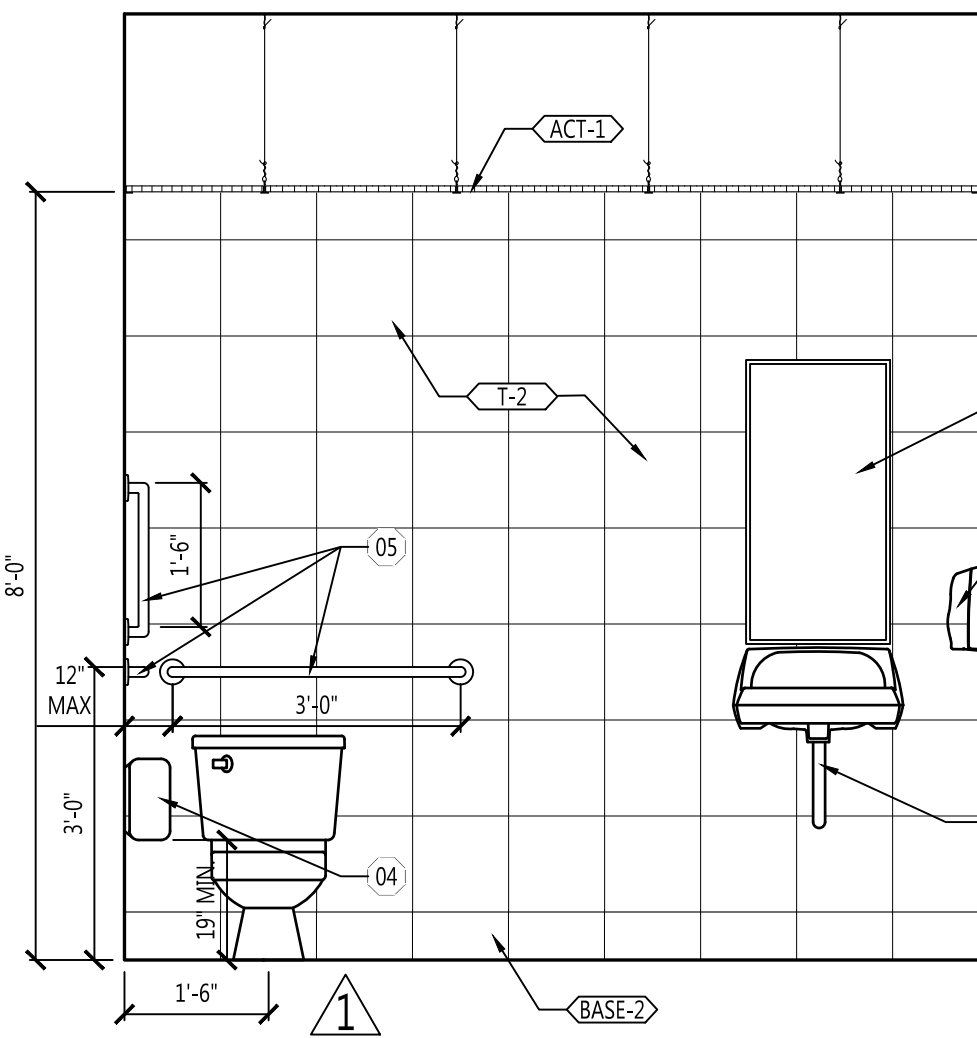




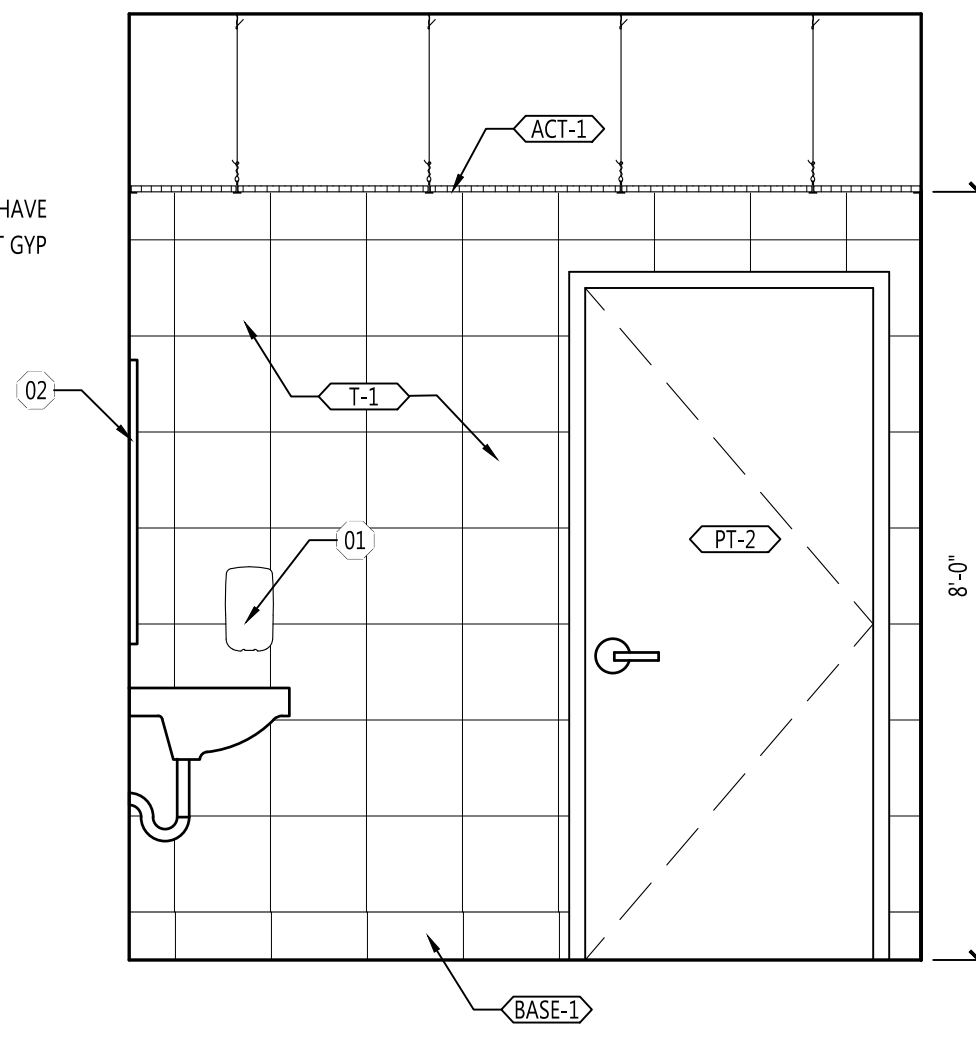
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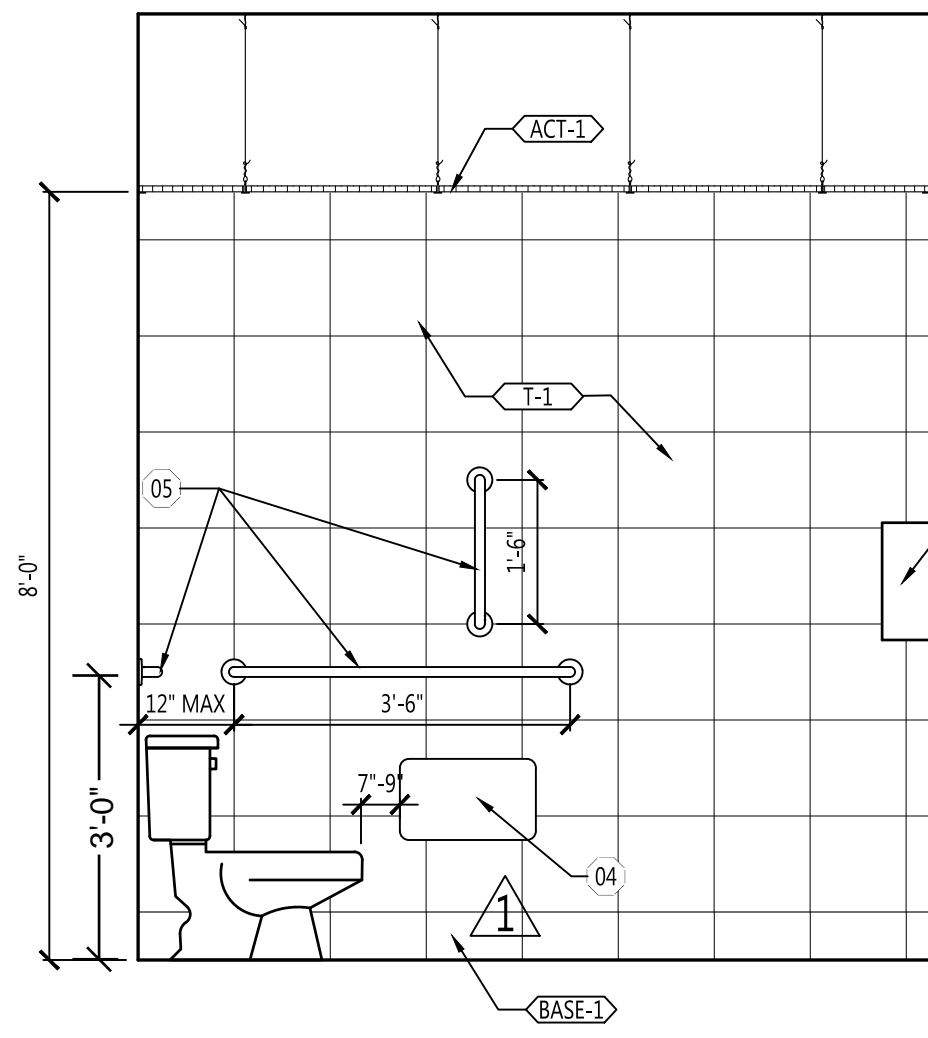
2 ENLARGED THIRD FLOOR TOILET PLANS  
SCALE: 1/2"=1'-0"



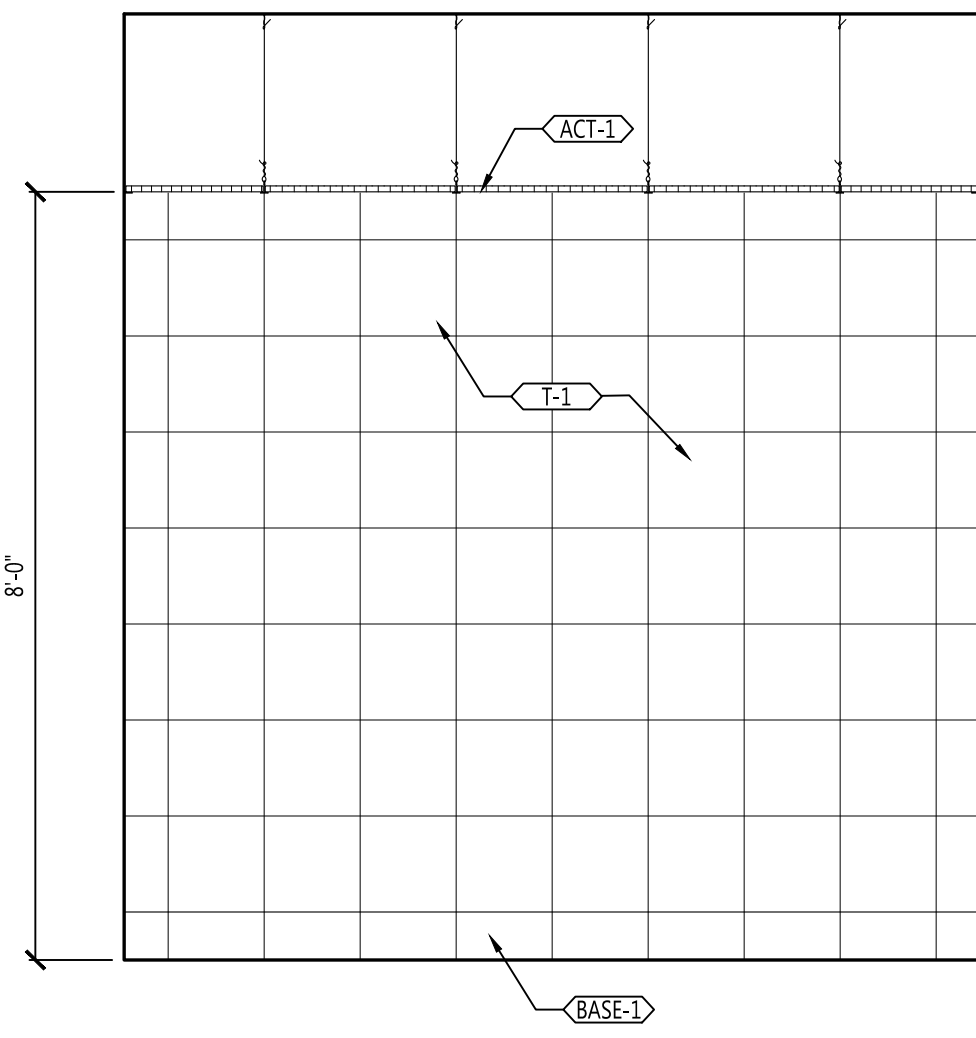
3 ENLARGED TOILET ELEVATIONS  
SCALE: 1/2"=1'-0"



4 ENLARGED TOILET ELEVATIONS  
SCALE: 1/2"=1'-0"



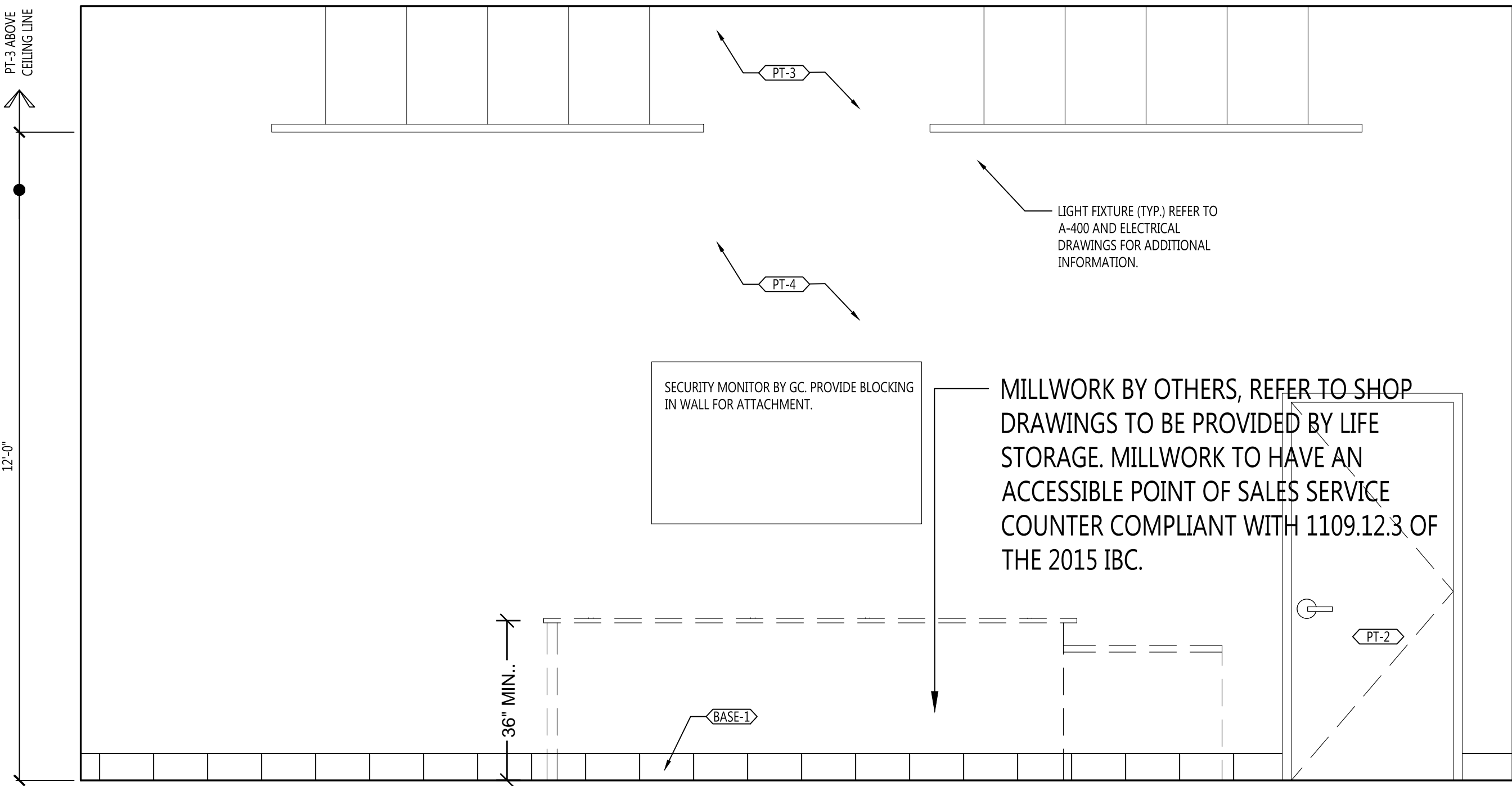
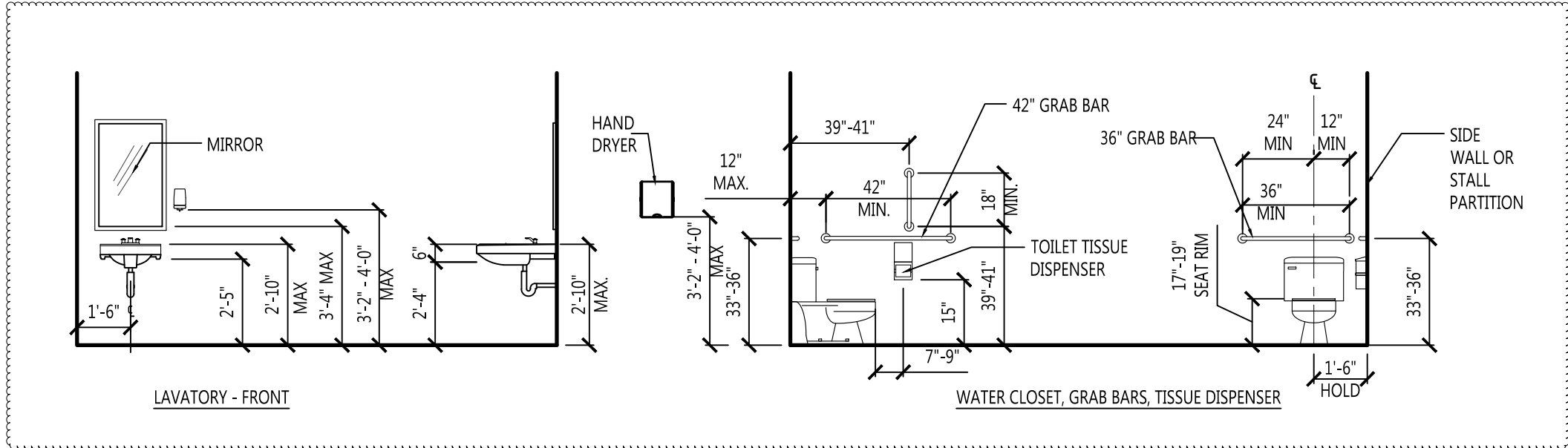
5 ENLARGED TOILET ELEVATIONS  
SCALE: 1/2"=1'-0"



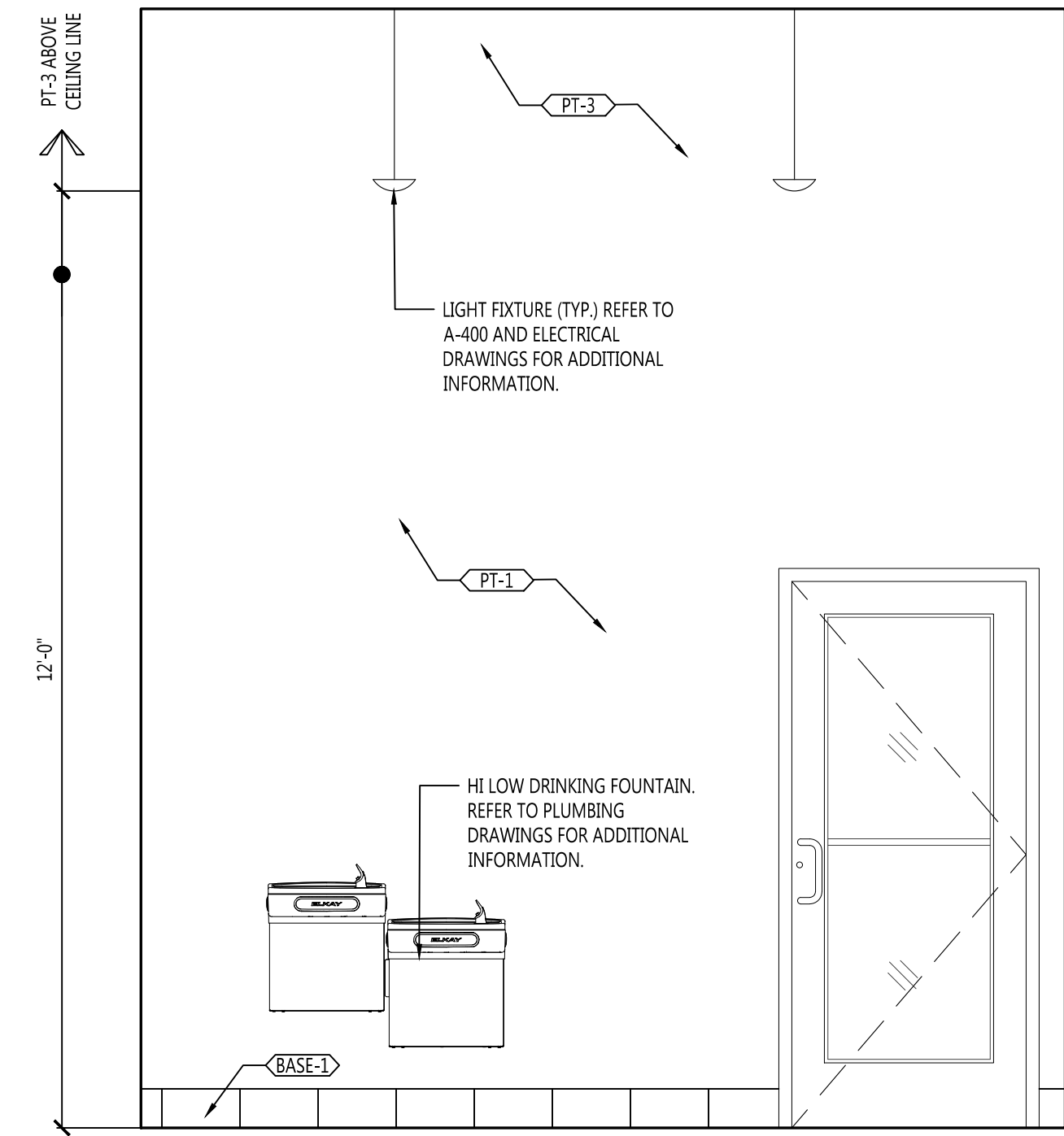
6 ENLARGED TOILET ELEVATIONS  
SCALE: 1/2"=1'-0"

H.C. TOILET ACCESSORIES SCHEDULE				
#	ACCESSORY	MANUF./MODEL	FINISH	REMARKS
1	WALL MOUNTED SOAP DISPENSER	GOJO	STAINLESS STEEL	SURFACE MOUNTED - SEE INT. ELEVATIONS
2	MIRROR	BOBRICK 8165 2448	STAINLESS STEEL	SURFACE MOUNTED - SEE INT. ELEVATIONS
3	HAND DRYER	EXCEL DRYER XLERATOR	WHITE	SURFACE MOUNTED - SEE INT. ELEVATIONS
4	TOILET TISSUE HOLDER	MINI TWIN T-BOX	STAINLESS STEEL	SURFACE MOUNTED - SEE INT. ELEVATIONS
5	GRAB BARS	BOBRICK B-6806	STAINLESS STEEL	LENGTH 36", 42", & 38" - SEE INTERIOR ELEVATIONS

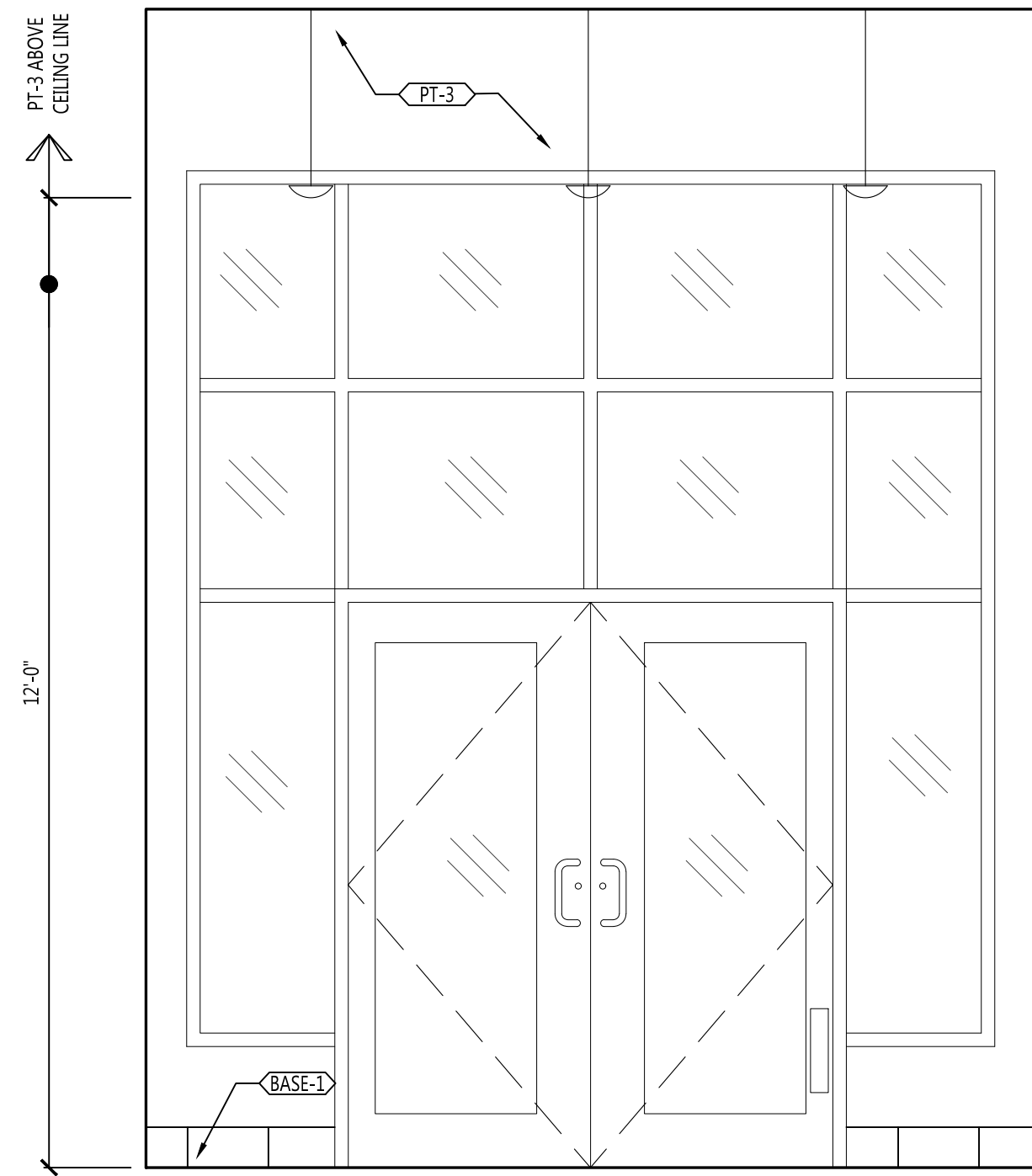
NOTE: SIDE GRAB BAR MUST EXTEND 2'-0" BEYOND THE FRONT OF THE TOILET. COORDINATE WITH PLUMBING DRAWINGS. PROVIDE LONGER BAR IF REQUIRED.  
SEE PLUMBING DRAWINGS FOR FIXTURES AND ADDITIONAL INFORMATION.



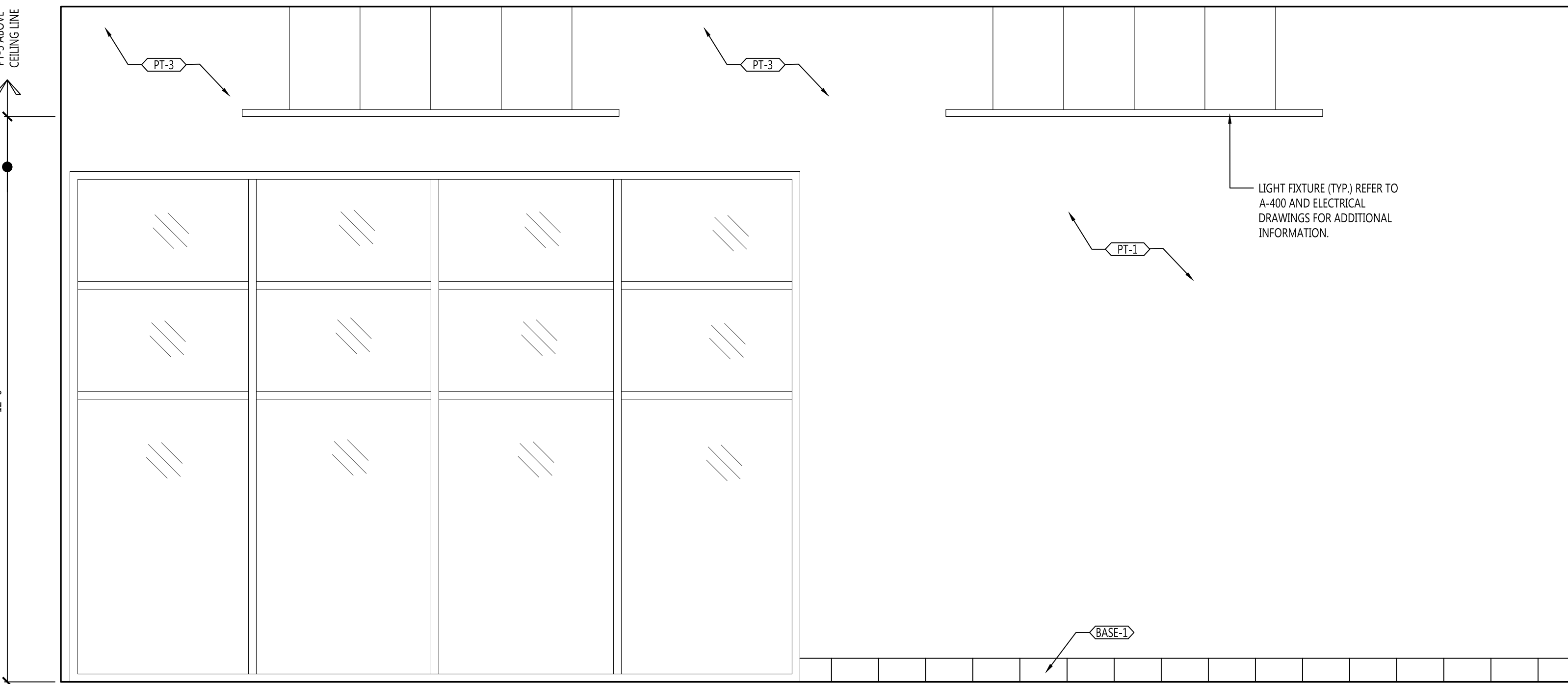
7 ENLARGED OFFICE ELEVATIONS  
SCALE: 1/2"=1'-0"



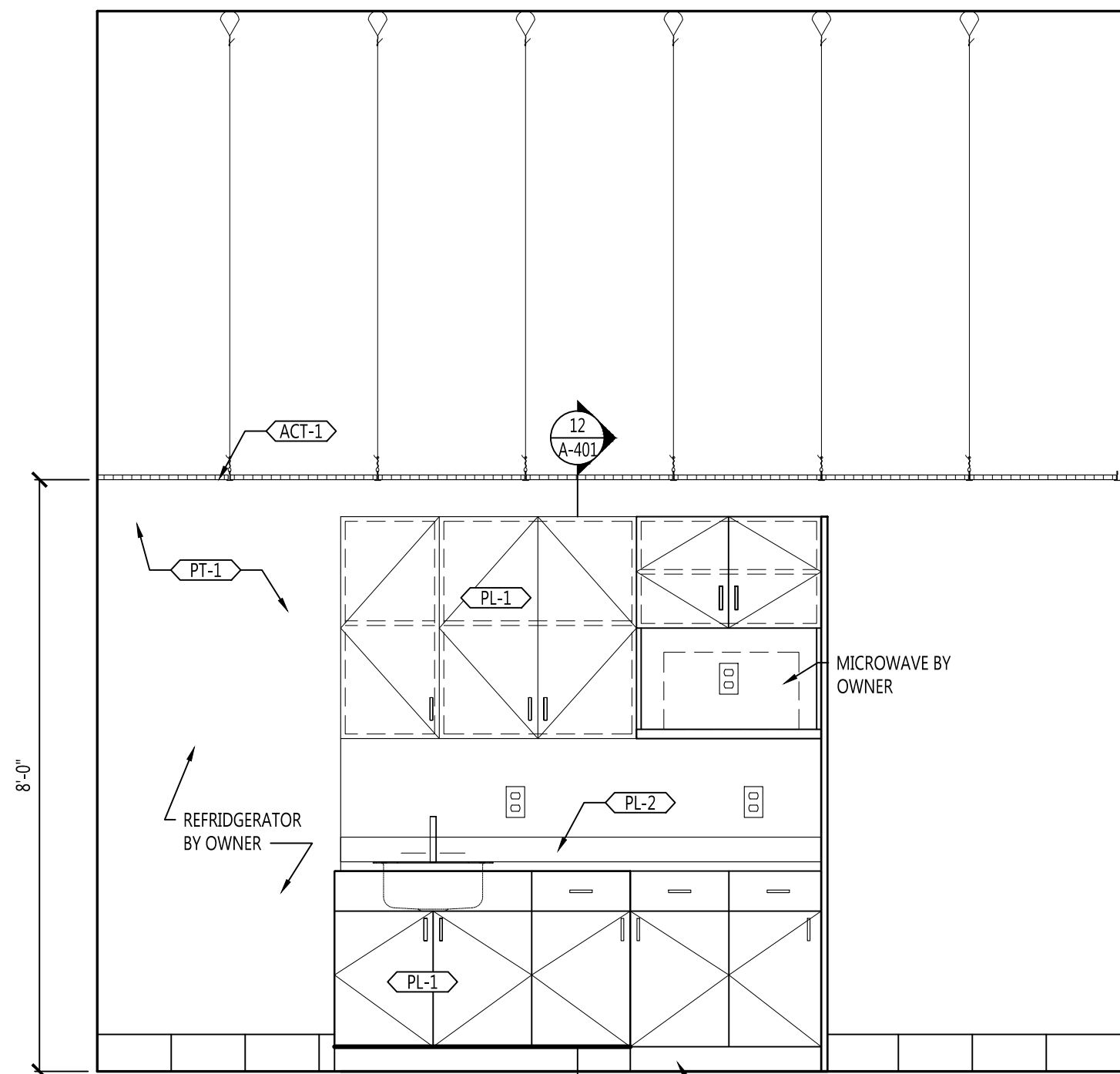
8 ENLARGED OFFICE ELEVATIONS  
SCALE: 1/2"=1'-0"



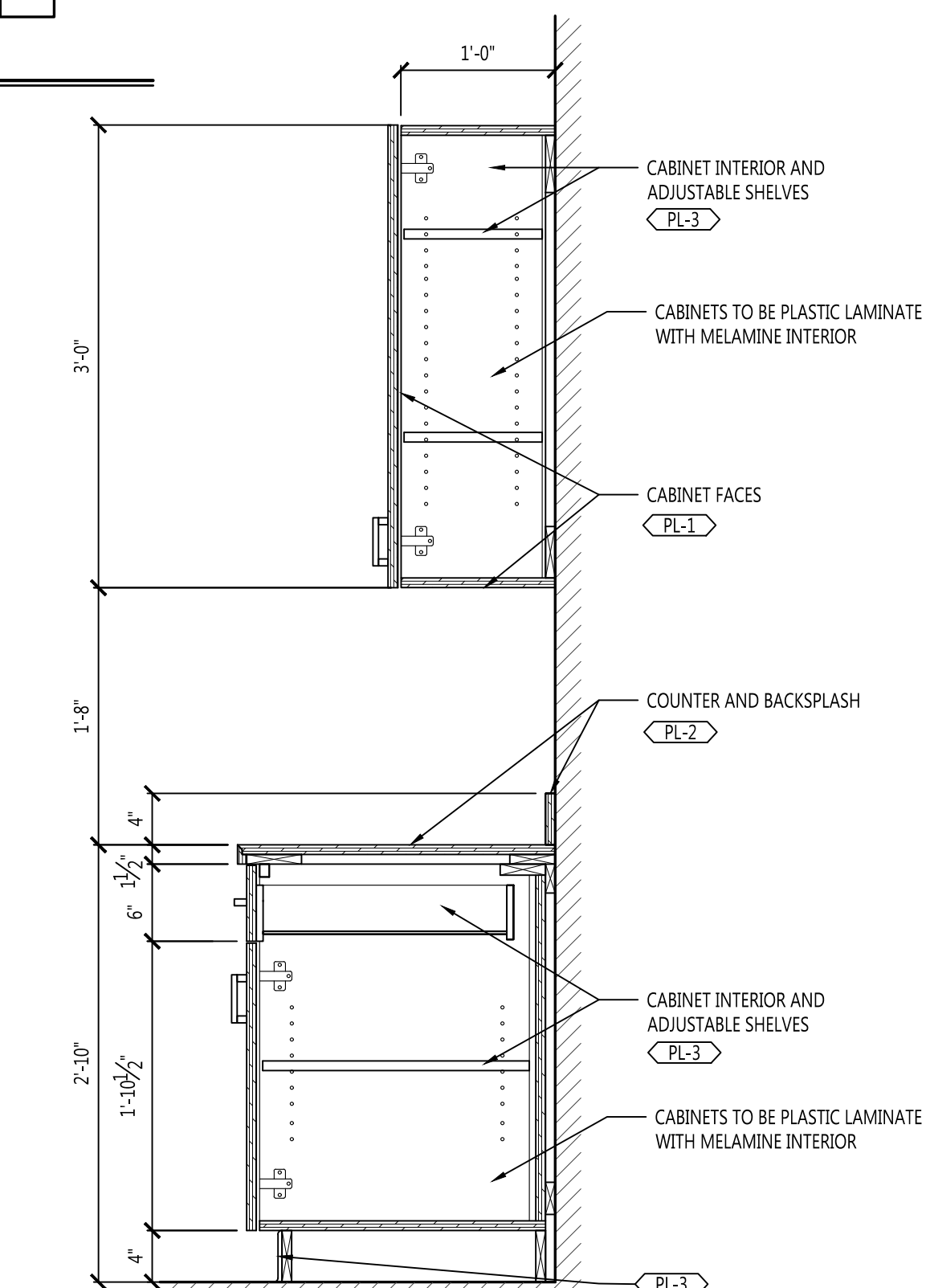
9 ENLARGED OFFICE ELEVATIONS  
SCALE: 1/2"=1'-0"



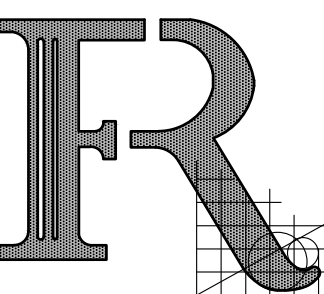
10 ENLARGED OFFICE ELEVATIONS  
SCALE: 1/2"=1'-0"



11 ENLARGED BREAKROOM ELEVATIONS  
SCALE: 1/2"=1'-0"



12 BREAKROOM SECTION  
SCALE: 1"=1'-0"



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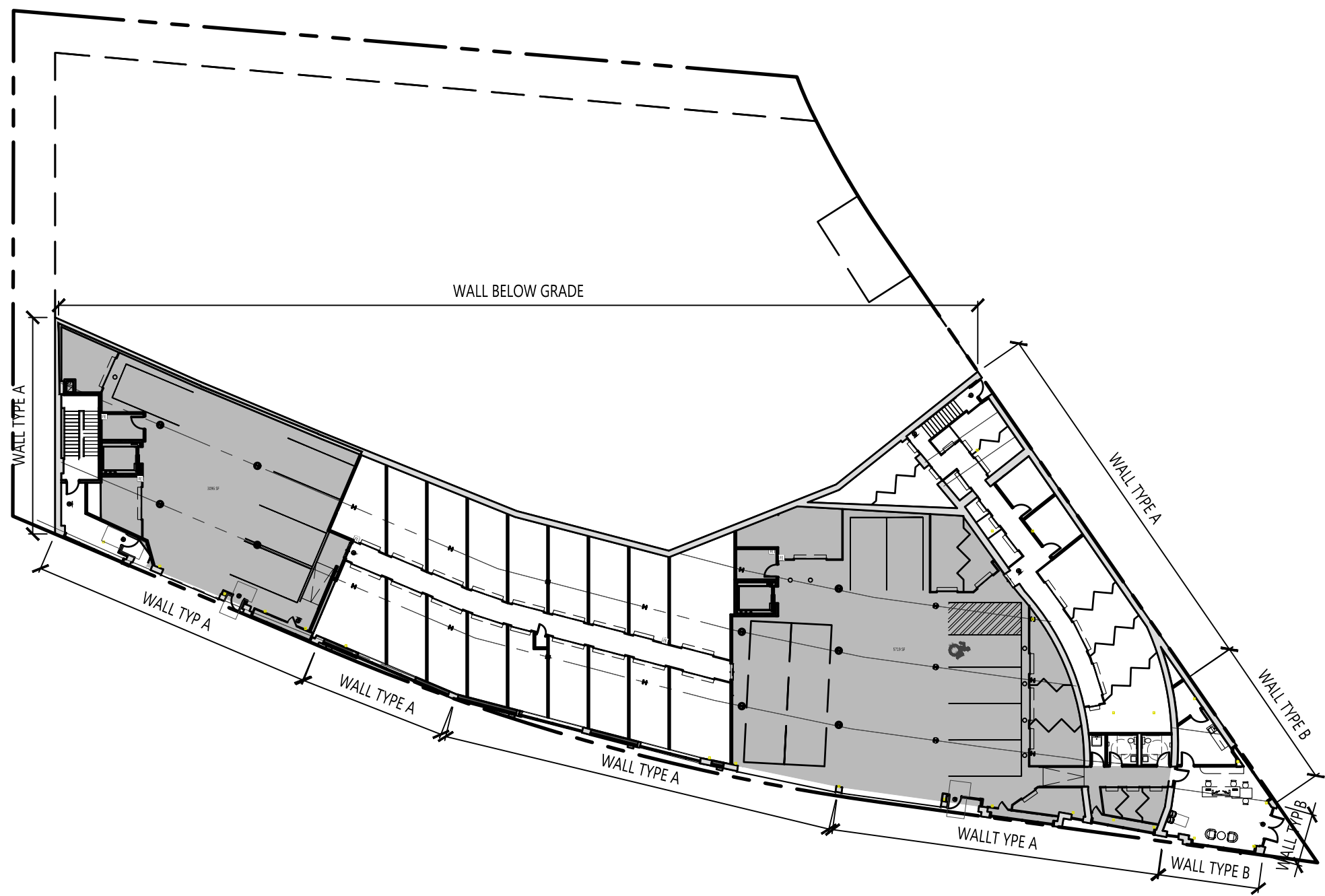
PROJECT:  
YONKERS SELF STORAGE  
60 MCLEAN AVENUE  
YONKERS, NY 10705

TITLE DRAWING:  
ENLARGED BATH AND BREAK  
ROOM PLANS AND  
ELEVATIONS

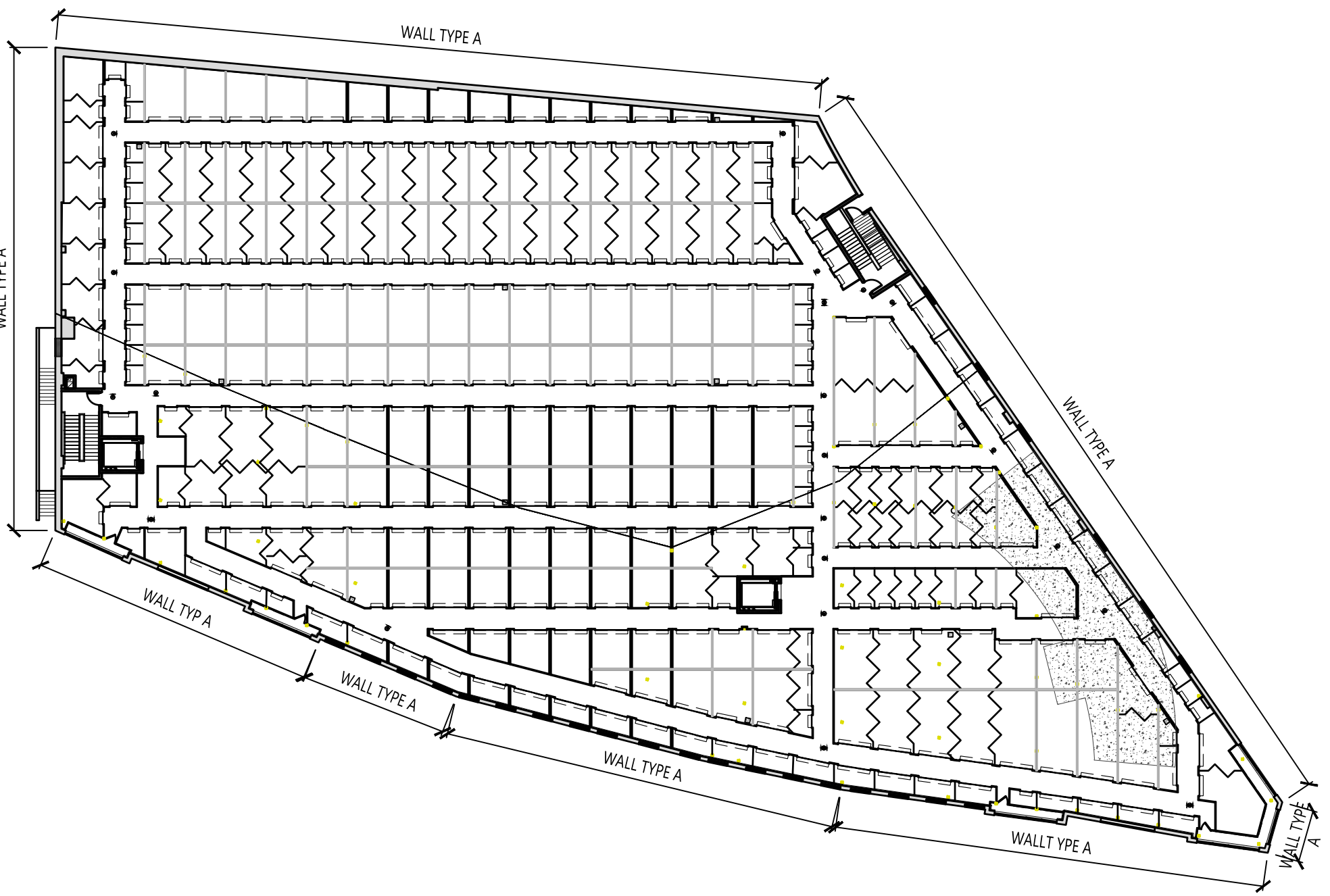
SEAL & SIGNATURE	DATE: 6/13/18 PROJECT No. 18014 DRAWING BY: J.R. CHK BY: J.N. DWG. No.: A-401.00 ALT OF XX
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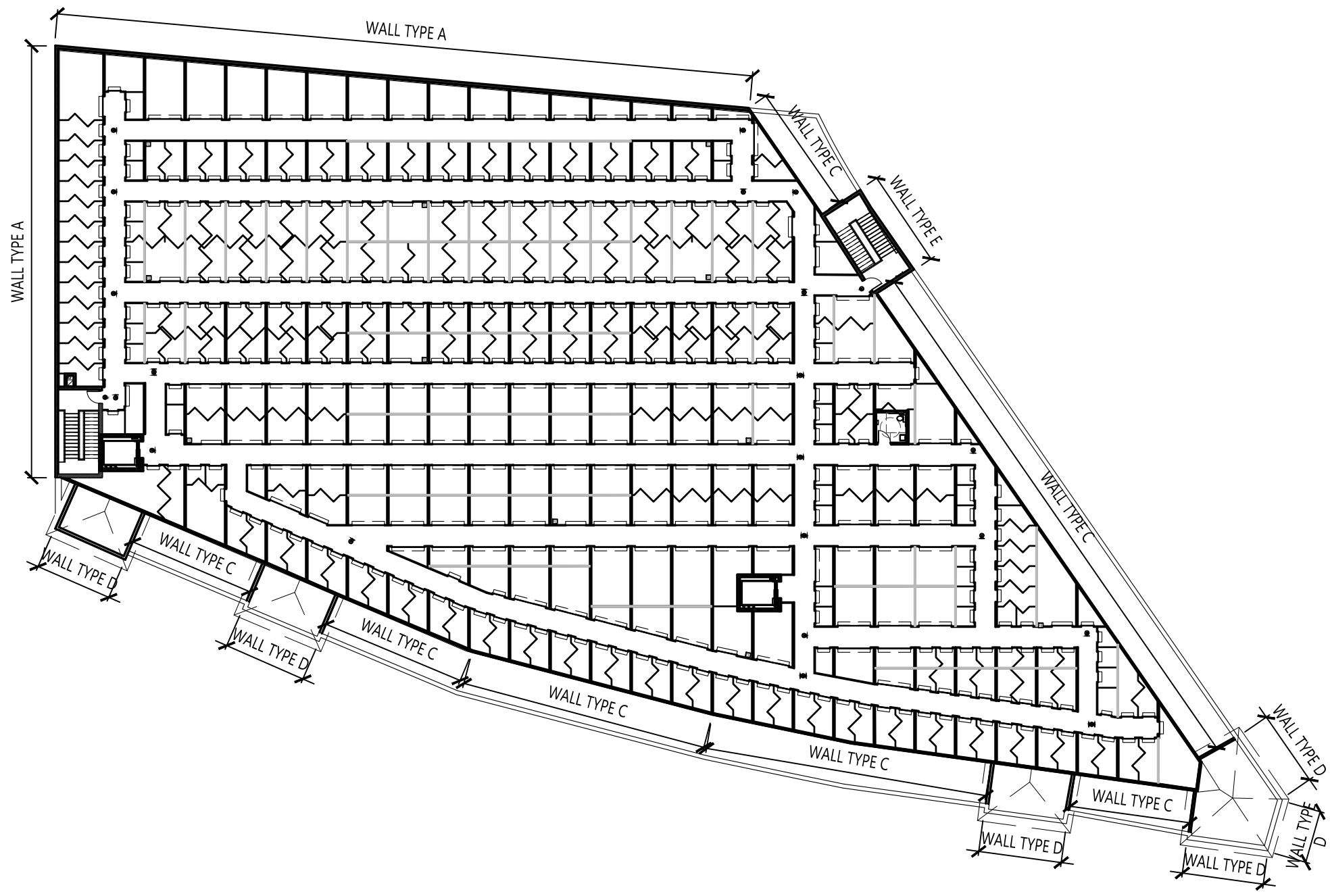




1 FIRST FLOOR WALL TYPES  
SCALE: 1/32" = 1'-0"



2 SECOND FLOOR WALL TYPES  
SCALE: 1/32" = 1'-0"



3 THIRD FLOOR WALL TYPES  
SCALE: 1/32" = 1'-0"

WALL TYPES AND DOCUMENTATION		
WALL TYPE	ASSEMBLY DESCRIPTION	DETAIL LOCATION
WALL TYPE A	-MASONRY WALL -2" (R-13) THERMAX INSULATION -CORRUGATED LINER PANEL	A-320, A-321
WALL TYPE B	-MASONRY WALL -1" FLOORING -2" (R-13) THERMAX INSULATION -5/8" GYP. BOARD	A-320, A-321
WALL TYPE C	-2" (R-7) MASTERWALL STUCCO -METAL STUD -CORRUGATED LINER PANEL	A-320, A-321
WALL TYPE D	-ROOF SYSTEM RS-2 -2" (R-13) THERMAX INSULATION -CORRUGATED LINER PANEL	A-110, A-320, A-321
WALL TYPE E	-MASONRY WALL -2" (R-7) MASTERWALL STUCCO	A-320, A-321

EXTERIOR DOOR SCHEDULE				
TYPE	DESCRIPTION	OPENING SIZE	GLASS TYPE	U-FACTOR
	EXTERIOR EGRESS DOORS	3'-0" X 6'-8"	—	0.36000
	OVERHEAD DOORS	VARIES	—	0.20000

STOREFRONT SCHEDULE								
TYPE	LOCATION	DESCRIPTION	OPENING SIZE	GLASS TYPE	U-FACTOR	SHGC	AIR LEAKAGE	NOTES
W1	EXTERIOR	ALUMINUM FRAMED STOREFRONT SYSTEM	7'-9" X 15'-6"	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W2	EXTERIOR		7'-9" X 8'-11"	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W3	EXTERIOR		10'-10" X 15'-6"	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W4	EXTERIOR		12'-4" X 10'-0" V.L.F.	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W5	EXTERIOR		6'-10" X 15'-6" V.L.F.	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W6	EXTERIOR		8'-9" X 3'-6" V.L.F.	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW
W7	EXTERIOR		9'-5" X 7'-10" V.L.F.	TEMPERED	.34	.35	≤ 0.04 cfm/s.f.	SEE BELOW

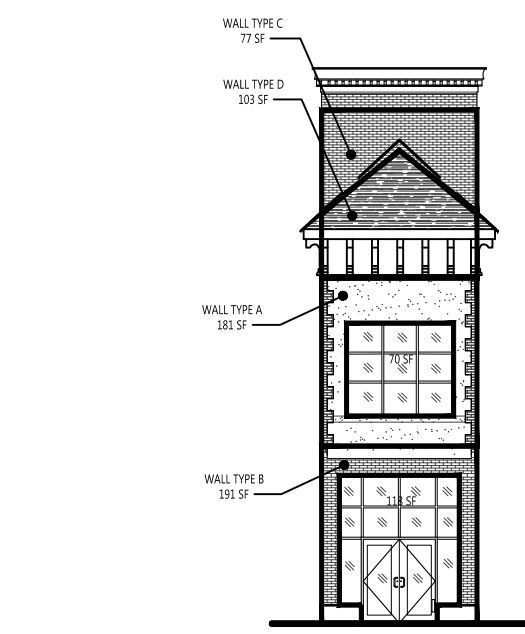
1. TUBELITE T140000 FRAME COLOR TO BE WHITE. STOREFRONT GRILLES SHALL BE URBAN BRONZE.  
2. ALL GLAZING TO BE LOW "E" CLEAR TEMPERED GLASS  
1" GLASS  
1" AIR GAP  
1" GLASS  
3. ENTRANCE DOORS MANUFACTURED BY YKK.  
4. COORDINATE JAMB, SILL AND HEAD DETAIL DEPENDING ON STOREFRONT LOCATION.

BUILDING ENVELOPE SEALING NOTES:

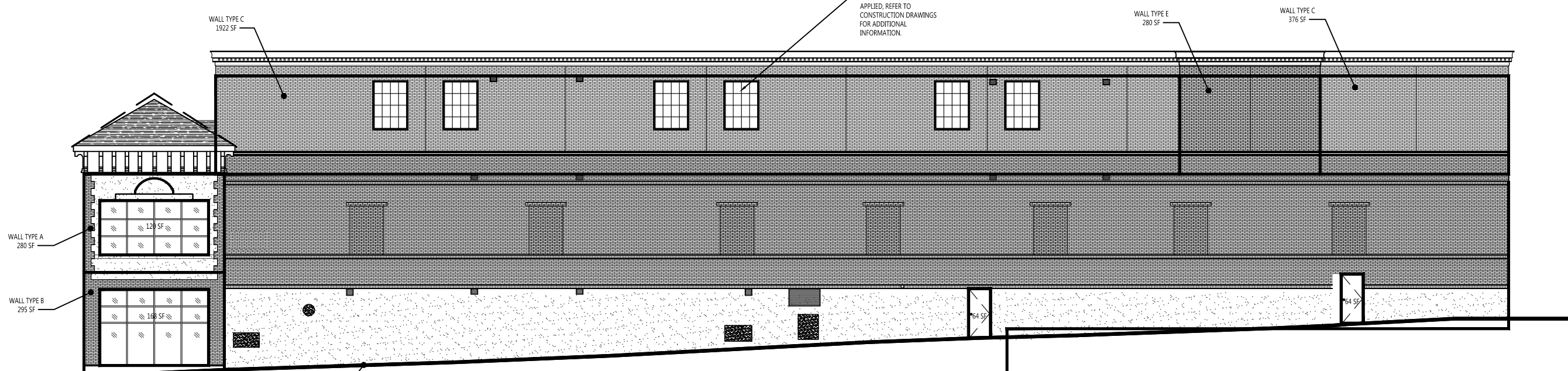
502.4.2 STOREFRONT GLAZING AND COMMERCIAL ENTRANCE DOORS  
STOREFRONT GLAZING AND COMMERCIAL GLAZED SWINGING ENTRANCE DOORS SHALL BE TESTED FOR AIR LEAKAGE AT 1.57 LBS/SQ. FT. (PSF) (75 PA) IN ACCORDANCE WITH ASTM E 283. FOR STOREFRONT GLAZING, THE MAX. AIR LEAKAGE RATE SHALL BE 0.3 (CFM/FT<sup>2</sup>) (5.5 M<sup>3</sup>/H X M<sup>2</sup>) OF PENETRATION AREA. FOR COMMERCIAL GLAZED ENTRANCE DOORS THE MAX. AIR LEAKAGE RATE SHALL BE 1.00 CFM/FT<sup>2</sup> (0.8 M<sup>3</sup>/H X M<sup>2</sup>) OF DOOR AREA WHEN TESTED IN ACCORDANCE WITH ASTM E 283.  
THE FOLLOWING AREAS OF THE BUILDING ENVELOPE SHALL BE SEALED, CALKED, GASKETED, OR WEATHER-STRIPPED TO MINIMIZE AIR LEAKAGE:  
SEE SHEET A-081 FOR DETAILS AND ADDITIONAL INFORMATION.

A. JOINTS AROUND FENESTRATION AND DOOR FRAMES  
B. JUNCTIONS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AT BUILDING CORNERS, BETWEEN WALLS AND STRUCTURAL WALLS AND FLOORS OR ROOFS, AND BETWEEN WALLS AND ROOF OR WALL PANELS  
C. OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH ROOFS, WALLS AND FLOORS.  
D. SITE BUILT FENESTRATION AND DOORS.  
E. BUILDING ASSEMBLIES USED AS DUCTS OR PLENUMS.  
F. JOINTS, SEAMS, AND PENETRATIONS OF VAPOR RETARDERS.  
G. ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.

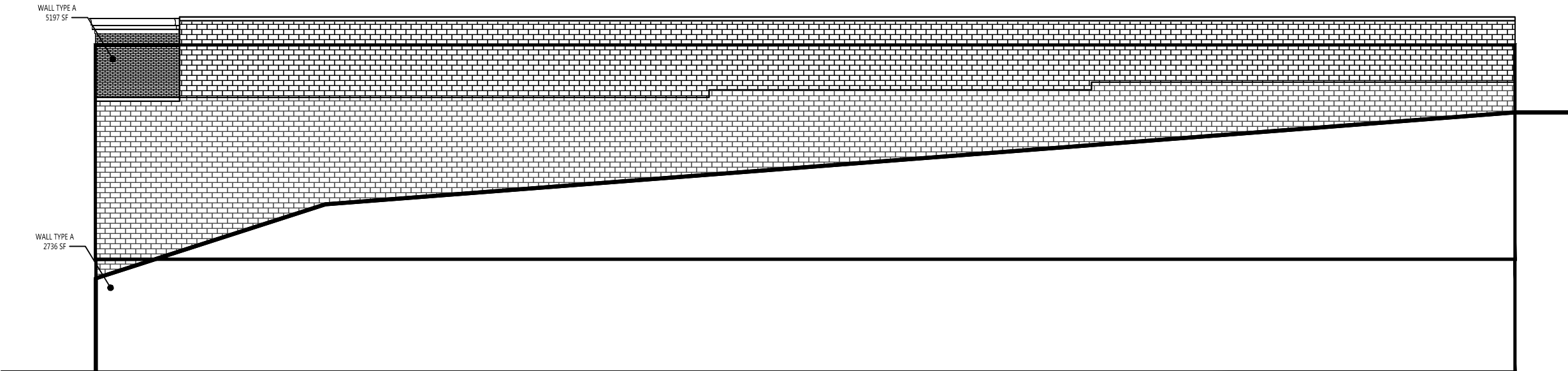
ALL JOINTS AND PENETRATIONS ARE CALKED, GASKETED OR COVERED WITH MOISTURE VAPOR PERMEABLE WRAPPING MATERIALS INSTALLED IN ACCORDANCE WITH ECC 502.4 (AIR LEAKAGE (MANDATORY)) AND MANUFACTURERS INSTALLATION INSTRUCTIONS. ALL WINDOWS & DOOR ASSEMBLIES AND DAMPERS IN OUTDOOR AIR INTAKES AND EXHAUST OPENINGS CERTIFIED AS MEETING LEAKAGE REQUIREMENTS. PER TRB INSPECTIONS IN BUILDING ENVELOPE TO BE PERFORMED TO CONFIRM PENETRATIONS ARE SEALED IN COMPLIANCE WITH CODE. INSPECTIONS INCLUDE OUTDOOR INTAKE AND EXHAUST DAMPERS IF REQUIRED AND RECESSED LIGHTING SEALS WHERE LIGHTING IS IN THE BUILDING ENVELOPE.



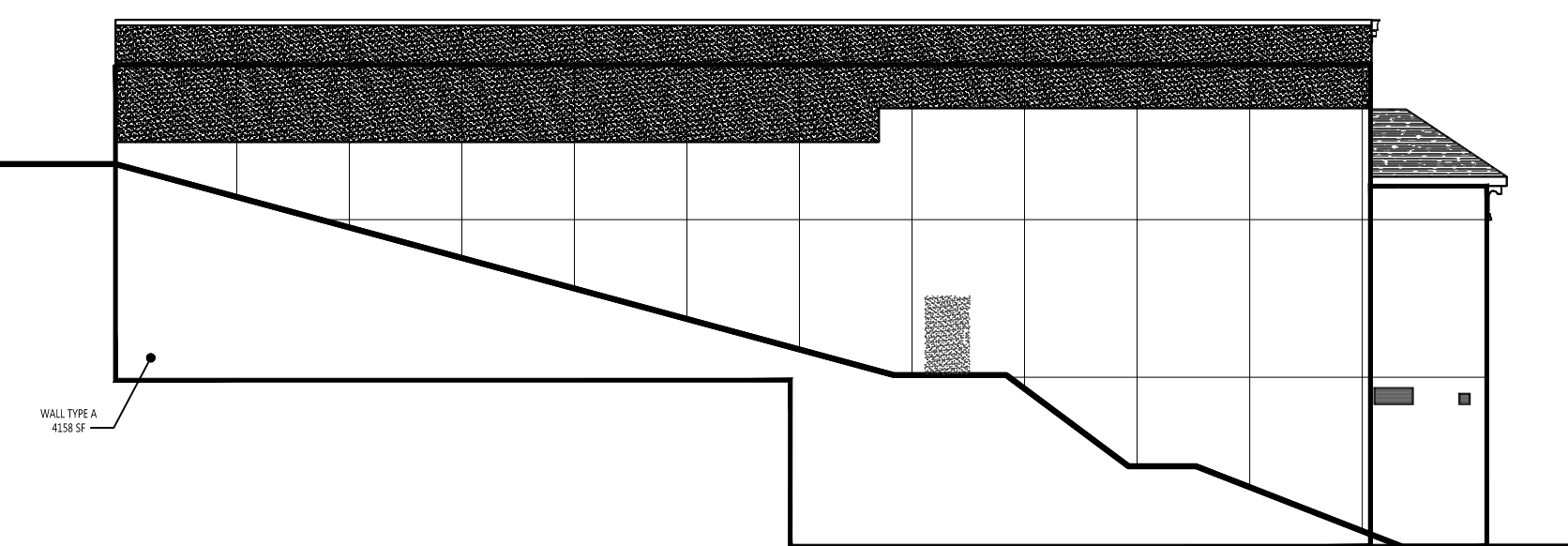
4 SOUTHEAST ELEVATION  
SCALE: 1/16" = 1'-0"



5 SOUTH ELEVATION  
SCALE: 1/16" = 1'-0"



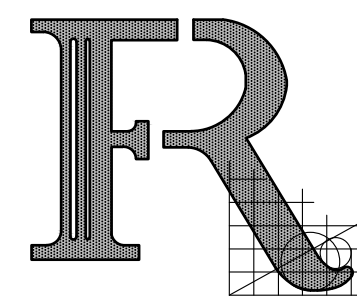
6 NORTH ELEVATION  
SCALE: 1/16" = 1'-0"



7 WEST ELEVATION  
SCALE: 1/16" = 1'-0"



8 EAST ELEVATION  
SCALE: 1/16" = 1'-0"



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COMCHECK DRAWINGS

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DWG. No.: EN-110.00

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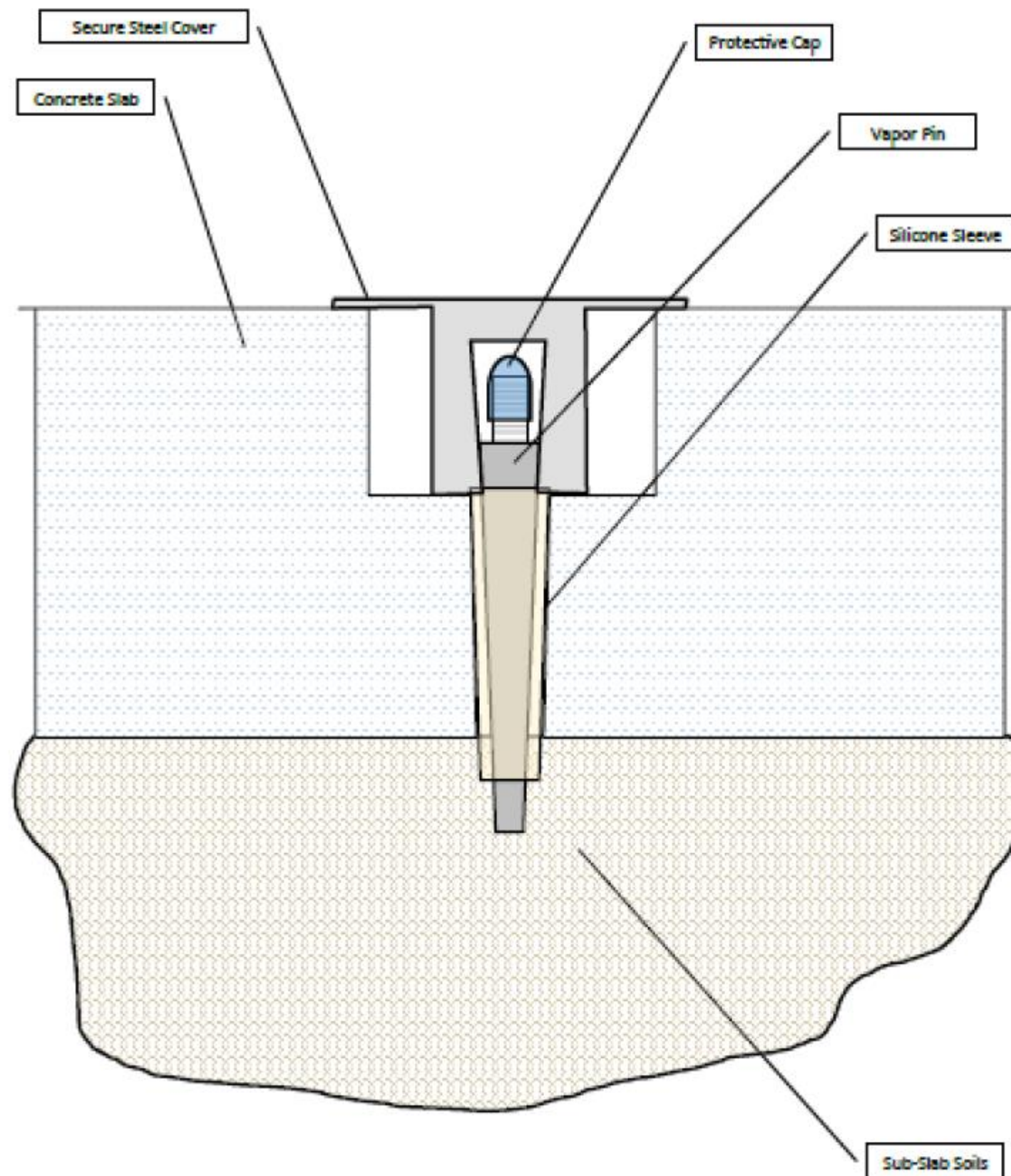
# Appendix B

60 McLean Avenue, Yonkers, NY

Typical Soil Vapor Pin Detail



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599



Sub-Slab Vapor Pin Installation

Legend

Notes:

Soil Vapor Point Construction Detail

60 McLean Avenue,  
Yonkers, NY

Appendix B

PROJECT # 15514

DRAWN BY CJC

CHECKED BY GMC

DATE 7/19/22

Revisions

Not to scale

IMPACT ENVIRONMENTAL  
CLOSURES, INC.

170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
TEL (631) 269-8800  
FAX (631) 269-1599





# Appendix C


60 McLean Avenue, Yonkers, NY

Soil Boring Logs



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599

# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514				<b>Boring ID:</b>  <b>SB-1</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers					
		Site Address: 60 McLean Avenue, Yonkers					
		Weather: Showers, 53 deg F					
				Geologist: Alex Keenan		Total Depth: 1.5'	
Start Date: 5/3/2022				Drilling Company: Coastal		GW: NA	
Start Time: 8:00				Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/3/2022				Drill Rig: 7822DT		GPS Coordinates: X,Y	
Completion Time: 15:00				Sampler Type/Len: discrete/duel tube			

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-1 (0-2)	0-1.5'	moist/wet	9"	SM/ Bedrock	3" concrete slab	
	0.0						refusal at 1.5' 2" concrete slab, 9" of brown m-fine sand trace silt and bedrock, slight saturation of water at 5" below	
2	0.0						end of boring at 1.5' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-2</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
					Geologist: Alex Keenan		Total Depth: 2'	
Start Date: 5/3/2022					Drilling Company: Coastal		GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/3/2022					Drill Rig: 7822DT		GPS Coordinates: X,Y	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube			

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-2 (0-2)	0-2'	Moist	10"	SM/ Bedrock	2" concrete slab	
	0.0						refusal at 2.0', brown, fine to medium SAND, trace silt and bedrock	
2	0.0						end of boring at 2' bgs	

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %



# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b>  <b>SB-3</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/3/2022		Drilling Company: Coastal		Total Depth: 2'				
Start Time: 8:00		Driller: Brandon Sullivan		GW: NA				
Completion Date: 5/3/2022		Drill Rig: 7822DT		GPS Coordinates:				
Completion Time: 15:00		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-3 (0-2)	0-2'	Moist	10"	SM/ Bedrock	2" concrete slab	
	0.0						refusal at 2.0', brown, fine to medium SAND, trace silt and bedrock	
2	0.0						end of boring at 2' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b>  <b>SB-4</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/3/2022		Drilling Company: Coastal		Total Depth: 2'				
Start Time: 8:00		Driller: Brandon Sullivan		GW: NA				
Completion Date: 5/3/2022		Drill Rig: 7822DT		GPS Coordinates:				
Completion Time: 15:00		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-4 (0-2)	0-2'	Moist	8"	SM/ Bedrock	2" concrete slab	
	0.0						refusal at 2.0', brown, fine to medium SAND, trace silt and bedrock	
2	0.0						end of boring at 2' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b>  <b>SB-5</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/3/2022		Drilling Company: Coastal		Total Depth: 2'				
Start Time: 8:00		Driller: Brandon Sullivan		GW: NA				
Completion Date: 5/3/2022		Drill Rig: 7822DT		GPS Coordinates:				
Completion Time: 15:00		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-5 (0-2)	0-2'	Moist	9"	SM/ Bedrock	2" concrete slab	
	0.0						refusal at 2.0', brown, fine to medium SAND, trace silt and bedrock	
2	0.0						end of boring at 2' bgs	

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %




# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-6</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers									
		Site Address: 60 McLean Avenue, Yonkers									
		Weather: Showers, 53 deg F									
		Geologist: Alex Keenan					Total Depth: 10'				
Start Date: 5/2/2022					Drilling Company: Coastal					GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan					GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT					GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube					X,Y	

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-6 (0-2)	0-5'	Dry	45"	SP	3" concrete slab	
2	0.0							
3	0.0							
4	0.0							
5	0.0							
6	0.0	SB-6 (7-9)	5-10'	Dry	55"		SILTY SAND, trace small gravel, some silt, fine to medium grained, brown	
7	0.0							
8	0.0							
9	0.0							
10	0.0							
End of boring @ 10' BGS								

TRACE = 1 - 10%      LITTLE = 11 - 20%      SOME = 21 - 35%      AND = 36 - 50 %

# SOIL BORING LOG


 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-7</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
		Geologist: Alex Keenan					Total Depth: 10'	
Start Date: 5/2/2022					Drilling Company: Coastal		GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT		GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube		X,Y	

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-7 (0-2)	0-5'	Dry	50"	SP	2" concrete slab	
2	0.0							
3	0.0							
4	0.0							
5	0.0							
6	0.0	SB-7 (7-9)	5-10'	Moist	45"	<div style="display: flex; flex-direction: column; align-items: center;"> <div>SP</div> <div>ML</div> <div>SP</div> </div>	SAND, with trace gravel, medium grained, brown	
7	0.0						SILT, with trace clay, brown, low plasticity	
8	0.0						SAND, with trace gravel, medium grained, brown	
9	0.0							
10	0.0						End of boring @ 10' BGS	

TRACE = 1 - 10%      LITTLE = 11 - 20%      SOME = 21 - 35%      AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514					<b>Boring ID:</b>  <b>SB-8<sub>a</sub></b>				
		Site/Project Name: 60 McLean Avenue, Yonkers									
		Site Address: 60 McLean Avenue, Yonkers									
		Weather: Showers, 53 deg F									
		Geologist: Alex Keenan					Total Depth: N/A				
Start Date: 5/2/2022					Drilling Company: Coastal					GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan					GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT					GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube					X,Y	
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description		Notes		
1	0.0		0-1'	N/A	None	N/A	3" concrete slab				
	No recovery										

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %



# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514				<b>Boring ID:</b>  <b>SB-8b/MW-4A</b>			
		Site/Project Name: 60 McLean Avenue, Yonkers							
		Site Address: 60 McLean Avenue, Yonkers							
		Weather: Showers, 53 deg F							
		Geologist: Alex Keenan				Total Depth: 1.5'			
Start Date: 5/2/2022				Drilling Company: Coastal				GW: 1.44	
Start Time: 8:00				Driller: Brandon Sullivan				GW Stabilized: N/A	
Completion Date: 5/2/2022				Drill Rig: 7822DT				GPS Coordinates:	
Completion Time: 15:00				Sampler Type/Len: discrete/duel tube				X,Y	
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes	
—	0.0	SB-8 (0-2)	0-1.5'	Moist/Wet	7"	Fill/Bedrock	3" concrete slab		
1	0.0						Very limited recovery. mostly gravel, wood pieces, trace sand, mostly fill, sheen observed sitting on top of bedrock. refusal at 1.5'		
2							end of boring at 1.5' bgs		


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b> <b>SB-9</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/2/2022		Geologist: Alex Keenan		Total Depth: 4'				
Start Time: 8:00		Drilling Company: Coastal		GW: NA				
Completion Date: 5/2/2022		Driller: Brandon Sullivan		GW Stabilized: N/A				
Completion Time: 15:00		Drill Rig: 7822DT		GPS Coordinates:				
		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	SB-1 (0-2)	0-4'	Dry/Moist	12"	SP	3" concrete slab	
1	0.0							
2	0.0						Refusal at 4', Fine to medium brown SAND and weathered bedrock.	
3	0.0							
4	0.0						end of boring at 4' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b>  <b>SB-10</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/2/2022		Geologist: Alex Keenan		Total Depth: 3'				
Start Time: 8:00		Drilling Company: Coastal		GW: NA				
Completion Date: 5/2/2022		Driller: Brandon Sullivan		GW Stabilized: N/A				
Completion Time: 15:00		Drill Rig: 7822DT		GPS Coordinates:				
		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	SB-10a (0-3)	0-3'	Moist/Wet	7"	Fill/Bedrock	3" concrete slab	
1	0.0						soft weathered micaceous bedrock grey to white, fine grained silt	
2	0.0							
3								

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %



# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514					<b>Boring ID:</b>  <b>SB-10b/MW-5A</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers									
		Site Address: 60 McLean Avenue, Yonkers									
		Weather: Showers, 53 deg F									
		Geologist: Alex Keenan					Total Depth: 3'				
Start Date: 5/2/2022					Drilling Company: Coastal					GW: 3.0	
Start Time: 8:00					Driller: Brandon Sullivan					GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT					GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube					X,Y	
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes			
—	0.0	SB-10b (0-3)	0-3'	Moist/Wet	7"	Fill/Bedrock	3" concrete slab				
1	0.0						soft weathered micaceous bedrock with some larger bedrock pieces, grey to white, fine grained silt,				
2	0.0										
3	0.0								end of boring at 3' bgs		


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-11</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
		Geologist: Alex Keenan					Total Depth: 3'	
Start Date: 5/2/2022					Drilling Company: Coastal		GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT		GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube		X,Y	

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-11 (0-2)	0-4'	Dry	35"	Fill/Bedrock/SP	3" concrete slab	
2	0.0						bedrock pieces, coarse gravel, broken quartz nodules, tan to white coarse SAND	
3	0.0							
4	0.0							
							end of boring at 4' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

		Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599				Project #: 15514		<b>Boring ID:</b>  <b>SB-12</b>
						Site/Project Name: 60 McLean Avenue, Yonkers		
						Site Address: 60 McLean Avenue, Yonkers		
						Weather: Showers, 53 deg F		
Start Date: 5/2/2022		Drilling Company: Coastal				Total Depth: 3'		
Start Time: 8:00		Driller: Brandon Sullivan				GW: NA		
Completion Date: 5/2/2022		Drill Rig: 7822DT				GPS Coordinates:		
Completion Time: 15:00		Sampler Type/Len: discrete/duel tube				X,Y		

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	SB-14 (0-4)	0-4'	Dry	20"	SP	3" concrete slab	
1 —	0.0							
2 —	0.0							
3 —	0.0							
4 —								
							end of boring at 4' bgs	

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %



# SOIL BORING LOG

 Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599						Project #: 15514		<b>Boring ID:</b>  <b>SB-13</b>
						Site/Project Name: 60 McLean Avenue, Yonkers		
						Site Address: 60 McLean Avenue, Yonkers		
						Weather: Showers, 53 deg F		
Start Date: 5/2/2022						Geologist: Alex Keenan		Total Depth: 2'
Start Time: 8:00						Drilling Company: Coastal		GW: NA
Completion Date: 5/2/2022						Driller: Brandon Sullivan		GW Stabilized: N/A
Completion Time: 15:00						Drill Rig: 7822DT		GPS Coordinates:
						Sampler Type/Len: discrete/duel tube		X,Y
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	no sample	1.5	dry	none	Bedrock	3" concrete slab	
1 —	0.0						bedrock pieces no soil recovery	
2 —							end of boring at 2' bgs	


TRACE = 1 - 10%

LITTLE = 11 - 20%


SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514		<b>Boring ID:</b>  <b>SB-14</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
Start Date: 5/2/2022		Geologist: Alex Keenan		Total Depth: 4'				
Start Time: 8:00		Drilling Company: Coastal		GW: NA				
Completion Date: 5/2/2022		Driller: Brandon Sullivan		GW Stabilized: N/A				
Completion Time: 15:00		Drill Rig: 7822DT		GPS Coordinates:				
		Sampler Type/Len: discrete/duel tube		X,Y				
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	SB-14 (0-4)	0-4'	Moist	18"	SP	3" concrete slab	
1	0.0						fine to medium grained, stained SAND, trace silt	
2	0.0							
3	0.0							
4							End of boring @ 10' BGS	
TRACE = 1 - 10%      LITTLE = 11 - 20%      SOME = 21 - 35%      AND = 36 - 50 %								


# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-16</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
		Geologist: Alex Keenan					Total Depth: 4'	
Start Date: 5/2/2022					Drilling Company: Coastal		GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT		GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube		X,Y	
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
—	0.0	SB-16 (0-4)	0-4'	Dry	35"	SM	4" concrete slab	
1	0.0						Brown SILTY SAND, fine grained, refusal at 4' due to soilid bedrock. Shoe very hot.	
2	0.0							
3	0.0							
4	0.0							
—	0.0						end of boring at 4' bgs	

TRACE = 1 - 10%
LITTLE = 11 - 20%
SOME = 21 - 35%
AND = 36 - 50 %



# SOIL BORING LOG

 <p>Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599</p>		Project #: 15514					<b>Boring ID:</b>  <b>SB-17</b>				
		Site/Project Name: 60 McLean Avenue, Yonkers									
		Site Address: 60 McLean Avenue, Yonkers									
		Weather: Showers, 53 deg F									
		Geologist: Alex Keenan					Total Depth: 4'				
Start Date: 5/2/2022					Drilling Company: Coastal					GW: NA	
Start Time: 8:00					Driller: Brandon Sullivan					GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT					GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube					X,Y	
Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes			
—	0.0	SB-17 (0-2) and 2-4)	0-3'	Moist/Wet	7"	SP/Bedrock	3" concrete slab				
1	0.0										
2	0.0						brown silty SAND, bedrock refusal at 4'				
3	0.0										
4	0.0										
—	0.0					end of boring at 4' bgs					


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-18/MW-7A</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
		Geologist: Alex Keenan					Total Depth: 15'	
Start Date: 5/2/2022					Drilling Company: Coastal		GW: 10.45	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT		GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube		X,Y	

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes	
1	0.0	SB-18 (0-2)	0-5'	Dry	50"	SP	2" concrete slab		
2	0.0								
3	52.7	Brown silty SAND, fine to medium grained							
4	0.0								
5	0.0								
6	76.6	SB-18 (7-9)	5-10'	Wet	50"	SP	Brown silty SAND, fine to medium grained		
7	0.0								
8	82.5								
9	0.0								
10	328.0								
11	1684.0	SB-18 (7-9)	10-15'	Wet	60"	SP	SAND, with trace gravel, medium grained, brown		
12	0.0						SILT, with trace clay, brown, low plasticity		
13	0.0								
14	0.0								SAND, with trace gravel, medium grained, brown
15	0.0								End of boring @ 15' BGS


TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# SOIL BORING LOG

		Impact Environmental Closures, Inc. 170 Keyland Court Bohemia, NY 11716 P. (631) 269-8800 F. (631) 269-1599				Project #: 15514		<b>Boring ID:</b>  <b>SB-19</b>
						Site/Project Name: 60 McLean Avenue, Yonkers		
						Site Address: 60 McLean Avenue, Yonkers		
						Weather: Showers, 53 deg F		
						Geologist: Alex Keenan		
Start Date: 5/2/2022						Drilling Company: Coastal		Total Depth: 15'
Start Time: 8:00						Driller: Brandon Sullivan		GW: NA
Completion Date: 5/2/2022						Drill Rig: 7822DT		GPS Coordinates:
Completion Time: 15:00						Sampler Type/Len: discrete/duel tube		X,Y

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-19 (0-2)	0-5'	Dry	50"	SM	2" concrete slab	
2	1200.0							
3	1200.0	0-5 fine sand some silt stained grey to brown, odors, 1200 ppm						
4	975.0							
5	450.0							
6	325.0	SB-19 (7-9)	5-10'	Wet	50"	SM	5-10 fine brown silt odors, 224 ppm	
7	300.0							
8	224.0							
9	200.0							
10	181.0	10-15'						
11	127.0							
12	141.0							
13	137.0							
14	130.0							
15	122.0					End of boring @ 15' BGS		

TRACE = 1 - 10%


LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %



# SOIL BORING LOG

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Impact Environmental Closures, Inc.              170 Keyland Court              Bohemia, NY 11716              P. (631) 269-8800              F. (631) 269-1599           </div>		Project #: 15514					<b>Boring ID:</b>  <b>SB-20/MW-9A</b>	
		Site/Project Name: 60 McLean Avenue, Yonkers						
		Site Address: 60 McLean Avenue, Yonkers						
		Weather: Showers, 53 deg F						
		Geologist: Alex Keenan					Total Depth: 10'	
Start Date: 5/2/2022					Drilling Company: Coastal		GW: 10.57	
Start Time: 8:00					Driller: Brandon Sullivan		GW Stabilized: N/A	
Completion Date: 5/2/2022					Drill Rig: 7822DT		GPS Coordinates:	
Completion Time: 15:00					Sampler Type/Len: discrete/duel tube		X,Y	

Depth (Feet)	PID (ppmv)	Sample ID	Depth (From-To)	Moisture Content	Recovery (Inches)	USCS Symbol	Soil Description	Notes
1	0.0	SB-20 (0-2)	0-5'	Moist	60"	SP/ML	3" concrete slab	
2	45.0							
3	168.0	fine to medium silty SAND, stained, odors						
4	232.0							
5	163.0							
6	216.0							
7	284.0	SB-20 (7-9)	5-10'	Moist	60"	ML	fine sandy SILT, stained, odors	
8	350.0							
9	246.0							
10	197.0							
							End of boring @ 10' BGS	

TRACE = 1 - 10%

LITTLE = 11 - 20%

SOME = 21 - 35%

AND = 36 - 50 %

# Appendix D

60 McLean Avenue, Yonkers, NY

Groundwater Sample Logs



IMPACT ENVIRONMENTAL  
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Bohemia, New York 11716  
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**IMPACT ENVIRONMENTAL CLOSURES, INC.**  
 170 Keyland Court  
 Bohemia, New York 11716  
 631.269.8800 telephone  
 631.269.1599 facsimile  
 www.impactenvironmental.com

Project #: 15514

Date: 5-4-22

Pg. 1 of 3

Client:

Staff: CE

Site: 60 Mclean

Task: GWS

## Groundwater Purging and Sampling Log

Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
MW-4A	0.0	—	1.44	1.44	—	2.40	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		15.15	7.65	-139	6.66	124	2.83	3.62	@ 1220	
Post- Purge									sampled	
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
MW-5A	0.0	—	1.29	1.29	—	3.0'	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge	12:55	14.95	7.60	20	0.500	588.6	4.87	0.24	sampled @ 13:15	
Post- Purge										
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
MW-7A	0.0	—	10.45	10.45	—	15.0	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.72	7.38	-64	0.977	248	2.89	0.37		
Post- Purge										
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
MW-9A	0.0	—	10.57	10.57	—	16.52	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.69	7.24	55	0.987	185	3.17	0.49	@ 1400	
Post- Purge									sampled	

Well Volume Calculation: Total Depth of Well - Depth to Water = Water Column Height.

Water Column Height x Well Diameter Multiplier = One Well Volume in Gallons

Diameter	Multiplier	Diameter	Multiplier
1 inch	0.041	3 inch	0.369
2 inch	0.164	4 inch	0.656





**IMPACT ENVIRONMENTAL CLOSURES, INC.**  
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 www.impactenvironmental.com

Project #: 15514

Date:

Pg. 2 of 3

Client:

Staff: EG

Site: 60 McLean

Task: GWS

## Groundwater Purging and Sampling Log

Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
WP-11	0.0	—	10.34	10.34	—	16.09	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.21	7.72	-26	0.754	447	2.14	0.4		
Post- Purge		15.41	7.68	-72	0.709	560	2.07	0.3		
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
WP-12	0.0	—	9.41	9.41	—	11.55	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.74	8.15	-618.24	0.618	1000	6.63	0.4		
Post- Purge		14.98	7.96	21	0.586	82.9	4.39	0.4		
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
WP-13	0.0	—	9.49	9.49	—	17.85	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.72	7.90	64	0.729	1600	2.87	0.3		
Post- Purge		15.19	7.81	103	0.721	305	2.76	0.3		
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
WP-14	0.0	—	9.24	9.24	—	18.50	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		14.94	7.98	94	0.715	450	5.29	0.4		
Post- Purge		15.08	7.70	61	0.799	285	1.64	0.3		

Well Volume Calculation: Total Depth of Well - Depth to Water = Water Column Height.

Water Column Height x Well Diameter Multiplier = One Well Volume in Gallons

Diameter	Multiplier	Diameter	Multiplier
1 Inch	0.041	3 Inch	0.369
2 Inch	0.164	4 Inch	0.656



**IMPACT ENVIRONMENTAL CLOSURES, INC.**  
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Bohemia, New York 11716  
631.269.8800 telephone  
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www.impactenvironmental.com

Project #: 15514

Date:

Pg. 3 of 3

Client:

Staff: CE

Site: 60 McLean

Task: GWS

## Groundwater Purging and Sampling Log

Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
NP-15	0.0	—	10.50	10.50	—	14.10	2"			
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge		15.15	7.64	2.97-57	0.710	175	2.97	0.3		
Post- Purge		14.98	7.70	2.81-27	0.681	31.8	2.81	0.3		
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge										
Post- Purge										
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge										
Post- Purge										
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge										
Post- Purge										
Well Number	Well Head PID (PPM)	Depth To Product	Depth To Water (Pre-Purge)	Depth to Water (Post- Purge)	Product Thickness	Total Depth of Well	Well Diameter		Well Volume	Purge Method & Sampling Device
Volume	Time	Temp	pH	Redox (ORPmv)	Cond (mS/cm)	Turidity (NTU)	Diss O2 (mg/L)	Salinity (ppt)	Notes	
Pre-Purge										
Post- Purge										

Well Volume Calculation: Total Depth of Well - Depth to Water = Water Column Height.

Water Column Height x Well Diameter Multiplier = One Well Volume in Gallons

Diameter	Multiplier
1 Inch	0.041
2 Inch	0.164

Diameter	Multiplier
3 Inch	0.369
4 Inch	0.656

# Appendix E

60 McLean Avenue, Yonkers, NY

Soil Vapor Sample Logs



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
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FAX: (631) 269-1599





## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5/4/22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Upper Level CenterCanister Record:Canister ID: 2190Flow regulator ID: 01951Sample duration: 8 HourSampling rate: 18.0 ml/minSample ID: SV-2ADate/Time start: 5-4-22 07:08Date/Time end: 5-4-22 09:14Regulator: 01951Start pressure: -30.16End pressure: -6.40Air temperature (°F): 49°

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 1.1 ppmPID Meter: Mini-Rap 3000Vacuum/Air pump: PIDType/ft. tubing used: LDPE

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: 2hr regulator



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Investigator: \_\_\_\_\_

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:upper level Right SideCanister Record:Canister ID: 3425Flow regulator ID: 01941Sample duration: 8 hourSampling rate: 18 ml/minSample ID: SU-3ADate/Time start: 5/4/22 - 07:20Date/Time end: 5/4/22 0915Regulator: 01941Start pressure: -30.05End pressure: -7.87Air temperature (°F): 49.0

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.1

PID Meter: \_\_\_\_\_

Vacuum/Air pump: \_\_\_\_\_

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: 2hr



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:JS Garage / Left most  
Garage  
\_\_\_\_\_  
\_\_\_\_\_Canister Record:Canister ID: 2043  
Flow regulator ID: 01611  
Sample duration: 8hr  
Sampling rate: 18. mL/minSample ID: SV-5ADate/Time start: 5-4-22 0735Date/Time end: 5-4-22 0935Regulator: 01611Start pressure: -30.16End pressure: -10.92Air temperature (°F): 49°

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.7 ppmPID Meter: mini Rec 3000Vacuum/Air pump: ↓Type/ft. tubing used: poly

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: 2hr regulator





## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Investigator: \_\_\_\_\_

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Canister Record:Canister ID: 325  
Flow regulator ID: 01802  
Sample duration: \_\_\_\_\_  
Sampling rate: \_\_\_\_\_Sample ID: IA-2A  
Date/Time start: 5-4-22 0738  
Date/Time end: 5-4-22 0927Regulator: 01802  
Start pressure: -30.33  
End pressure: -6.06Air temperature (°F): 49°F  
Barometric pressure: \_\_\_\_\_  
PID reading (ppm): 0.4 ppmPID Meter: Min. RAE  
Vacuum/Air pump: \_\_\_\_\_  
Type/ft. tubing used: \_\_\_\_\_Noticeable odor: Motes out of mechanical shop  
Floor slab depth (ft.): \_\_\_\_\_  
Ground surface type: Concrete  
Room: Oil Garage  
Story/level: 1st  
Intake depth below floor (ft.): \_\_\_\_\_Analytical method required: \_\_\_\_\_  
Laboratory used: \_\_\_\_\_Comments: 2hr Reg



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:SU  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Canister Record:Canister ID: 2040  
Flow regulator ID: 01713  
Sample duration: 8hr 30  
Sampling rate: 1510Sample ID: SU-6ADate/Time start: 5-4-22 0750Date/Time end: 5-4-22 0945Regulator: 01713Start pressure: -30.20End pressure: -8.74Air temperature (°F): 49.0 F

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.4 ppmPID Meter: Mini Range 3000Vacuum/Air pump: ↓Type/ft. tubing used: Poly

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Canister Record:Canister ID: 2382  
Flow regulator ID: 02133  
Sample duration: \_\_\_\_\_  
Sampling rate: 18.0 mL/minSample ID: SV-7ADate/Time start: 5-4-22 0750Date/Time end: 5-4-22 0745Regulator: 02133Start pressure: -30.04End pressure: -10.02Air temperature (°F): 49°F

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 1.6 ppmPID Meter: mini RAE 3000Vacuum/Air pump: ↓Type/ft. tubing used: poly

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: 2hr





## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:SU-8A  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Canister Record:Canister ID: 3102  
Flow regulator ID: 0801  
Sample duration: 8hr  
Sampling rate: 180 mL/minSample ID: SU-8A  
Date/Time start: 5-4-22 0805  
Date/Time end: 5-4-22 0955Regulator: 0801  
Start pressure: - 30.14  
End pressure: - 10.07Air temperature (°F): 49°F  
Barometric pressure: \_\_\_\_\_  
PID reading (ppm): 0.3 ppmPID Meter: min. Rec 3000  
Vacuum/Air pump: ↓  
Type/ft. tubing used: polyNoticeable odor: \_\_\_\_\_  
Floor slab depth (ft.): \_\_\_\_\_  
Ground surface type: \_\_\_\_\_  
Room: \_\_\_\_\_  
Story/level: \_\_\_\_\_  
Intake depth below floor (ft.): \_\_\_\_\_Analytical method required: \_\_\_\_\_  
Laboratory used: \_\_\_\_\_Comments: 2hr



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Outdoor  
Ambient Air

Soil Gas

Sample Location:OA-1A  
sidewalkCanister Record:Canister ID: 2210  
Flow regulator ID: 01781  
Sample duration: 8hr  
Sampling rate: \_\_\_\_\_Sample ID: OA-1ADate/Time start: 5-4-22 0815Date/Time end: 5-4-22 1000Regulator: 01781Start pressure: -30.04End pressure: -10.11Air temperature (°F): 49°F (rain)

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.3PID Meter: mini. Pce 3000Vacuum/Air pump: ↓

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: NONE

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Investigator: \_\_\_\_\_

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:

Same as SO-9A

Canister Record:

Canister ID:

Flow regulator ID:

Sample duration:

Sampling rate:

22.01

01548

8hr

18 mL/min

Sample ID:

Date/Time start:

Date/Time end:

Su. Dup

5-4-22 0828

5-4-22 1008

Regulator:

Start pressure:

End pressure:

01548

-30.44

-10.08

Air temperature (°F):

Barometric pressure:

PID reading (ppm):

50°F

0.0

PID Meter:

Vacuum/Air pump:

Type/ft. tubing used:

mini. Rec 7000

+

poly

Noticeable odor:

Floor slab depth (ft.):

Ground surface type:

Room:

Story/level:

Intake depth below floor (ft.):

None

concrete

1st

8"

Analytical method required:

Laboratory used:

Comments:





## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Office Area Center  
test buildingCanister Record:Canister ID: 2348Flow regulator ID: 01806Sample duration: 8hrSampling rate: 18 mL/minSample ID: SU-9ADate/Time start: 5-4-22 0825Date/Time end: 5-4-22 1005Regulator: 01806Start pressure: -29.32End pressure: -10.76Air temperature (°F): 50°

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.0PID Meter: Mini Rac 3000

Vacuum/Air pump: \_\_\_\_\_

Type/ft. tubing used: polyNoticeable odor: NONE

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: Concrete

Room: \_\_\_\_\_

Story/level: 1stIntake depth below floor (ft.): 8"

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CS

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Pizza Shop Sub SlabCanister Record:Canister ID: 208Flow regulator ID: 01392Sample duration: 8hrSampling rate: 18 ml/minSample ID: SU-10ADate/Time start: 5-4-22 0855Date/Time end: 5-4-22 1025Regulator: 01392Start pressure: -30.15End pressure: -10.71

Air temperature (°F): \_\_\_\_\_

Barometric pressure: \_\_\_\_\_

PID reading (ppm): \_\_\_\_\_

PID Meter: \_\_\_\_\_

Vacuum/Air pump: \_\_\_\_\_

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_

Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: C.E.

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Pizza Shop CenterCanister Record:Canister ID: 3449Flow regulator ID: 0694Sample duration: 8hrSampling rate: 18 mL/minSample ID: IA-4ADate/Time start: 5-4-22 0850Date/Time end: 5-4-22 1030Regulator: 0694Start pressure: -29.80End pressure: -11.35Air temperature (°F): 50°F

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 0.5 ppmPID Meter: Mmi: RAE 3000Vacuum/Air pump: ↓

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: None

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_



Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CS

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:ICanister Record:Canister ID: 31.75Flow regulator ID: 02098Sample duration: 8hrSampling rate: 18.0Sample ID: IA-3ADate/Time start: 5-4-22 0810Date/Time end: 5-4-22 0915 (CS)  
0950Regulator: 02098Start pressure: -30.06End pressure: -7.87 (CS) -10.47

Air temperature (°F): \_\_\_\_\_

PID Meter: \_\_\_\_\_

Barometric pressure: \_\_\_\_\_

Vacuum/Air pump: \_\_\_\_\_

PID reading (ppm): \_\_\_\_\_

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: Called Chris Connolly. Some samples appear to be  
2hr regulator checked at 8hr  
- Alphas. Confirmed need at least -16.0 mV for sample



## Air/Soil Gas Sampling Form

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Investigator: \_\_\_\_\_

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Behind SV-2ACanister Record:Canister ID: 182Flow regulator ID: 01081Sample duration: 8 hourSampling rate: 18 ml/minSample ID: IA-1ADate/Time start: 5/4/22 - 07:14Date/Time end: 5/4/22 - 1100Regulator: 01081Start pressure: -29.54End pressure: -8.36Air temperature (°F): 49°

Barometric pressure: \_\_\_\_\_

PID reading (ppm): \_\_\_\_\_

PID Meter: \_\_\_\_\_

Vacuum/Air pump: \_\_\_\_\_

Type/ft. tubing used: \_\_\_\_\_

Noticeable odor: \_\_\_\_\_

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: \_\_\_\_\_

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_

**Air/Soil Gas Sampling Form**

Project #: \_\_\_\_\_

Date: 5-4-22

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Basement near Furnace Oil  
burnerCanister Record:Canister ID: 330Flow regulator ID: 01168Sample duration: 5hrSampling rate: 18 mL/minSample ID: SU-4ADate/Time start: 5-4-22 0835Date/Time end: 5-4-22 1015Regulator: 01168Start pressure: -30.29End pressure: -9.28Air temperature (°F): 50°F

Barometric pressure: \_\_\_\_\_

PID reading (ppm): 36.4PID Meter: mini RAE 3000Vacuum/Air pump: ↓Type/ft. tubing used: polyNoticeable odor: Heating Oil

Floor slab depth (ft.): \_\_\_\_\_

Ground surface type: \_\_\_\_\_

Room: Basement

Story/level: \_\_\_\_\_

Intake depth below floor (ft.): \_\_\_\_\_

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: \_\_\_\_\_



**Air/Soil Gas Sampling Form**

Project #: \_\_\_\_\_

Date: 5-4-2022

Project Name: \_\_\_\_\_

Investigator: CE

Type of Sample: (circle one)

Indoor Air

Sub-Slab Soil Gas

Ambient Air

Soil Gas

Sample Location:Upper level / North EndCanister Record:Canister ID: 22.79Flow regulator ID: 01797Sample duration: 8hrSampling rate: 18.0Sample ID: SV-1ADate/Time start: 5-4-22 0653Date/Time end: 5-4-22Regulator: 01797Start pressure: -30.15

End pressure: \_\_\_\_\_

Air temperature (°F): 49°Barometric pressure: 1016 / 30.1"PID reading (ppm): 0.2

PID Meter: \_\_\_\_\_

Vacuum/Air pump: PIDType/ft. tubing used: LOPENoticeable odor: WOWEFloor slab depth (ft.): 6-8"

Ground surface type: \_\_\_\_\_

Room: Upper levelStory/level: Upper StorageIntake depth below floor (ft.): 12"

Analytical method required: \_\_\_\_\_

Laboratory used: \_\_\_\_\_

Comments: called Chris Connolly noticed water in canister advised to not take SV-1A NO SAMPLE

# Appendix F

60 McLean Avenue, Yonkers, NY

Well Construction Details



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599



IMPACT ENVIRONMENTAL  
170 Keyland Court, Bohemia, New York 11716  
631.269.8800 telephone | 631. 269.1599 facsimile  
impactenvironmental.com

Well Code:

MW-4A

Site Location: 60 McLean Avenue, Yonkers, NY

Job Number: 15514

Client: SnL Construction LLC

Installer: Coastal

Installation Method: 7782DT Direct Push

Installation Date: 5/3/2022

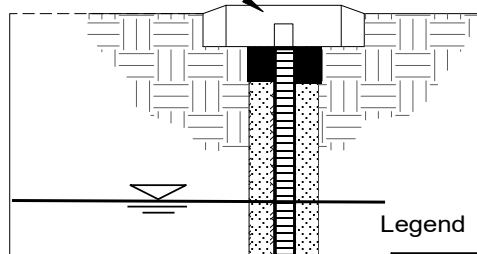
Depth

0.5

1.44'

2.40

WELL COVER



Legend



BENTONITE



SAND PACK



GROUT



NATIVE SOIL

Not To Scale

**Surface Pad**

Type: Concrete, roadbox, manhole cover

**Well Cap**

Type: J-Plug

**Surface Casing**

Type: 8" Steel Manhole

**Riser Pipe**

Type: NA  
Diameter: NA  
Length: NA  
Interval (BEG): NA

**Annular Seal**

Type: NA  
Length: NA  
Interval (BEG): NA

**Bentonite Seal**

Type: Granular 3/8"  
Length: 5"  
Interval (BEG): 0-0.5"

**Filter Pack**

Type: Sand #2  
Length: 0.9'  
Interval (BEG): 0.5" - 2.40'

**Screen**

Type: Schedule 40 PVC  
Diameter: 2"  
Length: 2.40'  
Slot Size: 0.010"  
Interval (BEG): 0-2.40'





IMPACT ENVIRONMENTAL  
170 Keyland Court, Bohemia, New York 11716  
631.269.8800 telephone | 631. 269.1599 facsimile  
impactenvironmental.com

Well Code:

MW-5A

Site Location: 60 McLean Avenue, Yonkers, NY  
Job Number: 15514  
Client: SnL Construction LLC

Installer: Coastal  
Installation Method: 7782DT Direct Push  
Installation Date: 5/3/2022

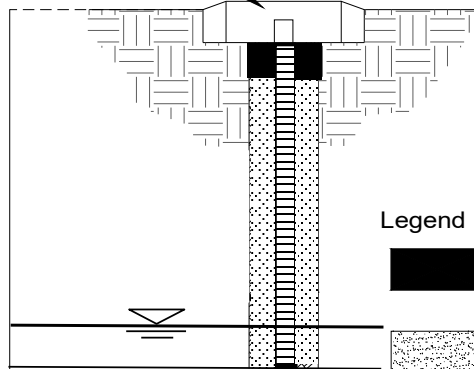
Depth

0.5

2.5'

3.0'

WELL COVER



Legend

- BENTONITE
- SAND PACK
- GROUT
- NATIVE SOIL

Not To Scale

Surface Pad

Type: Concrete, roadbox, manhole cover

Well Cap

Type: J-Plug

Surface Casing

Type: 8" Steel Manhole

Riser Pipe

Type: NA  
Diameter: NA  
Length: NA  
Interval (BEG): NA

Annular Seal

Type: NA  
Length: NA  
Interval (BEG): NA

Bentonite Seal

Type: Granular 3/8"  
Length: 5"  
Interval (BEG): 0-0.5"

Filter Pack

Type: Sand #2  
Length: 2.5'  
Interval (BEG): 0.5" - 3.0"

Screen

Type: Schedule 40 PVC  
Diameter: 2"  
Length: 3.0'  
Slot Size: 0.010"  
Interval (BEG): 0-3.0'



IMPACT ENVIRONMENTAL  
170 Keyland Court, Bohemia, New York 11716  
631.269.8800 telephone | 631. 269.1599 facsimile  
impactenvironmental.com

**Well Code:**

**MW-7A**

**Site Location:** 60 McLean Avenue, Yonkers, NY

**Job Number:** 15514

**Client:** SnL Construction LLC

**Installer:** Coastal

**Installation Method:** 7782DT Direct Push

**Installation Date:** 5/3/2022

Depth

0.5'

WELL COVER

**Legend**



BENTONITE



SAND PACK



GROUT



NATIVE SOIL

BENTONITE

SCREEN

WATER TABLE

SAND PACK

5.00'

10.45'

15.00'

Not To Scale

**Surface Pad**

Type: Concrete, roadbox, manhole cover

**Well Cap**

Type: J-Plug

**Surface Casing**

Type: 8" Steel Manhole

**Riser Pipe**

Type: Schedule 40 PVC

Diameter: 2"

Length: 5.00'

Interval (BEG): 0-5.00'

**Annular Seal**

Type: Sand #2 + Concrete

Length: 2'

Interval (BEG): 0-2.00'

**Bentonite Seal**

Type: Granular 3/8"

Length: 2'

Interval (BEG): 2.00-4.00'

**Filter Pack**

Type: Sand #2

Length: 11.00'

Interval (BEG): 4.00' - 15.00'

**Screen**

Type: Schedule 40 PVC

Diameter: 2"

Length: 10'

Slot Size: 0.010"

Interval (BEG): 5-15'



IMPACT ENVIRONMENTAL  
170 Keyland Court, Bohemia, New York 11716  
631.269.8800 telephone | 631. 269.1599 facsimile  
impactenvironmental.com

**Well Code:**

**MW-9A**

**Site Location:** 60 McLean Avenue, Yonkers, NY

**Job Number:** 15514

**Client:** SnL Construction LLC

**Installer:** Coastal

**Installation Method:** 7782DT Direct Push

**Installation Date:** 5/3/2022

Depth

0.5'

WELL COVER

**Legend**



BENTONITE



SAND PACK



GROUT



NATIVE SOIL

BENTONITE

6.52'

SCREEN

WATER TABLE

10.57'

SAND PACK

16.52'

Not To Scale

**Surface Pad**

Type: Concrete, roadbox, manhole cover

**Well Cap**

Type: J-Plug

**Surface Casing**

Type: 8" Steel Manhole

**Riser Pipe**

Type: Schedule 40 PVC  
Diameter: 2"  
Length: 6.52'  
Interval (BEG): 0-6.52'

**Annular Seal**

Type: Sand #2 + Concrete  
Length: 4'  
Interval (BEG): 0-3.00'

**Bentonite Seal**

Type: Granular 3/8"  
Length: 2'  
Interval (BEG): 3.00-5.52'

**Filter Pack**

Type: Sand #2  
Length: 11.00'  
Interval (BEG): 5.52' - 16.52'

**Screen**

Type: Schedule 40 PVC  
Diameter: 2"  
Length: 10'  
Slot Size: 0.010"  
Interval (BEG): 6.52'-16.52'



# Appendix G

60 McLean Avenue, Yonkers, NY

Data Validator Credentials



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599

## **DENISE “DEE” SHEPPERD**

### **Sr. Environmental Chemist**

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Ms. Shepperd has over 30 years of experience in the environmental industry. Her field experience includes site assessments, investigations, sample collection, auditing field procedures, writing SOPs for the field, and training staff. Her analytical experience includes preparation and analysis for many organics, inorganics, microbiological, and physical parameters, with a broad spectrum of methods and instrumentation. She has worked in sample management, client services, and logistics, as well as laboratory operations and management, maintaining and interpreting data sets within a variety of client and vendor software systems, and has operated mobile laboratories on both commercial and government-operated sites. She has served as QA officer with several independent, as well as a number of large network laboratories, with experience in implementing, maintaining, and improving quality systems. She has audited laboratories for agencies, private industries, and legal investigations. She is familiar with the administration of accreditation programs and the operation of an effective PT program, has written many SOPs and laboratory quality manuals, and has reviewed and revised these documents to assist laboratories and agencies to improve their quality systems. Within the laboratory environment, Ms. Shepperd has been responsible for the evaluation, purchase, installation, repair, and maintenance of analytical instruments, training of analysts, development and implementation of methods, managing projects, scheduling, troubleshooting processes, and performing sample preparation and analysis for a wide variety of organic and inorganic methods.

During her work with a chemistry consulting firm, Ms. Shepperd assisted in many litigation cases, conducting research, interpreting data, writing expert reports and affidavits, and assisting in depositions and testimony. She has served in an interim capacity as a lab manager, QA officer, and analyst during her work both for a private firm, as well as, as an independent consultant. She has performed laboratory data validation both inside the lab, as a part of the laboratory or client-driven quality assurance programs, as an external third-party validator, to support a variety of clients, and for regulatory and litigation applications including both defense and prosecution. Environmental projects for which Dee has performed data validation include site assessment, liability, remediation, decommissioning and closure of chemical and petroleum facilities, real estate transactions, brownfields use, and litigation to determine source, responsibility, and allocation.

Ms. Shepperd has given numerous presentations and trainings in analytical techniques, environmental forensics, quality systems, ethics, data validation, and data defensibility both as a consultant and within the companies for which she has worked. As an investigator and compliance officer, she was instrumental in investigations into improper practices, and in assisting laboratories to recover from allegations or incidences of improper practices. She has assisted in writing, reviewing and editing project specific QAPPs and SAPs as well as other project laboratory and site-specific documents.

#### **Project Experience:**

##### **Data Validation Experience**

Ms. Shepperd continues to actively perform validation of data, including organics (GC, GCMS, HRMS, LC/MS/MS, inorganics, metals, microbiological, radiological, and specialty chemical analyses), pursuant to the U.S. EPA Contract Laboratory

#### **Education**

BS, Environmental Chemistry, Juniata College, Huntingdon, PA - 1978

Marine studies, Duke University Marine Laboratory, Beaufort, NC

Graduate Studies: Groundwater Limnology, West Chester University

Graduate Studies: Environmental Science, Drexel University

Mass Spectral Interpretation, Indiana University

#### **Professional Affiliations, Past and Present**

National Ground Water Association

American Chemical Society

ASMS

AEHS

TNI – The NELAC Institute – member.

## **DEE SHEPPERD**

Program Statement of Work (CLP), U.S. EPA Regional Guidelines, DOD/DOE QSM, ASTM, Standard Methods, U.S. EPA SW-846, and other methodologies. She has a thorough understanding of the U.S. EPA Functional Guidelines for data validation, and various regional and other agency guidelines, and has, herself, performed many of the methods for which she performs data review. She has prepared EDDs in many agency and client-specific formats as well as data usability summary reports for many state, agency, and client-specific programs, including NYSDEC. Her current work includes implementation of Earthsoft's Data Quality Module (DQM) for use in automated assessment of electronic deliverables environmental data, both in-house for ddms' Environmental Chemistry Services (ECS) team, as well as assisting client companies.

### **Analytical Laboratory Experience**

As a laboratory analyst and group leader, performed preparation and analyses for many parameters, including organics, metals, wet chem, and microbiology, set-up and validated instrumentation and methods, validated methods, and trained analysts. Ms. Shepperd has implemented and validated new methods for analysis and adapted existing methods to address new analytes and matrices.

Served as interim analyst, group leader, QA officer, and manager in laboratories, to fill gaps left by loss or reassignment of personnel, re-organization, or re-location of laboratory operations. Served as temporary analyst to develop methods for specific site compounds of concern and assist laboratories to implement and operate methods for analysis of site samples.

As a QA officer for several laboratories, was responsible for all aspects of the quality system, directing document control, staff training, PT programs, internal auditing, field operations, chemical, radiological, toxicity testing, and microbiological laboratories, and attaining, and maintaining accreditation with national and state programs, including NY, as well as private industries.

### **Laboratory Investigations**

Investigated allegations of testing laboratory fraud impacting a national multi-facility power generation utility. Determined the improper practices being performed and assisted the company to prevail in legal proceedings and recover costs and lost capital.

Investigated allegations of fraud brought against independent and large nationally known environmental laboratories. Determined the nature and extent of the issues. Worked with laboratories to implement and improve elements of the quality systems to prevent further problems and to recover and remedy the impact to clients to the extent possible.

### **Site Investigations**

Performed site investigation, followed with designing and implementing sampling and analysis plans, retrieving historical documents and data, review and interpretation, and drafting of affidavits, expert reports, and deposition questions for companies sued for remediation costs, to determine culpability or allocation of costs. Example companies include small private firms and family-run companies, such as an oil recovery operation, auto salvage, restaurants, gas stations, grain supplier, dairy operations, private homes, contractors, truck maintenance operation, commercial uniform and linens service, and large national corporations such as chemical producers, warehouse and distribution, textile manufacture, and oil companies, and municipal operations, such as airports, wastewater treatment

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## **DEE SHEPPERD**

plants, and landfills.

Performed annual audits of laboratories to satisfy requirements for client company approved laboratory list. Performed laboratory audits in support of the quality and defensibility of data for litigation cases involving organic and inorganic contaminants. Performed laboratory audits to determine usability for projects-specific analyses and matrix types.

### **Professional Publications/Presentations:**

"Introduction to Data Validation", May 6-7, 2003, and other dates, in-house presentation for representatives from engineering firms.

Certified My (Beep) "&@\$^%", AAFS National Meeting, February 2004.

"Defensibility of Data", June 20-21, 2006 and other dates, In-house presentation for law firms.

Asbestos Data Validation: What Do We Have to Go On, AAFS Annual Meeting, 2005.

Age-Dating Diesel Fuel: Facts and Fallacies, T.R. Crawford and D.A. Shepperd, American Association of Forensic Scientists, National meeting, 2003.

Smith, J.S., L. Eng, and D.A. Shepperd, "Age-Dating Oil: Is Christensen and Larsen Applicable?." The Chemist, Vol. 78, No. 1, pp. 9-13, March/April 2001.

A Baseline Study of Measurement Uncertainty for Peak Ratios of Isoprenoids and PAHs, T.R. Crawford and D.A. Shepperd, AAFS National Meeting, 2004, and Association for Environmental Health and /sciences Foundation, 2011.

Forensic Review of Environmental Data, D.A. Shepperd and T.R. Crawford, NGWA Law Conference, Chicago, IL, June 2006.

Instructor in Environmental Forensics for NGWA, Columbus, OH, July 2006, Houston, TX, November 2006, Fair Lawn, NJ, June 2007, Denver, CO, June 2008, Pittsburgh, PA, June 2009.

### **Continuing Education/Specialized Training:**

"Hydrocarbon Pattern Recognition and Dating", University of Wisconsin

"Preventing Improper Laboratory Practices", NLTN

"Dioxin Analysis Workshop", Analytical Perspectives, Wilmington, NC

"Asbestos Analysis by TEM Training", MVA Scientific, Duluth, GA

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## **DEE SHEPPERD**

"Petroleum Refining in Nontechnical Language", Venus Consulting,  
Houston, TX

Various operation, maintenance, and application courses from the  
Finnigan Institute

"Environmental Applications of GC/MS", Indiana University,  
Bloomington, IN

Commonwealth of PA Courses for Operation of Potable Water and Wastewater  
Treatment Plant

Various short courses in data integrity, laboratory auditing, corrective action  
process/root cause analysis, health and safety, handling of hazardous  
materials, etc.

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## **ELIZABETH “LIZ” DICKINSON**

### **Sr. Environmental Chemist**

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Ms. Dickinson has over 30 years of experience in the environmental industry. Her background includes data review, data evaluation, data validation, sample collection, and project management. Ms. Dickinson has extensive experience in the data review process having examined data for a variety of matrices for compliance with state and federal validation guidelines. She has prepared sampling and analysis plans and quality assurance project plans for site investigations. She has over ten years of experience preparing NYSDEC data usability summary reports (DUSRs) and assisting in the preparation of electronic data deliverables (EDDs) for submission. She has collected samples of various matrices for both field and laboratory analyses and has performed onsite laboratory analyses. Ms. Dickinson has served as project manager for numerous contaminated sites in which she provided oversight during sampling events, coordinated with the analytical laboratories, compiled and reviewed analytical data generated, and prepared documents including expert reports. A representative sampling of her project experience is provided below.

#### **Project Experience:**

##### **Data Validation/Quality Assurance**

Validation of analytical data for volatile and semivolatile organic compounds (including tentatively identified compounds), per- and polyfluorinated alkyl substances (PFAS), perfluoroalkyl ether carboxylic acids (PFECAS), organochlorine and organophosphorus pesticides, polychlorinated biphenyls (PCBs) as Aroclors and congeners, radiological analytes, carbamates, herbicides, polynuclear aromatic hydrocarbons, dioxins/furans, total petroleum hydrocarbons, diesel range organics, gasoline range organics, metals, and classical chemistry analytes in a variety of matrices. Samples are analyzed pursuant to the United States Environmental Protection Agency (USEPA) Contract Laboratory Program Statements of Work (CLP), the USEPA SW-846 Compendium, various other USEPA methodologies, and United States Department of Energy methodologies. Thoroughly understands the U.S. EPA Functional Guidelines for data validation, as well as various regional and other agency guidelines. She has performed data validation for numerous projects.

Actively providing data validation and evaluation services for sites located in Connecticut, Massachusetts, New York, Pennsylvania, Puerto Rico, Vermont, California, Indiana, Michigan, and New Jersey. Also providing data quality assessments (DQAs) and data usability evaluations (DUEs) for USPS, NPS, and other sites in New Jersey and Connecticut. Activities include coordination of laboratory analyses, data review, comparison of results with historical data to determine trends, and preparation of validation and evaluation reports.

Provided quality assurance and data validation services in connection with New Jersey river sediment sampling program. Services included input with quality assurance project plan preparation, validation of herbicides, PCBs as Aroclors, and PCB congeners data pursuant to USEPA Region 2 guidance, and coordination with laboratories to obtain complete and defensible data packages.

#### **Education**

BS Candidate,  
Chemistry/Geology West  
Chester University, West  
Chester, PA

AA, Goldey Beacom  
College, Wilmington, DE,  
*magna cum laude*

#### **Registrations/ Certifications**

Basic Radiation Worker  
Certificate

40-Hour OSHA Hazardous  
Waste Safety Training

The NELAC Institute

Brownfield Coalition of the  
East Coast



## **ELIZABETH “LIZ” DICKINSON**

Quality assurance manager for predesign phase investigation of USEPA Region 1 Superfund site. Conducted laboratory audits, developed quality assurance project plan, attended consultant and EPA review meetings, coordinated with sampling teams and selected laboratory to ensure that project quality assurance objectives were met, conducted mid-investigation field and laboratory audits, and validated analytical data generated from investigation.

Independent quality assurance consultant and validator for remedial action activities at Region 3 Superfund site contaminated with PCBs. Conducted laboratory audit and provided input for quality assurance project plans. Secured custom-made performance evaluation (PE) samples using background soil from the site and maintained control charts for PE sample results. Validating analytical data generated from soil and fish tissue sampling efforts.

Since 1992 has provided quality assurance and data validation services for potentially responsible party (PRP) group performing remediation of Region 2 Superfund site. Services have included assistance with quality assurance project plan preparation, site visit, attending consultant review meetings, responding to USEPA and consultant questions and comments, interpretation of site data, validation of analytical data generated from pre- and post-design soil and groundwater investigations, fish tissue sample collection efforts, sediment sampling efforts, periodic stockpiled soil sample collection efforts, and in situ vapor extraction process air samples, and adding qualifiers and other information to EDDs.

Since 2006, performed as independent quality assurance consultant and validator for investigation activities at USEPA Region 2 Superfund site. Conducted site and on-site and off-site laboratory audits. Validating analytical data generated from soil, air, water, and rock core sample collection efforts, for which analysis parameters have included VOCs, metals, cyanide, monitoring natural attenuation (MNA) parameters, and compound-specific isotope analyses (CSIA).

Conducted onsite audits of environmental analytical laboratories located in the eastern, southeastern, northwestern, and midwestern United States. Audits included review of organization and personnel; sample receipt and storage area; general laboratory facilities; analytical instrumentation; data handling, review and documentation; quality assurance program plan and standard operating procedures; and prior performance evaluation data.

### **Environmental Chemistry Consulting**

Conducted onsite mass spectrometer and Fourier transform infrared spectroscopy analyses of gas cylinder samples and interpretation of analytical data generated. Los Alamos National Laboratories, New Mexico.

Environmental chemistry consultant, Columbia, South Carolina. Responsibilities included assistance with development of sampling and modified analytical protocols for Work Plan, communications with sampling team and analytical laboratory during sample collection, forensic chemistry interpretation of mass spectra for tentatively identified compounds, and validation of analytical data generated from sampling efforts.

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## **ELIZABETH “LIZ” DICKINSON**

Performed environmental site assessment of former railyard facility on which client intended to construct an asphalt manufacturing plant. Assessment included review of historical documents, collection and analyses of soil samples, and submission of project report to client.

Conducted telephone surveys of approximately 250 laboratories across the country to assess their capabilities, instrumentation, and quality assurance practices. Onsite audits of selected laboratories performed. Results of the telephone surveys were compiled, and a manual containing that information, laboratory audit summaries, and recommendations was prepared for use by industrial client's personnel.

Investigation of closed landfill, southeastern Pennsylvania. Collected gas samples from interior of the landfill to determine anaerobic activity within the landfill, the probability of the landfill producing a leachate or gas that would migrate from the area, and the probability of toxic chemicals migrating from the area via gas or leachate. Project included sampling, laboratory analysis of gas samples, and report preparation delineating the extent of landfill activity. Phase 2 of the project consisted of monitoring well installation, groundwater sampling, and analysis to delineate the extent of contamination.

Performed site investigations for business owner whose property appeared to have been contaminated by former neighboring tank cleaning operation. Site investigations included collection of soil samples from backhoe pits, installation and sampling of groundwater monitoring wells, and installation and sampling of groundwater monitoring points. Also reviewed numerous investigation reports prepared for USEPA related to other nearby properties of the tank cleaning business, reviewed historical records, and prepared investigation report for submission to the state regulatory agency.

### **Litigation**

Project manager for case involving a home/business owner whose property was contaminated by a gasoline leak from a nearby gas station. Conducted several rounds of split sampling to obtain soil, water, and gas phase samples. Analytical results were used to determine composition of product, amount of product in the subsurface, and rate of gas movement. Review and compilation of analytical data for use at trial. Case was settled favorably for client.

Project manager to assist a Boston law firm in defense of its client, a manufacturing facility which was accused by the local water company of contaminating its groundwater supplies. Laboratory results from samples collected from the water company wells, client's facility, and other nearby sites were compiled. Graphs were created from spreadsheet data, and ratios were calculated to assist with oral testimony. Judgment was entered for the defendant manufacturing facility and survived numerous appeals.

Project manager for case involving a lawsuit related to PCBs contamination of a Superfund site in Massachusetts. Reviewed reports of previous investigations and other documentation related to case and site, prepared database of all available analytical results, assisted with expert report and certification preparation, assisted

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## **ELIZABETH “LIZ” DICKINSON**

with preparation of exhibits, reviewed and evaluated opposing side's exhibits, and provided assistance as needed to attorneys.

Project manager for case involving former owner of manufacturing facility contaminated with chlorinated solvents and fuel oil. Reviewed reports of previous investigations and other documentation related to case, prepared database of all available analytical results, assisted with expert report preparation, and coordinated preparation of exhibits.

### **Deposition Testimony**

*United States of America and Commonwealth of Pennsylvania, Department of Environmental Resources v. National Railroad Passenger Corporation, Consolidated Rail Corporation, and Southeastern Pennsylvania Transportation Authority v. Penn Central Corporation*, U.S. District Court for the Eastern District of Pennsylvania, Civil Action Nos. 86-1094, 92-6119, 99-4835.

### **Professional Publications/Presentations:**

Urban, M.J., J.S. Smith, R.K. Dickinson, and E.K. Schultz, “Volatile Organic Analysis for a Soil, Sediment or Waste Sample,” presented at the 5<sup>th</sup> Annual Waste Testing and Quality Assurance Conference sponsored by the EPA, July 24-28, 1989.

Urban, M.J., J.S. Smith, E.K. Schultz, and R.K. Dickinson, “Volatile Organic Sample Preservation for a Soil, Sediment or Waste,” ASTM STP 1075, C.E. Tatsch, Ed., American Society for Testing Materials, Philadelphia, 1991.

### **Continuing Education/Specialized Training:**

“EPA Region III Data Validation,” EPA Central Regional Lab, Annapolis, Maryland

"Environmental Applications of GC/MS," Indiana University Short Course, Bloomington, Indiana

"Interpretation of Mass Spectra," conducted by Environmental Analytical Consulting, Inc., Edison, New Jersey

"Modern Practice of Gas Chromatography," Chromatography Forum of Delaware Valley Short Course, West Chester, Pennsylvania

"Application of Environmental Isotopes," National Well Water Association, Orlando, Florida

“Introduction to Geochemistry,” National Well Water Association, Boston, Massachusetts

"Interpretation of Mass Spectra," American Society for Mass Spectrometry, San Francisco, California

“Principles of Ground Water,” National Water Well Association, Houston, Texas

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## **POLLY S. NEWBOLD**

### **Sr. Environmental Chemist/QA Coordinator**

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Ms. Newbold has over 30 years of experience in the environmental industry. Her background includes sample collection, preparation and analysis, data validation, data review, and project management. She has collected samples of various matrices for both field and laboratory analyses, prepared and analyzed samples in a laboratory setting, and has performed field analyses. Her experience as a quality assessment/quality control (QA/QC) manager has provided her with a thorough understanding of the entire laboratory process. Ms. Newbold has extensive experience in the data review process having examined data for a variety of matrices for compliance with state and federal validation guidelines. She has over 10 years' experience preparing NYSDEC DUSRs and assisting in the preparation of EDDs for submittal. She has also collaborated with state agencies to write validation guidelines when none existed for a particular method, and she has written data review courses to be used by the data end-user for internal data screening purposes. She has prepared Sampling and Analysis Plans (SAPs) for Superfund sites and assisted in developing laboratory QA/QC acceptance criteria. Ms. Newbold has served as project manager for numerous contaminated sites in which she provided oversight during sampling events, coordinated with the analytical laboratories, compiled and reviewed generated data, mapped laboratory results to observe trends in contamination, and prepared documents including expert reports. She has performed environmental site investigations evaluating the nature and extent of site contamination, and she is experienced in performing property transfer evaluations including Phase I and Phase II investigations in New Jersey and Pennsylvania. A representative sampling of her project experience is provided below:

#### **Project Experience:**

##### **Data Validation/Quality Assurance**

Performed validation of analytical data for samples analyzed pursuant to the U.S. EPA Contract Laboratory Program Statement of Work (CLP), U.S. EPA SW-846, and various other EPA methodologies. Thoroughly understands the U.S. EPA Functional Guidelines for data validation, as well as various regional and other agency guidelines. She has performed data validation for numerous projects.

Actively providing data validation and evaluation services for sites located in Connecticut, Nevada, Florida, Pennsylvania, and New Jersey. The sites are contaminated with volatile and semivolatile compounds and metals. Activities include coordination of laboratory analyses, data review, comparison of results with historical data to determine trends, and preparation of validation and evaluation reports.

Performed critical review and validation of analytical data packages received from quarterly sampling rounds conducted at industrial client's plant site, which is highly contaminated with organic compounds. Sampling procedures and analytical results were reviewed for accuracy and consistency with past sampling rounds, and recommendations for modified analytical methods were offered to ensure more reliable analytical data.

#### **Education**

Masters Candidate,  
Environmental Science,  
Rutgers University - New  
Brunswick, NJ

BS, Science, State  
University of New York at  
Buffalo - 1978

#### **Registrations/ Certifications**

Rutgers University  
Professional Certificate  
Program in Geomatics –  
New Brunswick, NJ

Certified Project  
Management Professional  
(PMP) – Certification No.  
2912322

40-Hour OSHA Hazardous  
Waste Safety Training

Adult and Child CPR and  
AED

#### **Professional Affiliations**

National Ground Water  
Association

American Chemical  
Society

CIANJ – Environmental  
Business Roundtable

NJDEP LSRPA – member

TNI – The NELAC Institute  
– member.

NEMC - National  
Environmental Monitoring

## **POLLY S. NEWBOLD**

Developed QA/QC manual for monitoring program for a major chemical company. Included appropriate methodology for sampling, analysis, and documentation for all phases of program. Served as quality assurance manager for the investigation phase of drug company's involvement of public water contamination. Included the development of alternative analysis program and implementation of program.

Conference – session chair

Conducted onsite audits of environmental analytical laboratories located in the eastern, southeastern, northwestern, and midwestern United States. Audits included review of organization and personnel; sample receipt and storage area; general laboratory facilities; analytical instrumentation; data handling, review and documentation; quality assurance program plan and standard operating procedures; and prior performance evaluation data.

Served as Quality Control/Quality Control Officer for the remediation of a Superfund site in Pennsylvania. Responsibilities included preparation of Sampling and Analysis Plan, completing field audits of sample collection, tracking of field sampling and laboratory activities, and appraisal of laboratory data corrective action procedures. Performed data validation and evaluation services and prepared QA/QC validation reports for data generated by cyclical sample collection episodes.

### **Project Oversight**

Monitored sampling and processing techniques to ensure compliance with agency-approved operating procedures for a large sediment project located in the northeast. Reviewed field logbooks and field-generated forms for accuracy and completeness. Produced plots to examine trends in analytical data. Examined field procedures to determine sources of contamination.

### **Environmental Chemistry Consulting**

Developed and conducted sampling methods at the plant site of a carbon treatment unit manufacturer to determine source of methylene chloride contamination. Sampling conducted in step-wise fashion to isolate the source of contamination. Coordinated with the laboratory to ensure quick turnaround time and the use of appropriate analytical methodology. Recommendations offered to client for development of in-house quality assurance program to detect and eliminate contamination prior to treatment unit shipment.

Project manager to a New Jersey law firm in support of its client, a local water company, who was accusing chemical manufacturing companies of contaminating the water supply system. Laboratory results from samples taken over an eighteen-year period from the water company's wells, facility, and monitoring wells were compiled into spreadsheet form. Graphs were created from spreadsheet data and ratios were calculated to assist with oral testimony.

Project manager for bioremediation of polynuclear aromatic compounds in coal tar. Tasks included the development of the analytical method, coordination with client and laboratory for expedited analytical results, data validation, and evaluation of results for compliance with project goals.

Conducted the sampling of water flowing over two outfalls into a New Jersey river to

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## **POLLY S. NEWBOLD**

determine the extent, if any, of hexavalent chromium discharge into the river. Performed on-site analysis to determine the presence or absence of hexavalent chromium in outfall samples and standing water located on site. Testified as fact witness.

Coordinated sampling and analysis project for firm needing to comply with tighter restrictions for their wastewater discharge.

Served as quality control coordinator for a large sediment sampling program of a New Jersey river. Participated in the preparation and review of the site-specific Quality Assurance Project Plan. Assisted in developing site-specific acceptance limits where none existed. Conducted audits of the field sampling techniques used for sediment sampling for compliance with site-specific sampling Standard Operating Procedures. Performed audits of participating analytical laboratories. Provided oversight to sample processing performed in field facility. Coordinated third-party data validation effort. Prepared data tables and supporting graphs for

Participated in the preparation and review of the site-specific Quality Assurance Project Plan for an industrial facility located in Connecticut. Assisted in developing site-specific acceptance limits where none existed. Coordinated analysis program with the participating laboratories prior to sample collection. Performed audit of primary analytical laboratory. Conducted an on-site audit of the field sampling for regulatory compliance. Performed third-party data validation effort.

Served as quality control coordinator for an industrial site located in New Jersey contaminated with trichloroethene. Assisted with the preparation of the site-specific Quality Control Project Plan (QAPP). Reviewed QAPP for completeness. Collected treatment system, soil, and groundwater samples. Coordinated laboratory analysis. Compiled data and prepared reports for submission to oversight agency.

Developed site-specific sampling and analysis plan manual for remediation program for major chemical manufacturing company. Included appropriate methodology for sampling, analysis, QA/QC and documentation.

Served as environmental chemistry consultant to a firm located in Midlothian, Texas. Responsibilities included assistance with development of modified sample preparation and analytical protocols, coordination of sample preparation, communications with analytical laboratory during analytical process, and daily contact with client with respect to project progress.

Performed unannounced audits of a of network environmental laboratories at the request of management. Audits included evaluation of day-to-day quality control/quality assurance practices. Developed a program of quarterly program evaluation (PE) samples to monitor quality within a given laboratory.

Environmental chemistry consultant for a firm that screen printed highway signs.

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## **POLLY S. NEWBOLD**

Responsibilities included observation of the removal of two underground storage tanks, investigation of area of stressed vegetation, development and implementation of field analytical protocols for the detection and quantification of hexavalent chromium, coordination of analytical program with the laboratory, and compilation of final report.

Served as project manager in assisting a steel manufacturer with the delisting of co-product as a hazardous substance. Responsibilities included sampling, pulverizing, and sieving sample to obtain homogeneity, coordination of round robin analytical program among three laboratories, and preparation of final reports for submission to state agencies.

### **Litigation**

Compiled and evaluated historical sample data and reports for preparation of an expert report with respect to a large Superfund site in Pennsylvania. Reviewed reports and assisted with the preparation of expert report.

Served as project manager for former gas station sites contaminated by gasoline. Conducted several rounds of sampling to determine source of contamination. Reviewed historical data, documents, and reports to assist with the preparation of expert reports. Provided oversight to site activities. Designed and developed exhibits to be used during trial.

Project manager to assist a New Jersey law firm with litigation for its client with respect to petroleum hydrocarbon and PCB contamination caused by previous owner. Conducted field sampling to determine location of contamination. Coordinated analytical efforts with laboratory. Compiled and evaluated historical sample data, documents, and reports for litigation preparation.

Project manager to assist a New Jersey law firm with litigation for its client with respect to heating oil No. 2 contamination, which occurred during the previous owner's occupancy. Coordinated and conducted field sampling to determine source and extent of contamination. Provided oversight during field activities. Coordinated analytical efforts with laboratory. Compiled and evaluated historical sample data, documents, and reports for litigation preparation. Prepared reports at request of counsel.

Project manager to assist a New York law firm with litigation for its client with respect to alleged contamination caused by fill material. Coordinated and conducted field sampling to determine source and extent of contamination. Coordinated analytical efforts with laboratory. Compiled and evaluated historical sample data, documents, and reports for litigation preparation.

Project manager to assist a New York law firm with the investigation and possible litigation for its client with respect to alleged lead contamination caused by the disposal of lead-containing metal sludges from a former dye manufacturing facility. Determined sampling locations using historical aerial photographs. Coordinated and conducted field sampling to determine source and extent of contamination. Coordinated analytical efforts with laboratory. Compiled and evaluated historical

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## **POLLY S. NEWBOLD**

sample data, documents, and reports.

Project manager to assist a New Jersey law firm with litigation for its client with respect to contamination caused by the previous owner and the manufacture of relays. Coordinated and conducted field sampling to determine source and extent of contamination. Coordinated analytical efforts with laboratory. Compiled analytical data for use by engineering firm. Produced computer generated maps of the locations of contamination on an analyte-by-analyte basis. Compiled and evaluated sample data, historical documents, and reports for litigation preparation.

Project manager to assist a New York law firm with litigation for its client with respect to jet fuel contamination found at a major airport. Reviewed quarterly data generated by on-site and off-site laboratories for the presence of petroleum hydrocarbons.

### **Hazardous Waste Investigation**

Conducted environmental assessments in support of property transactions for industrial, commercial and residential properties. The projects at commercial and industrial sites in New Jersey have been conducted under the New Jersey Department of Environmental Protection ISRA regulations where preliminary assessments and site investigations are required.

Provided Phase I and Phase II program support at gas manufacturing facilities located in Pennsylvania and New Jersey.

Conducted Phase I assessments for residential redevelopment properties located throughout New Jersey. Activities include sampling, data collection, data analysis and management, and report preparation.

Conducted groundwater, monitoring well, and soils sampling at sites located primarily in New Jersey. Activities were performed in support of Phase II programs and ISRA remedial investigations.

Prepared Electronic Data Delivery (EDD) tables and program reports for submission to NJDEP.

### **Professional Publications/Presentations:**

“SPE: The Good, the Bad, and the Ugly”, NEMC August 2017.

“Data Usability Part 1: Data Validation Is More Than Just A Checklist”, NEMC Presentation, August 2016.

“Setting Up a Project With a Laboratory”, NJ Licensed Site Remediation Professional Association Training, March 2013.

“Data Usability Assessment”, NJ Licensed Site Remediation Professional Association Training, March 2013.

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## **POLLY S. NEWBOLD**

### **Continuing Education/Specialized Training:**

"Advanced Petroleum Forensics", Rutgers University, October 2013.

"Professional Certificate Program in Geomatics", Rutgers University, 2001.

"Environmental Application of GC/MS", Indiana University Short Course, Bloomington, Indiana, July 1995.

"Source Sampling Course", Entropy Short Course, Raleigh, North Carolina, August 1994.

"Fundamentals of the 1990 Clean Air Act Amendments," conducted by Lancaster Laboratories, Lancaster, Pennsylvania, November 1992.

Environmental Analytical Chemistry: Air Toxics Monitoring - ACS, Washington, DC, August 1992.

"Modern Practice of Gas Chromatography", Chromatography Forum of Delaware Valley Short Course, West Chester, Pennsylvania, May 1991.

"NPDES Permitting," USEPA Short Course, Arlington, Virginia, March 1991.

"Environmental Site Assessments in Conjunction with Real Estate Transactions," National Water Well Association, Philadelphia, Pennsylvania, March 1991

"Interpretation of Mass Spectra," conducted by Environmental Analytical Consulting, Inc., Edison, New Jersey, March 1990.

"Principles of Ground Water," National Water Well Association Short Course, Orlando, Florida, January 1989.

"Shewhart Charting," George Washington University Short Course, Orlando, Florida, June 1988.

"QA for Analytical Laboratories," AOAC Short Course, Arlington, Virginia, July 1988.

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# Appendix H

60 McLean Avenue, Yonkers, NY

Data Usability Summary Reports (TBC)



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599



**DATA VALIDATION**  
**FOR**  
**60 McLEAN AVENUE**  
**YONKERS, NY**  
**ORGANIC AND INORGANIC ANALYSIS DATA**

**Laboratory Sample Delivery Group (SDG) No. L2123311**

**Analyses Performed By:**  
**Alpha Analytical**  
**Westborough, Massachusetts**

**For:**  
**Impact Environmental Inc.**  
**Bohemia, NY**

**Data Validation By:**  
**ddms, inc.**  
**St. Paul, Minnesota 55102**

**July 30, 2022**

**2144-000102**  
**60 McLean Avenue\L2123311.docx**

## EXECUTIVE SUMMARY

Validation of the organic analyses data prepared by Alpha Analytical Westborough, Massachusetts for five groundwater samples from the 60 McLean Avenue Site has been completed by de maximis Data Management Solutions, Inc. (ddms). Stage 4 validation was performed on the sample data. The data were reported by the laboratory under SDG No. L2123311. The following samples were reported:

WP-11 WP-15	WP-12	WP-13	WP-14
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Based on professional judgment, results for non-detects should be considered to be “U,” not detected, at the analyte-specific reporting limit (RL) to represent the lowest concentration at which the laboratory can detect and accurately quantitate sample concentrations based on the documentation provided. The laboratory reported results as not detected at the method detection limit (MDL). The MDL is an estimated value based on a statistical determination, not a quantitative measurement supported by the data provided and should not be used to report non-detect results. It should also be noted by the data user that the laboratory reported non-detect results, RLs, and MDLS to three significant figures. The level of accuracy portrayed at these concentrations and estimated concentrations is not supported by the data and should not be used.

Below is the Data Usability Summary Report (DUSR) associated with these samples.

<b>Data Usability Summary Report</b>	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See following sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes – See Attachments A, B, and C



Based on the validation effort, the following data qualifiers were applied:

#### VOCs

- Results for dichlorodifluoromethane and chloromethane in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (UJ) due to a decrease in sensitivity from the initial calibration.
- Results for tetrachloroethene in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (J+) due to an increase in sensitivity from the initial calibration.
- Results for methyl tert butyl ether, 1,2,3-trichloropropane, dichlorodifluoromethane, 2-hexanone, 2,2-dichloropropane, naphthalene, 1,2,3-trichlorobenzene, 1,4-dioxane, and trans-1,4-dichloro-2-butene in WP-11 were qualified as estimated (J, UJ) due to laboratory control sample (LCS)/LCS duplicate (LCSD) excursions.

#### SVOCs

##### 8270D Fullscan

- Results for 2-nitroaniline, 2,6-dinitrotoluene, butyl benzyl phthalate, and di-n-octyl phthalate in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (UJ) based on high percent differences (%Ds) between the initial calibration (IC) and the IC verification (ICV) standards.
- Results for all target compounds in WP-13 and WP-15 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.
- Results for benzyl alcohol in WP-11, WP-12, and WP-14 were qualified as estimated (UJ) based on low recovery for one or both of the associated surrogate compounds
- Results for 3,3'-dichlorobenzidine and 4-chloroaniline in WP-11, WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (UJ) based on low recoveries in the LCS and LCSD.

##### 8270D SIM

- Results for hexachloroethane, naphthalene, hexachlorobutadiene, acenaphthylene, 2-methylnaphthalene, 2-chloronaphthalene, and pyrene in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (J, UJ) based on high variability between the ICV and the IC.

- Results for benzo(ghi)perylene and indeno(1,2,3-cd)pyrene in WP-13 were qualified as not detected (U) at the reporting limit, based on presence of these compounds in the laboratory method blank at similar concentrations.
- Results for all target compounds in WP-13 and WP-15 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in the base/neutral extractables fraction.

All other results were determined to be valid as reported by the laboratory.

This report should be considered part of the data package for all future distributions of the data.

## **INTRODUCTION**

Analyses for the requested parameters were performed by the laboratory according to the following analytical methods:

Volatile Organic Compounds (VOCs)	SW846 Method 8260C
Semivolatile Organic Compounds (SVOCs)	SW846 Method 8270D SW846 Method 8270DSIM

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

ddms' validation was performed in conformance with the USEPA "National Functional Guidelines (NFG) for Organic Data Review" (2020), ddms' Standard Operating Procedures (SOPs) for the methods followed, the requirements of the analytical methods followed, and the specifications of the project-specific Quality Assurance Project Plan (QAPP). Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the CLP. This requires that the data package be presented in accordance with the CLP requirements, so that sufficient supporting documentation is available to facilitate the validation effort. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the NFG:

**U** The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

**J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**J+** The result is an estimated quantity, but the result may be biased high.

**J-** The result is an estimated quantity, but the result may be biased low.

**NJ** The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.



**UJ** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

## I. Holding Times, Preservation and Sample Integrity

Copies of the applicable chain of custody (COC) records were included in the data package, documenting a sample collection date of May 5, 2021. The samples were also received at the laboratory on May 5, 2021

The temperature of the cooler upon receipt at the laboratory (4.3°C) was acceptable (QC <6°C). Appropriate sample preservation was noted on the COC records, sample receipt checklists, and VOC run logs. All samples were prepared and analyzed within method holding times.

## II. Documentation

The following documentation issues were observed during the validation effort:

- The report narrative states that LCS/LCSD recoveries for benzidine were unacceptably low; however, benzidine was not a reported analyte for these samples.

The remainder of this report discusses the review effort for each of the parameters. The tables below document the quality control (QC) elements reviewed for each analysis parameter. Where a quality indicator was deemed acceptable after thorough review, no further discussion is included in this report. Detailed findings are included for each quality element that impacted the usability of the reported results. Additional information or explanation is included as needed, to provide support for decisions made, based on the validator's best professional judgment.

Where a result was qualified J+ or J- and J, the J qualifier takes precedence. Where a result was qualified biased high and low for differing data quality excursions, the final qualifier is J with an indeterminate bias.

## III. VOCs

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Surrogates	Y
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field and Laboratory Duplicates	N/A
Matrix Spike (MS)/Matrix Spike Duplicate (MSD)	N/A
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	N/A

N/A – not applicable

## A. Calibration

Data for one IC were provided, performed on instrument GONZO on 3/2/21. All of the IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable except for acetone (0.042), acrylonitrile (0.047), and 1,4-dioxane (0.001). A review of other laboratory quality control data supports the laboratory's ability to detect and accurately quantify the compounds. No data were qualified on this basis.

An initial calibration verification (ICV) standard was analyzed after the IC; all percent differences (%Ds) were acceptable in the ICV standard.

Data for two continuing calibration standards were reported. All %Ds were acceptable except as summarized below. Where the excursion represented an increase in sensitivity and the analyte was not detected, no data required qualification. Data were qualified as defined in the table below.

Parameter	%D	Samples Affected	Qualifier Applied
Batch 1496318-2			
Dichlorodifluoromethane	28	WP-12 WP-13 WP-14 WP-15	UJ
Chloromethane	23		
1,4-Dioxane	-22		none
Tetrachloroethene	-25		J+
Bromoform	-21		none
trans-1,4-Dichloro-2-butene	-31		none
1,2-Dibromo-3-chloropropane	-21		none
Naphthalene	-26		none
Batch 1496478-2			
Dichlorodifluoromethane	-36	WP-11	none
Bromomethane	-29		none
Acetone	-79		J+
Methyl tert-butyl ether	-27		none
2,2-Dichloropropane	-37		none
trans-1,3-Dichloropropene	-22		none
trans-1,4-Dichloro-2-butene	-51		none
Naphthalene	-24		J+

## B. LCS/LCSD

Two LCS/LCSD pairs were prepared and analyzed with these samples. Recoveries for all spiked compounds assessed (70-130% R) and agreement between paired results (<20 RPD) were acceptable except as summarized below.



Parameter	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1496318-3/4</i>					
trans-1,4-Dichloro-2-butene	69	a	a	WP-12 WP-13 WP-14 WP-15	UJ
<i>Batch 1496478-3/4</i>					
Methyl tert butyl ether	a	a	22	WP-11	UJ
1,2,3-Trichloropropane	a	a	21		UJ
Acrylonitrile	a	140	a		none
Dichlorodifluoromethane	64	a	a		UJ
Acetone	180	180	0		none
2-Hexanone	a	a	23		UJ
2,2-Dichloropropane	63	a	16		UJ
Naphthalene	a	a	27		J
1,2,3-Trichlorobenzene	a	a	27		UJ
1,4-Dioxane	a	a	29		UJ
trans-1,4-Dichloro-2-butene	48	57	a		UJ

#### IV. SVOCs (8270D Fullscan)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	NA
Matrix Spike (MS)/MS duplicate (MSD)	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

##### A. Calibration

Two initial calibrations were provided in support of the sample results, one performed on 7/12/20 on instrument SV106 and another performed on 3/30/21 on instrument SV124. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after the IC; all percent differences (%Ds) were acceptable ( $\leq 20\%$ ) in the ICV standard, with the exceptions detailed below:

ICV Date	Compound	%D	Samples Affected	Qualifier Applied
7/13/2020 @ 4:27 am SV106	2-Nitroaniline	27.5	WP-14	UJ
	2,6-Dinitrotoluene	21.5	WP-15	
	Butyl benzyl phthalate	27.9	WP-12	
	Di-n-octyl phthalate	21.9	WP-13	

Results for 2-nitroaniline, 2,6-dinitrotoluene, butyl benzyl phthalate, and di-n-octyl phthalate in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (UJ) based on high %Ds in the ICV.

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable ( $\leq 20\%$ ) with the following exception:

CC Date	Compound	%D	Samples Affected	Qualifier Applied
5/11/2021 @ 14:13 SV124	bis(2-Chloroisopropyl) ether	+33.5	WP-11	None

The high %D for bis(2-chloroisopropyl) ether represents an increase in sensitivity from the IC and this compound was not detected in WP-11; therefore, no action was necessary.

## B. Surrogates

Six surrogate compounds (2-fluorophenol [2FP], phenol-d<sub>5</sub> [PHL], nitrobenzene-d<sub>5</sub> [NBZ], fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], and terphenyl-d<sub>14</sub> [TPHd<sub>14</sub>]), were added before extraction to all QC and field samples. Recoveries for the surrogates were acceptable (70-130%) with the exceptions detailed below:

Sample	2FP	PHL	NBZ	FBP	TBP	TPHd <sub>14</sub>	Qualifier Applied
WP-11	a	61	a	a	a	a	J-, UJ
WP-12	59	52	a	a	67	a	
WP-13	39	40	59	58	60	a	
WP-14	55	55	a	a	56	a	
WP-15	49	46	a	66	59	a	

Results for all target compounds in WP-13 and WP-15 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.

Only phenol-d<sub>5</sub> and 2-fluorophenol have bearing on the single acid-extractable target compound (benzyl alcohol) reported in the target list for these samples; therefore, based on professional judgement, recoveries for TBP did not impact sample results.

Results for benzyl alcohol in WP-11, WP-12, and WP-14 were qualified as estimated (UJ) based on low recovery for one or both of the associated surrogate compounds, phenol-d<sub>5</sub> and 2-fluorophenol.

### C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

One LCS/LCSD pair was prepared and analyzed with the extraction batch. Recoveries for all spiked compounds assessed (70-130% R) and agreement between paired results (<20 RPD) were acceptable with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1497011-2/3</i>					
3,3'-Dichlorobenzidine	56	56	a	MW-11 MW-12 MW-13 MW-14 MW-15	UJ
bis(2-chloroisopropyl) ether	a	131	a		None
4-Chloroaniline	60	55	a		UJ

Results for 3,3'-dichlorobenzidine and 4-chloroaniline in MW-11, MW-12, MW-13, MW-14, and MW-15 were qualified as estimated (UJ) based on low recoveries in the LCS and LCSD.

There were no detections of bis(2-chloroisopropyl) ether in the field samples; therefore, no action was necessary for this compound.

### V. SVOCs (Method 8270D SIM)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	Y
Field Duplicates	NA
Matrix Spike (MS)/MS duplicate (MSD)	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed



## A. Calibration

Two initial calibrations were provided in support of the samples results, one performed on 2/24/21 and the other on 5/6/21, both on instrument SV119. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after the IC; all percent differences (%Ds) were acceptable ( $\leq 20\%$ ) in the ICV standard, with the exceptions detailed below:

ICV Date	Compound	%D	Samples Affected	Qualifier Applied
2/24/21 @ 05:28 pm SV119	Hexachloroethane	23.0	WP-12	J, UJ
	Naphthalene	25.3	WP-13	
	Hexachlorobutadiene	21.6	WP-14	
	Acenaphthylene	25.0	WP-15	
	2-Methylnaphthalene	27.2		
	2-Chloronaphthalene	26.0		
	Pyrene	21.8		

Results for hexachloroethane, naphthalene, hexachlorobutadiene, acenaphthylene, 2-methylnaphthalene, 2-chloronaphthalene, and pyrene in WP-12, WP-13, WP-14, and WP-15 were qualified as estimated (J, UJ) based on high variability between the ICV and the IC.

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable ( $\leq 20\%$ ).

## B. Blanks

One method blank was prepared with the single analytical batch that included all of the site samples. The following compounds were detected in the method blank.

ICV Date	Compound	%D	Samples Affected	Qualifier Applied
WG1497014-1	Benzo(b)fluoranthene	0.02 $\mu\text{g/L}$	WP-13	U
	Benzo(ghi)perylene	0.02 $\mu\text{g/L}$		
	Indeno(1,2,3-cd)pyrene	0.01 $\mu\text{g/L}$		

Results for benzo(ghi)perylene and indeno(1,2,3-cd)pyrene in WP-13 were qualified as not detected, at the reporting limit based on presence of these compounds in the laboratory method blank at similar concentrations. Benzo(b)fluoranthene was not detected in this sample.

## C. Surrogates

Six surrogate compounds (2-fluorophenol [2FP], phenol- $\text{d}_5$  [PHL], nitrobenzene- $\text{d}_5$  [NBZ], fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], and terphenyl- $\text{d}_{14}$  [TPHd14]) were added before extraction to all QC and field samples. Of these, only the three

base/neutral extractable surrogate compounds (NBZ, FBP, and TPHd14) have bearing on the reported target compounds. Recoveries for these surrogates were acceptable (70-130%) with the exceptions detailed below:

Sample	2FP	PHL	NBZ	FBP	TBP	TPHd <sub>14</sub>	Qualifier Applied
WP-13	NA	NA	53	58	NA	a	J-, UJ
WP-15	NA	NA	62	62	NA	a	

Results for all target compounds in WP-13 and WP-15 were qualified as estimated (J-, UJ) based on low recoveries for two surrogates in the base/neutral extractables fraction.

**Attachment A**  
**Volatiles QC Summary Forms - Excursions**



## Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2021\210227A\  
 Method File : G\_210227A\_8260.m  
 Title : VOLATILES BY GC/MS  
 Last Update : Tue Mar 02 13:15:36 2021  
 Response Via : Initial Calibration

## Calibration Files

L11 =VG210227A04.D L1 =VG210301N03.D L2 =VG210227A08.D L3 =VG210227A09.D L4 =VG210227A10.D  
 L6 =VG210227A11.D L8 =VG210227A12.D L10 =VG210227A13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
-----ISTD-----											
1) I	Fluorobenzene										
2) TP	Dichlorodifluo...	0.134	0.123	0.137	0.143	0.152	0.146	0.152	0.141	7.47	
3) TP	Chloromethane	0.275	0.229	0.179	0.188	0.184	0.183	0.183	0.203	17.75	
4) TC	Vinyl chloride	0.200	0.154	0.158	0.150	0.162	0.171	0.169	0.176	9.36	
5) TP	Bromomethane	0.276	0.157	0.099	0.079	0.080	0.086	0.094	*L	0.9943	
6) TP	Chloroethane	0.113	0.111	0.102	0.108	0.095	0.067		0.099#	17.21	
7) TP	Trichlorofluor...	0.195	0.224	0.234	0.246	0.261	0.252	0.262	0.239	10.03	
8) TP	Ethyl ether	0.079	0.072	0.068	0.076	0.079	0.080	0.083	0.077	6.91	
10) TC	1,1-Dichloroet...	0.115	0.132	0.128	0.137	0.145	0.145	0.151	0.136	9.05	
11) TP	Carbon disulfide	0.429	0.394	0.356	0.388	0.415	0.409	0.426	0.402	6.30	
12) TP	Freon-113	0.092	0.113	0.134	0.146	0.155	0.149	0.156	0.135	17.90	
14) TP	Acrolein		0.020	0.017	0.019	0.020	0.021	0.022	0.020#	8.89	
15) TP	Methylene chlo...	0.188	0.149	0.133	0.143	0.148	0.147	0.151	0.151	11.41	
17) TP	Acetone		0.047	0.038	0.039	0.041	0.043	0.045	0.042#	8.14	
18) TP	trans-1,2-Dich...	0.128	0.151	0.134	0.143	0.152	0.151	0.154	0.145	6.98	
19) TP	Methyl acetate	0.113	0.084	0.078	0.092	0.098	0.104	0.108	0.097#	13.10	
20) TP	Methyl tert-bu...	0.318	0.343	0.350	0.398	0.421	0.427	0.442	0.385	12.53	
21) TP	tert-Butyl alc...	0.012	0.014	0.013	0.014	0.015	0.016	0.017	0.014#	13.34	
22) TP	Diisopropyl ether	0.391	0.434	0.424	0.494	0.532	0.542	0.560	0.483	13.73	
23) TP	1,1-Dichloroet...	0.268	0.295	0.275	0.297	0.309	0.308	0.313	0.295	5.94	
24) TP	Halothane	0.097	0.109	0.111	0.124	0.130	0.128	0.132	0.119	11.13	
25) TP	Acrylonitrile	0.039	0.038	0.044	0.048	0.051	0.053	0.055	0.047#	14.00	
26) TP	Ethyl tert-but...	0.374	0.391	0.398	0.472	0.506	0.512	0.531	0.455	14.40	
27) TP	Vinyl acetate	0.271	0.259	0.255	0.305	0.311	0.320	0.325	0.292	10.19	
28) TP	cis-1,2-Dichlo...	0.165	0.174	0.149	0.165	0.175	0.170	0.178	0.168	5.92	
29) TP	2,2-Dichloropr...	0.230	0.225	0.223	0.242	0.247	0.241	0.244	0.236	4.18	
30) TP	Bromochloromet...	0.072	0.080	0.072	0.074	0.073	0.071	0.072	0.073	4.04	
31) TP	Cyclohexane	0.219	0.227	0.258	0.283	0.302	0.292	0.308	0.270	13.25	
32) TC	Chloroform	0.237	0.286	0.254	0.281	0.280	0.289	0.291	0.274	7.46	
33) TP	Ethyl acetate	0.100	0.121	0.120	0.137	0.147	0.154	0.160	0.134	16.08	
34) TP	Carbon tetrach...	0.235	0.198	0.192	0.212	0.236	0.252	0.249	0.228	10.65	

## Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2021\210227A\  
 Method File : G\_210227A\_8260.m  
 Title : VOLATILES BY GC/MS  
 Last Update : Tue Mar 02 13:15:36 2021  
 Response Via : Initial Calibration

## Calibration Files

L11 =VG210227A04.D L1 =VG210301N03.D L2 =VG210227A08.D L3 =VG210227A09.D L4 =VG210227A10.D  
 L6 =VG210227A11.D L8 =VG210227A12.D L10 =VG210227A13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
35) TP	Tetrahydrofuran	0.064	0.047	0.041	0.044	0.045	0.046	0.047	0.048#	15.63	
36) S	Dibromofluorom...	0.270	0.262	0.267	0.260	0.251	0.246	0.242	0.256	4.13	
37) TP	1,1,1-Trichlor...	0.214	0.247	0.246	0.270	0.281	0.277	0.282	0.259	9.59	
39) TP	2-Butanone	0.084	0.060	0.048	0.060	0.062	0.067	0.069	0.064#	17.38	
40) TP	1,1-Dichloropr...	0.159	0.178	0.187	0.212	0.225	0.222	0.228	0.202	13.39	
41) TP	Benzene	0.556	0.495	0.555	0.531	0.602	0.628	0.630	0.645	0.580	9.29
42) TP	tert-Amyl meth...	0.317	0.357	0.343	0.396	0.423	0.432	0.450	0.388	12.89	
43) S	1,2-Dichloroet...	0.317	0.323	0.320	0.318	0.296	0.298	0.303	0.306	0.310	3.41
44) TP	1,2-Dichloroet...	0.220	0.215	0.196	0.215	0.221	0.219	0.224	0.216	4.31	
47) TP	Methyl cyclohe...	0.216	0.199	0.234	0.266	0.287	0.278	0.294	0.254	14.57	
48) TP	Trichloroethene	0.195	0.162	0.161	0.148	0.171	0.179	0.180	0.172#	8.29	
50) TP	Dibromomethane	0.059	0.087	0.080	0.090	0.093	0.093	0.095	0.085	14.61	
51) TC	1,2-Dichloropr...	0.128	0.146	0.138	0.159	0.165	0.162	0.166	0.152	9.88	
53) TP	2-Chloroethyl ...	0.063	0.060	0.064	0.065	0.061	0.060	0.052	0.061	7.08	
54) TP	Bromodichlorom...	0.184	0.199	0.189	0.214	0.223	0.221	0.228	0.208	8.48	
57) TP	1,4-Dioxane	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001#	15.21	
58) TP	cis-1,3-Dichlo...	0.181	0.204	0.215	0.213	0.248	0.262	0.264	0.270	0.232	14.23
59) I	Chlorobenzene-d5	-----ISTD-----									
60) S	Toluene-d8	1.170	1.170	1.195	1.186	1.186	1.175	1.171	1.183	1.180	0.80
61) TC	Toluene	0.520	0.418	0.466	0.436	0.492	0.507	0.508	0.520	0.483	8.09
62) TP	4-Methyl-2-pen...	0.047	0.057	0.053	0.060	0.064	0.067	0.070	0.060#	13.46	
63) TP	Tetrachloroethene	0.198	0.210	0.204	0.236	0.249	0.246	0.252	0.228	10.10	
65) TP	trans-1,3-Dich...	0.187	0.225	0.234	0.236	0.290	0.309	0.310	0.321	0.264	18.72
67) TP	Ethyl methacry...	0.186	0.189	0.190	0.226	0.232	0.238	0.243	0.215	11.82	
68) TP	1,1,2-Trichlor...	0.101	0.113	0.110	0.133	0.138	0.138	0.144	0.125	13.29	
69) TP	Chlorodibromom...	0.135	0.161	0.164	0.202	0.214	0.216	0.223	0.188	18.19	
70) TP	1,3-Dichloropr...	0.210	0.234	0.231	0.274	0.282	0.285	0.292	0.258	12.54	
71) TP	1,2-Dibromoethane	0.124	0.146	0.136	0.165	0.172	0.174	0.180	0.157	13.70	
72) TP	2-Hexanone	0.111	0.104	0.095	0.113	0.118	0.123	0.127	0.113	9.69	
73) TP	Chlorobenzene	0.510	0.509	0.494	0.559	0.570	0.576	0.589	0.544	7.04	
74) TC	Ethylbenzene	1.089	0.792	0.896	0.846	0.956	0.993	1.000	1.030	0.950	10.44

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2021\210507N\  
 Data File : V08210507N01.d  
 Acq On : 7 May 2021 4:58 pm  
 Operator : VOA108:TMS  
 Sample : WGI496318-2  
 Misc : WGI496318,ICAL17731  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 07 17:20:22 2021  
 Quant Method : I:\VOLATILES\VOA108\2021\210507N\V108\_210316A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Wed Mar 17 12:46:02 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	170	0.00
2 TP	Dichlorodifluoromethane	0.198	0.142	28.3#	119	0.00
3 TP	Chloromethane	0.354	0.273	22.9#	123	0.00
4 TC	Vinyl chloride	0.283	0.324	-14.5	194	0.00
5 TP	Bromomethane	0.119	0.108	9.2	179	0.00
6 TP	Chloroethane	0.190	0.196	-3.2	173	0.00
7 TP	Trichlorofluoromethane	0.431	0.364	15.5	140	0.00
8 TP	Ethyl ether	0.138	0.127	8.0	157	0.00
10 TC	1,1-Dichloroethene	0.219	0.219	0.0	170	0.00
11 TP	Carbon disulfide	0.692	0.642	7.2	154	0.00
12 TP	Freon-113	0.227	0.213	6.2	153	0.00
14 TP	Acrolein	0.032	0.049#	-53.1#	260#	0.00
15 TP	Methylene chloride	0.245	0.247	-0.8	170	0.00
17 TP	Acetone	* 10.000	8.083	19.2	128	0.00
18 TP	trans-1,2-Dichloroethene	0.232	0.244	-5.2	176	0.00
19 TP	Methyl acetate	0.203	0.169	16.7	148	-0.01
20 TP	Methyl tert-butyl ether	0.710	0.574	19.2	134	-0.01
21 TP	tert-Butyl alcohol	0.027	0.022#	18.5	134	-0.03
22 TP	Diisopropyl ether	1.058	1.062	-0.4	170	-0.01
23 TP	1,1-Dichloroethane	0.572	0.580	-1.4	170	0.00
24 TP	Halothane	0.186	0.186	0.0	170	-0.01
25 TP	Acrylonitrile	0.096	0.104	-8.3	182	0.00
26 TP	Ethyl tert-butyl ether	0.950	0.997	-4.9	189	-0.01
27 TP	Vinyl acetate	0.655	0.641	2.1	177	0.00
28 TP	cis-1,2-Dichloroethene	0.256	0.273	-6.6	175	0.00
29 TP	2,2-Dichloropropane	0.358	0.352	1.7	169	0.00
30 TP	Bromochloromethane	0.119	0.133	-11.8	177	0.00
31 TP	Cyclohexane	0.427	0.566	-32.6#	220#	0.00
32 TC	Chloroform	0.440	0.435	1.1	165	-0.01
33 TP	Ethyl acetate	0.209	0.220	-5.3	185	0.00
34 TP	Carbon tetrachloride	0.314	0.290	7.6	151	-0.01
35 TP	Tetrahydrofuran	0.063	0.060	4.8	159	-0.01
36 S	Dibromofluoromethane	0.278	0.291	-4.7	180	0.00
37 TP	1,1,1-Trichloroethane	0.369	0.377	-2.2	166	0.00
39 TP	2-Butanone	0.092	0.092#	0.0	164	-0.01
40 TP	1,1-Dichloropropene	0.312	0.313	-0.3	168	-0.01
41 TP	Benzene	0.887	0.937	-5.6	176	0.00
42 TP	tert-Amyl methyl ether	0.658	0.563	14.4	143	0.00
43 S	1,2-Dichloroethane-d4	0.333	0.326	2.1	168	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2021\210507N\  
 Data File : V08210507N01.d  
 Acq On : 7 May 2021 4:58 pm  
 Operator : VOA108:TMS  
 Sample : WGI496318-2  
 Misc : WGI496318,ICAL17731  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 07 17:20:22 2021  
 Quant Method : I:\VOLATILES\VOA108\2021\210507N\V108\_210316A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Wed Mar 17 12:46:02 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.362	0.380	-5.0	170	0.00
47 TP	Methyl cyclohexane	0.359	0.354	1.4	161	0.00
48 TP	Trichloroethene	0.234	0.252	-7.7	178	0.00
50 TP	Dibromomethane	0.147	0.147	0.0	163	0.00
51 TC	1,2-Dichloropropane	0.271	0.320	-18.1	198	0.00
54 TP	Bromodichloromethane	0.332	0.292	12.0	147	0.00
57 TP	1,4-Dioxane	0.00161	0.00126#	21.7#	129	0.00
58 TP	cis-1,3-Dichloropropene	0.391	0.346	11.5	153	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	161	0.00
60 S	Toluene-d8	1.175	1.301	-10.7	178	0.00
61 TC	Toluene	0.685	0.793	-15.8	182	0.00
62 TP	4-Methyl-2-pentanone	0.099	0.118	-19.2	186	0.00
63 TP	Tetrachloroethene	0.315	0.395	-25.4#	194	0.00
65 TP	trans-1,3-Dichloropropene	0.451	0.397	12.0	140	0.00
67 TP	Ethyl methacrylate	0.355	0.315	11.3	139	0.00
68 TP	1,1,2-Trichloroethane	0.209	0.224	-7.2	171	0.00
69 TP	Chlorodibromomethane	0.293	0.278	5.1	156	0.00
70 TP	1,3-Dichloropropane	0.439	0.461	-5.0	164	0.00
71 TP	1,2-Dibromoethane	0.262	0.261	0.4	156	0.00
72 TP	2-Hexanone	0.170	0.162	4.7	154	0.00
73 TP	Chlorobenzene	0.833	0.982	-17.9	184	0.00
74 TC	Ethylbenzene	1.327	1.510	-13.8	177	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.302	0.312	-3.3	162	0.00
76 TP	p/m Xylene	0.548	0.580	-5.8	166	0.00
77 TP	o Xylene	0.531	0.566	-6.6	167	0.00
78 TP	Styrene	0.887	0.955	-7.7	173	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	188	0.00
80 TP	Bromoform	0.373	0.293	21.4#	151	0.00
82 TP	Isopropylbenzene	2.616	2.368	9.5	168	0.00
83 S	4-Bromofluorobenzene	0.887	0.766	13.6	166	0.00
84 TP	Bromobenzene	0.641	0.670	-4.5	184	0.00
85 TP	n-Propylbenzene	3.068	3.094	-0.8	185	0.00
86 TP	1,4-Dichlorobutane	0.996	1.028	-3.2	191	0.00
87 TP	1,1,1,2,2-Tetrachloroethane	0.571	0.490	14.2	155	0.00
88 TP	4-Ethyltoluene	2.537	2.331	8.1	169	0.00
89 TP	2-Chlorotoluene	2.153	2.075	3.6	178	0.00
90 TP	1,3,5-Trimethylbenzene	2.299	2.115	8.0	168	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2021\210507N\  
 Data File : V08210507N01.d  
 Acq On : 7 May 2021 4:58 pm  
 Operator : VOA108:TMS  
 Sample : WGI496318-2  
 Misc : WGI496318,ICAL17731  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 07 17:20:22 2021  
 Quant Method : I:\VOLATILES\VOA108\2021\210507N\V108\_210316A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Wed Mar 17 12:46:02 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 TP	1,2,3-Trichloropropane	0.488	0.403	17.4	156	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.197	0.136	31.0#	126	0.00
93 TP	4-Chlorotoluene	1.984	1.876	5.4	175	0.00
94 TP	tert-Butylbenzene	1.866	1.771	5.1	175	0.00
97 TP	1,2,4-Trimethylbenzene	2.255	2.059	8.7	170	0.00
98 TP	sec-Butylbenzene	2.568	2.429	5.4	175	0.00
99 TP	p-Isopropyltoluene	2.336	2.263	3.1	180	0.00
100 TP	1,3-Dichlorobenzene	1.266	1.284	-1.4	185	0.00
101 TP	1,4-Dichlorobenzene	1.298	1.320	-1.7	189	0.00
102 TP	p-Diethylbenzene	1.388	1.302	6.2	175	0.00
103 TP	n-Butylbenzene	2.151	2.177	-1.2	185	0.00
104 TP	1,2-Dichlorobenzene	1.201	1.204	-0.2	183	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.332	2.026	13.1	162	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.086	0.068	20.9#	144	0.00
107 TP	1,3,5-Trichlorobenzene	0.954	1.034	-8.4	198	0.00
108 TP	Hexachlorobutadiene	0.437	0.495	-13.3	213#	0.00
109 TP	1,2,4-Trichlorobenzene	0.882	0.915	-3.7	197	0.00
110 TP	Naphthalene	1.818	1.351	25.7#	137	0.00
111 TP	1,2,3-Trichlorobenzene	0.832	0.791	4.9	174	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 4 CCC's out = 0

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2021\210508A\  
 Data File : VG210508A01.D  
 Acq On : 8 May 2021 10:33 am  
 Operator : GONZO:LAC  
 Sample : WG1496478-2  
 Misc : WG1496478,ICAL17686  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 08 10:57:36 2021  
 Quant Method : I:\VOLATILES\Gonzo\2021\210508A\G\_210227A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Mar 02 13:15:36 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	73	0.00
2 TP	Dichlorodifluoromethane	0.141	0.091	35.5#	48#	0.00
3 TP	Chloromethane	0.203	0.193	4.9	78	0.00
4 TC	Vinyl chloride	0.168	0.153	8.9	74	0.00
5 TP	Bromomethane	* 10.000	7.099	29.0#	53	0.00
6 TP	Chloroethane	0.099	0.086#	13.1	61	0.00
7 TP	Trichlorofluoromethane	0.239	0.241	-0.8	75	0.00
8 TP	Ethyl ether	0.077	0.069	10.4	74	0.00
10 TC	1,1-Dichloroethene	0.136	0.142	-4.4	80	0.00
11 TP	Carbon disulfide	0.402	0.425	-5.7	87	0.00
12 TP	Freon-113	0.135	0.146	-8.1	79	0.00
14 TP	Acrolein	0.020	0.026#	-30.0#	111	0.00
15 TP	Methylene chloride	0.151	0.159	-5.3	87	0.00
17 TP	Acetone	0.042	0.075#	-78.6#	145	-0.02
18 TP	trans-1,2-Dichloroethene	0.145	0.151	-4.1	82	0.00
19 TP	Methyl acetate	0.097	0.106	-9.3	98	0.00
20 TP	Methyl tert-butyl ether	0.385	0.280	27.3#	58	0.00
21 TP	tert-Butyl alcohol	0.014	0.016#	-14.3	89	0.00
22 TP	Diisopropyl ether	0.483	0.535	-10.8	92	-0.02
23 TP	1,1-Dichloroethane	0.295	0.334	-13.2	88	0.00
24 TP	Halothane	0.119	0.127	-6.7	83	0.00
25 TP	Acrylonitrile	0.047	0.055	-17.0	91	-0.02
26 TP	Ethyl tert-butyl ether	0.455	0.329	27.7#	60	0.00
27 TP	Vinyl acetate	0.292	0.327	-12.0	93	0.00
28 TP	cis-1,2-Dichloroethene	0.168	0.183	-8.9	89	0.00
29 TP	2,2-Dichloropropane	0.236	0.149	36.9#	49#	0.00
30 TP	Bromochloromethane	0.073	0.084	-15.1	85	0.00
31 TP	Cyclohexane	0.270	0.316	-17.0	89	0.00
32 TC	Chloroform	0.274	0.296	-8.0	85	0.00
33 TP	Ethyl acetate	0.134	0.145	-8.2	88	0.00
34 TP	Carbon tetrachloride	0.228	0.207	9.2	71	0.00
35 TP	Tetrahydrofuran	0.048	0.052	-8.3	92	0.00
36 S	Dibromofluoromethane	0.256	0.267	-4.3	75	0.00
37 TP	1,1,1-Trichloroethane	0.259	0.268	-3.5	79	0.00
39 TP	2-Butanone	0.064	0.058#	9.4	88	-0.02
40 TP	1,1-Dichloropropene	0.202	0.211	-4.5	82	0.00
41 TP	Benzene	0.580	0.605	-4.3	83	0.00
42 TP	tert-Amyl methyl ether	0.388	0.234	39.7#	50#	0.00
43 S	1,2-Dichloroethane-d4	0.310	0.323	-4.2	74	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2021\210508A\  
 Data File : VG210508A01.D  
 Acq On : 8 May 2021 10:33 am  
 Operator : GONZO:LAC  
 Sample : WG1496478-2  
 Misc : WG1496478,ICAL17686  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 08 10:57:36 2021  
 Quant Method : I:\VOLATILES\Gonzo\2021\210508A\G\_210227A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Mar 02 13:15:36 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.216	0.223	-3.2	83	0.00
47 TP	Methyl cyclohexane	0.254	0.255	-0.4	79	0.00
48 TP	Trichloroethene	0.172	0.170#	1.2	83	0.00
50 TP	Dibromomethane	0.085	0.090	-5.9	81	0.00
51 TC	1,2-Dichloropropane	0.152	0.171	-12.5	90	0.00
54 TP	Bromodichloromethane	0.208	0.210	-1.0	80	0.00
57 TP	1,4-Dioxane	0.00146	0.00140#	4.1	64	0.00
58 TP	cis-1,3-Dichloropropene	0.232	0.212	8.6	72	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	73	0.00
60 S	Toluene-d8	1.180	1.191	-0.9	73	0.00
61 TC	Toluene	0.483	0.496	-2.7	83	0.00
62 TP	4-Methyl-2-pentanone	0.060	0.059#	1.7	82	0.00
63 TP	Tetrachloroethene	0.228	0.237	-3.9	85	0.00
65 TP	trans-1,3-Dichloropropene	0.264	0.206	22.0#	64	0.00
67 TP	Ethyl methacrylate	0.215	0.188	12.6	72	0.00
68 TP	1,1,2-Trichloroethane	0.125	0.128	-2.4	85	0.00
69 TP	Chlorodibromomethane	0.188	0.176	6.4	78	0.00
70 TP	1,3-Dichloropropane	0.258	0.255	1.2	80	0.00
71 TP	1,2-Dibromoethane	0.157	0.152	3.2	81	0.00
72 TP	2-Hexanone	0.113	0.108	4.4	83	0.00
73 TP	Chlorobenzene	0.544	0.572	-5.1	85	0.00
74 TC	Ethylbenzene	0.950	0.971	-2.2	84	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.192	0.190	1.0	80	0.00
76 TP	p/m Xylene	0.378	0.394	-4.2	83	0.00
77 TP	o Xylene	0.357	0.372	-4.2	84	0.00
78 TP	Styrene	0.582	0.612	-5.2	83	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	76	0.00
80 TP	Bromoform	* 10.000	8.112	18.9	73	0.00
82 TP	Isopropylbenzene	1.637	1.643	-0.4	84	0.00
83 S	4-Bromofluorobenzene	0.805	0.804	0.1	76	0.00
84 TP	Bromobenzene	0.412	0.412	0.0	85	0.00
85 TP	n-Propylbenzene	1.984	2.011	-1.4	86	0.00
86 TP	1,4-Dichlorobutane	0.520	0.518	0.4	89	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.313	0.290#	7.3	81	0.00
88 TP	4-Ethyltoluene	1.617	1.646	-1.8	86	0.00
89 TP	2-Chlorotoluene	1.173	1.169	0.3	83	0.00
90 TP	1,3,5-Trimethylbenzene	1.447	1.496	-3.4	86	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2021\210508A\  
 Data File : VG210508A01.D  
 Acq On : 8 May 2021 10:33 am  
 Operator : GONZO:LAC  
 Sample : WG1496478-2  
 Misc : WG1496478,ICAL17686  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 08 10:57:36 2021  
 Quant Method : I:\VOLATILES\Gonzo\2021\210508A\G\_210227A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Mar 02 13:15:36 2021  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 TP	1,2,3-Trichloropropane	0.291	0.259	11.0	79	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.107	0.052	51.4#	41#	0.00
93 TP	4-Chlorotoluene	1.209	1.237	-2.3	87	0.00
94 TP	tert-Butylbenzene	1.218	1.256	-3.1	86	0.00
97 TP	1,2,4-Trimethylbenzene	1.400	1.455	-3.9	87	0.00
98 TP	sec-Butylbenzene	1.619	1.667	-3.0	87	0.00
99 TP	p-Isopropyltoluene	1.526	1.592	-4.3	86	0.00
100 TP	1,3-Dichlorobenzene	0.801	0.835	-4.2	88	0.00
101 TP	1,4-Dichlorobenzene	0.814	0.846	-3.9	87	0.00
102 TP	p-Diethylbenzene	0.886	0.915	-3.3	88	0.00
103 TP	n-Butylbenzene	1.379	1.400	-1.5	85	0.00
104 TP	1,2-Dichlorobenzene	0.736	0.749	-1.8	87	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.266	1.302	-2.8	90	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.061	0.049#	19.7	73	0.00
107 TP	1,3,5-Trichlorobenzene	0.547	0.610	-11.5	95	0.00
108 TP	Hexachlorobutadiene	0.266	0.303	-13.9	99	0.00
109 TP	1,2,4-Trichlorobenzene	0.477	0.482	-1.0	89	0.00
110 TP	Naphthalene	0.983	0.746	24.1#	72	0.00
111 TP	1,2,3-Trichlorobenzene	0.418	0.352	15.8	78	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range

SPCC's out = 10 CCC's out = 0

# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1496318-3      Analysis Date : 05/07/21 16:58      File ID : V08210507N01  
 LCSD Sample ID : WG1496318-4      Analysis Date : 05/07/21 17:19      File ID : V08210507N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	9.8	98	2	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	9.9	99	10	10	100	1	70-130	20
Carbon tetrachloride	10	9.2	92	10	9.0	90	2	63-132	20
1,2-Dichloropropane	10	12	120	10	12	120	0	70-130	20
Dibromochloromethane	10	9.5	95	10	10	100	5	63-130	20
1,1,2-Trichloroethane	10	11	110	10	11	110	0	70-130	20
Tetrachloroethene	10	12	120	10	12	120	0	70-130	20
Chlorobenzene	10	12	120	10	11	110	9	75-130	20
Trichlorofluoromethane	10	8.4	84	10	8.0	80	5	62-150	20
1,2-Dichloroethane	10	10	100	10	10	100	0	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	8.8	88	10	9.1	91	3	67-130	20
trans-1,3-Dichloropropene	10	8.8	88	10	9.1	91	3	70-130	20
cis-1,3-Dichloropropene	10	8.8	88	10	9.2	92	4	70-130	20
1,1-Dichloropropene	10	10	100	10	9.8	98	2	70-130	20
Bromoform	10	7.8	78	10	9.2	92	16	54-136	20
1,1,2,2-Tetrachloroethane	10	8.6	86	10	9.8	98	13	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	12	120	10	11	110	9	70-130	20
Ethylbenzene	10	11	110	10	11	110	0	70-130	20
Chloromethane	10	7.7	77	10	7.4	74	4	64-130	20
Bromomethane	10	9.1	91	10	9.4	94	3	39-139	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
Chloroethane	10	10	100	10	10	100	0	55-138	20
1,1-Dichloroethene	10	10	100	10	9.6	96	4	61-145	20



# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1496318-3      Analysis Date : 05/07/21 16:58      File ID : V08210507N01  
 LCSD Sample ID : WG1496318-4      Analysis Date : 05/07/21 17:19      File ID : V08210507N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Trichloroethene	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,3-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	8.1	81	10	8.7	87	7	63-130	20
p/m-Xylene	20	21	105	20	21	105	0	70-130	20
o-Xylene	20	21	105	20	21	105	0	70-130	20
cis-1,2-Dichloroethene	10	11	110	10	11	110	0	70-130	20
Dibromomethane	10	10	100	10	10	100	0	70-130	20
1,2,3-Trichloropropane	10	8.2	82	10	9.2	92	11	64-130	20
Acrylonitrile	10	11	110	10	12	120	9	70-130	20
Styrene	20	22	110	20	21	105	5	70-130	20
Dichlorodifluoromethane	10	7.1	71	10	6.8	68	4	36-147	20
Acetone	10	8.1	81	10	8.2	82	1	58-148	20
Carbon disulfide	10	9.3	93	10	9.1	91	2	51-130	20
2-Butanone	10	10	100	10	11	110	10	63-138	20
Vinyl acetate	10	9.8	98	10	10	100	2	70-130	20
4-Methyl-2-pentanone	10	12	120	10	13	130	8	59-130	20
2-Hexanone	10	9.6	96	10	11	110	14	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
2,2-Dichloropropane	10	9.8	98	10	9.9	99	1	63-133	20
1,2-Dibromoethane	10	10	100	10	10	100	0	70-130	20
1,3-Dichloropropane	10	10	100	10	11	110	10	70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	10	100	0	64-130	20
Bromobenzene	10	10	100	10	11	110	10	70-130	20





# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1496318-3      Analysis Date : 05/07/21 16:58      File ID : V08210507N01  
 LCSD Sample ID : WG1496318-4      Analysis Date : 05/07/21 17:19      File ID : V08210507N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
n-Butylbenzene	10	10	100	10	10	100	0	53-136	20
sec-Butylbenzene	10	9.4	94	10	9.6	96	2	70-130	20
tert-Butylbenzene	10	9.5	95	10	9.6	96	1	70-130	20
o-Chlorotoluene	10	9.6	96	10	9.8	98	2	70-130	20
p-Chlorotoluene	10	9.4	94	10	9.6	96	2	70-130	20
1,2-Dibromo-3-chloropropane	10	7.9	79	10	8.5	85	7	41-144	20
Hexachlorobutadiene	10	11	110	10	12	120	9	63-130	20
Isopropylbenzene	10	9.0	90	10	9.3	93	3	70-130	20
p-Isopropyltoluene	10	9.7	97	10	9.8	98	1	70-130	20
Naphthalene	10	7.4	74	10	8.3	83	11	70-130	20
n-Propylbenzene	10	10	100	10	10	100	0	69-130	20
1,2,3-Trichlorobenzene	10	9.5	95	10	10	100	5	70-130	20
1,2,4-Trichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,3,5-Trimethylbenzene	10	9.2	92	10	9.2	92	0	64-130	20
1,2,4-Trimethylbenzene	10	9.1	91	10	9.5	95	4	70-130	20
1,4-Dioxane	500	390	78	500	420	84	7	56-162	20
p-Diethylbenzene	10	9.4	94	10	9.5	95	1	70-130	20
p-Ethyltoluene	10	9.2	92	10	9.5	95	3	70-130	20
1,2,4,5-Tetramethylbenzene	10	8.7	87	10	9.0	90	3	70-130	20
Ethyl ether	10	9.2	92	10	9.5	95	3	59-134	20
trans-1,4-Dichloro-2-butene	10	6.9	69 Q	10	7.9	79	14	70-130	20



# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1496478-3      Analysis Date : 05/08/21 10:33      File ID : VG210508A01  
 LCSD Sample ID : WG1496478-4      Analysis Date : 05/08/21 11:00      File ID : VG210508A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	12	120	18	70-130	20
1,1-Dichloroethane	10	11	110	10	13	130	17	70-130	20
Chloroform	10	11	110	10	12	120	9	70-130	20
Carbon tetrachloride	10	9.1	91	10	9.8	98	7	63-132	20
1,2-Dichloropropane	10	11	110	10	13	130	17	70-130	20
Dibromochloromethane	10	9.3	93	10	10	100	7	63-130	20
1,1,2-Trichloroethane	10	10	100	10	11	110	10	70-130	20
Tetrachloroethene	10	10	100	10	11	110	10	70-130	20
Chlorobenzene	10	10	100	10	11	110	10	75-130	20
Trichlorofluoromethane	10	10	100	10	11	110	10	62-150	20
1,2-Dichloroethane	10	10	100	10	12	120	18	70-130	20
1,1,1-Trichloroethane	10	10	100	10	12	120	18	67-130	20
Bromodichloromethane	10	10	100	10	11	110	10	67-130	20
trans-1,3-Dichloropropene	10	7.8	78	10	8.4	84	7	70-130	20
cis-1,3-Dichloropropene	10	9.1	91	10	9.9	99	8	70-130	20
1,1-Dichloropropene	10	10	100	10	11	110	10	70-130	20
Bromoform	10	8.1	81	10	9.1	91	12	54-136	20
1,1,2,2-Tetrachloroethane	10	9.3	93	10	11	110	17	67-130	20
Benzene	10	10	100	10	11	110	10	70-130	20
Toluene	10	10	100	10	11	110	10	70-130	20
Ethylbenzene	10	10	100	10	11	110	10	70-130	20
Chloromethane	10	9.5	95	10	10	100	5	64-130	20
Bromomethane	10	7.1	71	10	7.2	72	1	39-139	20
Vinyl chloride	10	9.1	91	10	9.8	98	7	55-140	20
Chloroethane	10	8.6	86	10	9.2	92	7	55-138	20
1,1-Dichloroethene	10	10	100	10	12	120	18	61-145	20



# Laboratory Control Sample Summary

## Form 3

### Volatiles

**Client** : Impact Environmental **Lab Number** : L2123311  
**Project Name** : 60 MCLEAN AVE **Project Number** : 15514  
**Matrix** : WATER  
**LCS Sample ID** : WG1496478-3 **Analysis Date** : 05/08/21 10:33 **File ID** : VG210508A01  
**LCSD Sample ID** : WG1496478-4 **Analysis Date** : 05/08/21 11:00 **File ID** : VG210508A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
trans-1,2-Dichloroethene	10	10	100	10	12	120	18	70-130	20
Trichloroethene	10	9.9	99	10	11	110	11	70-130	20
1,2-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,3-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
Methyl tert butyl ether	10	7.2	72	10	9.0	90	22 Q	63-130	20
p/m-Xylene	20	21	105	20	22	110	5	70-130	20
o-Xylene	20	21	105	20	22	110	5	70-130	20
cis-1,2-Dichloroethene	10	11	110	10	12	120	9	70-130	20
Dibromomethane	10	10	100	10	12	120	18	70-130	20
1,2,3-Trichloropropane	10	8.9	89	10	11	110	21 Q	64-130	20
Acrylonitrile	10	12	120	10	14	140 Q	15	70-130	20
Styrene	20	21	105	20	23	115	9	70-130	20
Dichlorodifluoromethane	10	6.4	64	10	7.0	70	9	36-147	20
Acetone	10	18	180 Q	10	18	180 Q	0	58-148	20
Carbon disulfide	10	10	100	10	12	120	18	51-130	20
2-Butanone	10	9.0	90	10	10	100	11	63-138	20
Vinyl acetate	10	11	110	10	12	120	9	70-130	20
4-Methyl-2-pentanone	10	10	100	10	12	120	18	59-130	20
2-Hexanone	10	9.5	95	10	12	120	23 Q	57-130	20
Bromochloromethane	10	11	110	10	13	130	17	70-130	20
2,2-Dichloropropane	10	6.3	63	10	7.4	74	16	63-133	20
1,2-Dibromoethane	10	9.7	97	10	11	110	13	70-130	20
1,3-Dichloropropane	10	9.8	98	10	11	110	12	70-130	20
1,1,1,2-Tetrachloroethane	10	9.9	99	10	10	100	1	64-130	20
Bromobenzene	10	10	100	10	11	110	10	70-130	20



# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1496478-3      Analysis Date : 05/08/21 10:33      File ID : VG210508A01  
 LCSD Sample ID : WG1496478-4      Analysis Date : 05/08/21 11:00      File ID : VG210508A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
n-Butylbenzene	10	10	100	10	10	100	0	53-136	20
sec-Butylbenzene	10	10	100	10	11	110	10	70-130	20
tert-Butylbenzene	10	10	100	10	11	110	10	70-130	20
o-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
p-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
1,2-Dibromo-3-chloropropane	10	8.0	80	10	9.7	97	19	41-144	20
Hexachlorobutadiene	10	11	110	10	12	120	9	63-130	20
Isopropylbenzene	10	10	100	10	10	100	0	70-130	20
p-Isopropyltoluene	10	10	100	10	11	110	10	70-130	20
Naphthalene	10	7.6	76	10	10	100	27 Q	70-130	20
n-Propylbenzene	10	10	100	10	11	110	10	69-130	20
1,2,3-Trichlorobenzene	10	8.4	84	10	11	110	27 Q	70-130	20
1,2,4-Trichlorobenzene	10	10	100	10	12	120	18	70-130	20
1,3,5-Trimethylbenzene	10	10	100	10	11	110	10	64-130	20
1,2,4-Trimethylbenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dioxane	500	480	96	500	640	128	29 Q	56-162	20
p-Diethylbenzene	10	10	100	10	11	110	10	70-130	20
p-Ethyltoluene	10	10	100	10	11	110	10	70-130	20
1,2,4,5-Tetramethylbenzene	10	10	100	10	11	110	10	70-130	20
Ethyl ether	10	9.0	90	10	11	110	20	59-134	20
trans-1,4-Dichloro-2-butene	10	4.8	48 Q	10	5.7	57 Q	17	70-130	20





**Attachment A**  
**Semi-volatiles QC Summary Forms – Excursions**  
**(Full Scan)**

## Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\2007121viICAL\  
 Data File : ABNICV.D  
 Acq On : 13 Jul 2020 4:27 am  
 Operator : SV106:cb  
 Sample : CQICV1,32,,ABNICV Lot# 8836  
 Misc : wgl397168,,  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 04 13:37:14 2020  
 Quant Method : I:\8270\SV106\2007121viICAL\FS200712LVISV106.m  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Mon Jul 20 11:54:23 2020  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	IS1_1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
2 t	n-Nitrosodimethylamine	0.399	0.358	10.3	89	0.00
3 t	Pyridine	0.720	0.757	-5.1	97	0.00
4 S	2-Fluorophenol	0.609	0.554	9.0	87	0.00
5 T	Aniline	1.073	1.038	3.3	94	0.00
6 t	2-Chlorophenol	0.771	0.712	7.7	87	0.00
7 S	Phenol-d6	0.780	0.735	5.8	91	0.00
8 T	Phenol	0.845	0.803	5.0	90	0.00
9 T	Bis(2-chloroethyl)ether	0.699	0.692	1.0	93	0.00
10 T	1,3-Dichlorobenzene	0.975	0.912	6.5	93	0.00
11 T	1,4-Dichlorobenzene	0.986	0.912	7.5	91	0.00
12 T	1,2-Dichlorobenzene	0.961	0.868	9.7	89	0.00
13 t	Benzyl alcohol	0.565	0.506	10.4	86	0.00
14 T	Bis(2-chloroisopropyl)ether	1.243	1.212	2.5	94	0.00
15 T	2-Methylphenol	0.663	0.607	8.4	88	0.00
16 T	Hexachloroethane	0.381	0.357	6.3	91	0.00
17 T	n-Nitrosodi-n-propylamine	0.534	0.509	4.7	89	0.00
18 T	3-Methylphenol/4-Methylphen	0.708	0.658	7.1	88	0.00
19 S	Nitrobenzene-d5	0.721	0.646	10.4	84	0.00
20 T	Nitrobenzene	0.730	0.673	7.8	86	0.00
21 T	Isophorone	1.439	1.367	5.0	90	0.00
22 T	2-Nitrophenol *	5.000	3.811	23.8#	73	0.00
23 T	2,4-Dimethylphenol	0.728	0.702	3.6	90	0.00
24 T	Bis(2-chloroethoxy)methane	0.974	0.946	2.9	93	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\2007121viICAL\  
 Data File : ABNICV.D  
 Acq On : 13 Jul 2020 4:27 am  
 Operator : SV106:cb  
 Sample : CQICV1,32,,ABNICV Lot# 8836  
 Misc : wgl397168,,  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 04 13:37:14 2020  
 Quant Method : I:\8270\SV106\2007121viICAL\FS200712LVISV106.m  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Mon Jul 20 11:54:23 2020  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
25 T	2,4-Dichlorophenol	0.686	0.623	9.2	83	0.00
26 T	1,2,4-Trichlorobenzene	0.869	0.779	10.4	88	0.00
34 I	IS1_Naphthalene-d8	1.000	1.000	0.0	100	0.00
35 T	Naphthalene	1.042	0.980	6.0	92	0.00
36 T	Benzoic Acid	* 5.000	3.962	20.8#	66	-0.04
37 T	4-Chloroaniline	0.122	0.117	4.1	89	0.00
38 T	Hexachlorobutadiene	0.195	0.174	10.8	89	0.00
39 T	p-Chloro-m-cresol	0.264	0.227	14.0	85	0.00
40 T	2-Methylnaphthalene	0.706	0.658	6.8	89	0.00
41 T	1-Methylnaphthalene	0.256	0.237	7.4	92	0.00
42 T	Hexachlorocyclopentadiene	0.225	0.183	18.7	79	0.00
43 T	2,4,6-Trichlorophenol	0.204	0.163	20.1#	80	0.00
44 T	2,4,5-Trichlorophenol	0.228	0.185	18.9	79	0.00
45 S	2-Fluorobiphenyl	0.762	0.725	4.9	92	0.00
46 T	2-Chloronaphthalene	0.705	0.649	7.9	89	0.00
47 T	2-Nitroaniline	* 5.000	3.625	27.5#	75	0.00
48 T	1,4-Dinitrobenzene	0.092	0.062	32.6#	77	0.00
49 T	1,3-Dinitrobenzene	0.104	0.077	26.0#	78	0.00
50 T	Dimethyl phthalate	0.813	0.730	10.2	84	0.00
51 T	Acenaphthylene	1.039	0.972	6.4	89	0.00
52 T	2,6-Dinitrotoluene	* 5.000	3.924	21.5#	80	0.00
53 T	1,2-Dinitrobenzene	0.065	0.051	21.5#	75	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\2007121viICAL\  
 Data File : ABNICV.D  
 Acq On : 13 Jul 2020 4:27 am  
 Operator : SV106:cb  
 Sample : CQICV1,32,,ABNICV Lot# 8836  
 Misc : wgl397168,,  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 04 13:37:14 2020  
 Quant Method : I:\8270\SV106\2007121viICAL\FS200712LVISV106.m  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Mon Jul 20 11:54:23 2020  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
62 I	IS1_Acenaphthene-d10		1.000	1.000	0.0	95	0.00
63 T	3-Nitroaniline		0.337	0.281	16.6	80	0.00
64 T	Acenaphthene		1.203	1.138	5.4	90	0.00
65 T	2,4-Dinitrophenol	*	5.000	3.961	20.8#	68	0.00
66 T	Dibenzofuran		1.862	1.711	8.1	88	0.00
67 T	2,4-Dinitrotoluene	*	5.000	4.092	18.2	80	0.00
68 T	4-Nitrophenol		0.287	0.228	20.6#	80	0.00
69 T	2,3,5,6-Tetrachlorophenol		0.345	0.268	22.3#	74	0.00
70 T	2,3,4,6-Tetrachlorophenol		0.356	0.284	20.2#	78	0.00
71 T	Diethyl phthalate		1.556	1.460	6.2	85	0.00
72 T	Fluorene		1.473	1.402	4.8	89	0.00
73 T	4-Chlorophenyl phenyl ether		0.706	0.648	8.2	87	0.00
74 T	4-Nitroaniline	*	5.000	4.067	18.7	81	0.00
75 T	4,6-Dinitro-o-cresol	*	5.000	3.859	22.8#	72	0.00
76 T	NDPA/DPA		1.226	1.185	3.3	87	0.00
77 T	Azobenzene		1.445	1.593	-10.2	101	0.00
78 S	2,4,6-Tribromophenol	*	5.000	4.174	16.5	80	0.00
79 T	4-Bromophenyl phenyl ether		0.421	0.383	9.0	85	0.00
80 T	Hexachlorobenzene		0.479	0.419	12.5	85	0.00
81 T	Pentachlorophenol	*	5.000	3.924	21.5#	74	0.00
87 I	IS1_Phenanthrene-d10		1.000	1.000	0.0	96	0.00
88 T	Phenanthrene		1.138	1.049	7.8	88	0.00
89 T	Anthracene		1.124	1.068	5.0	89	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\2007121viICAL\  
 Data File : ABNICV.D  
 Acq On : 13 Jul 2020 4:27 am  
 Operator : SV106:cb  
 Sample : CQICV1,32,,ABNICV Lot# 8836  
 Misc : wgl397168,,  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 04 13:37:14 2020  
 Quant Method : I:\8270\SV106\2007121viICAL\FS200712LVISV106.m  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Mon Jul 20 11:54:23 2020  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 T	Carbazole	1.015	0.958	5.6	86	0.00
91 T	Di-n-butylphthalate	1.279	1.090	14.8	81	0.00
92 T	Fluoranthene	1.226	1.133	7.6	85	0.00
93 T	Benzidine	0.795	0.600	24.5#	77	0.00
94 T	Pyrene	1.303	1.213	6.9	86	0.00
95 S	4-Terphenyl-d14	0.899	0.801	10.9	82	0.00
96 T	Butyl benzyl phthalate	* 5.000	3.607	27.9#	73	0.00
103 I	IS1_Chrysene-d12	1.000	1.000	0.0	97	0.00
104 T	Benzo(a)anthracene	1.194	1.132	5.2	87	0.00
105 T	3,3'-Dichlorobenzidine	0.434	0.374	13.8	82	0.00
106 T	Chrysene	1.275	1.141	10.5	86	0.00
107 T	Bis(2-ethylhexyl)phthalate	* 5.000	4.040	19.2	78	0.00
108 T	Di-n-octylphthalate	* 5.000	3.907	21.9#	77	0.00
109 T	Benzo(b)fluoranthene	1.180	1.130	4.2	86	0.00
110 T	Benzo(k)fluoranthene	1.109	1.053	5.0	86	0.00
111 T	Benzo(a)pyrene	1.006	0.931	7.5	85	0.00
112 I	IS1_Perylene-d12	1.000	1.000	0.0	97	0.00
113 T	Indeno(1,2,3-cd)pyrene	* 5.000	4.201	16.0	82	0.00
114 T	Dibenzo(a,h)anthracene	1.127	1.027	8.9	83	0.00
115 T	Benzo(ghi)perylene	1.146	1.047	8.6	86	0.00

\* Evaluation of CC level amount vs concentration.

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\2007121viICAL\  
 Data File : ABNICV.D  
 Acq On : 13 Jul 2020 4:27 am  
 Operator : SV106:cb  
 Sample : CQICV1,32,,ABNICV Lot# 8836  
 Misc : wgl397168,,  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 04 13:37:14 2020  
 Quant Method : I:\8270\SV106\2007121viICAL\FS200712LVISV106.m  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Mon Jul 20 11:54:23 2020  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev Area%	Dev(min)
-----				
(#) = Out of Range	SPCC's out = 0 CCC's out = 0			

# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2123311  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1497011-2      Analysis Date : 05/11/21 19:55      File ID : 497011-2  
 LCSD Sample ID : WG1497011-3      Analysis Date : 05/11/21 20:18      File ID : 497011-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
1,2,4-Trichlorobenzene	18	14.	75	18	14.	79	5	39-98	30
Bis(2-chloroethyl)ether	18	15.	81	18	16.	91	12	40-140	30
1,2-Dichlorobenzene	18	13.	74	18	15.	82	10	40-140	30
1,3-Dichlorobenzene	18	13.	70	18	14.	77	10	40-140	30
1,4-Dichlorobenzene	18	13.	71	18	14.	76	7	36-97	30
3,3'-Dichlorobenzidine	18	10.	56	18	10.	56	0	40-140	30
2,4-Dinitrotoluene	18	18.	97	18	17.	94	3	48-143	30
2,6-Dinitrotoluene	18	19.	102	18	18.	98	4	40-140	30
4-Chlorophenyl phenyl ether	18	14.	77	18	14.	78	1	40-140	30
4-Bromophenyl phenyl ether	18	15.	82	18	14.	78	5	40-140	30
Bis(2-chloroisopropyl)ether	18	23.	126	18	24.	131	4	40-140	30
Bis(2-chloroethoxy)methane	18	16.	87	18	16.	88	1	40-140	30
Hexachlorocyclopentadiene	18	13.	74	18	14.	76	3	40-140	30
Isophorone	18	17.	92	18	17.	93	1	40-140	30
Nitrobenzene	18	18.	100	18	19.	107	7	40-140	30
NDPA/DPA	18	16.	88	18	16.	86	2	40-140	30
n-Nitrosodi-n-propylamine	18	18.	101	18	18.	102	1	29-132	30
Bis(2-ethylhexyl)phthalate	18	20.	110	18	18.	102	8	40-140	30
Butyl benzyl phthalate	18	20.	110	18	18.	101	9	40-140	30
Di-n-butylphthalate	18	17.	96	18	16.	91	5	40-140	30
Di-n-octylphthalate	18	20.	110	18	19.	106	4	40-140	30
Diethyl phthalate	18	17.	92	18	16.	88	4	40-140	30
Dimethyl phthalate	18	16.	88	18	15.	83	6	40-140	30
Biphenyl	18	14.	78	18	14.	79	1	40-140	30
4-Chloroaniline	18	11.	60	18	10.	55	9	40-140	30
2-Nitroaniline	18	18.	99	18	18.	98	1	52-143	30



## Form 3

### Semivolatiles

Client	: Impact Environmental	Lab Number	: L2123311
Project Name	: 60 MCLEAN AVE	Project Number	: 15514
Matrix	: WATER		
LCS Sample ID	: WG1497011-2	Analysis Date	: 05/11/21 19:55
		File ID	: 497011-2
LCSD Sample ID	: WG1497011-3	Analysis Date	: 05/11/21 20:18
		File ID	: 497011-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
3-Nitroaniline	18	13.	73	18	13.	72	1	25-145	30
4-Nitroaniline	18	15.	82	18	14.	76	8	51-143	30
Dibenzofuran	18	14.	78	18	15.	82	5	40-140	30
1,2,4,5-Tetrachlorobenzene	18	13.	71	18	13.	73	3	2-134	30
Acetophenone	18	15.	85	18	16.	89	5	39-129	30
Benzyl Alcohol	18	16.	88	18	17.	93	6	26-116	30
Carbazole	18	16.	86	18	16.	85	1	55-144	30





# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2123311  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
WP-11 (L2123311-01)	71	61	92	70	83	90	0
WP-12 (L2123311-02)	59	52	80	71	67	82	0
WP-13 (L2123311-03)	39	40	59	58	60	79	0
WP-14 (L2123311-04)	55	55	84	80	56	87	0
WP-15 (L2123311-05)	49	46	70	66	59	85	0
WG1497011-1BLANK	81	64	101	83	87	93	0
WG1497011-2LCS	78	70	110	78	103	87	0
WG1497011-3LCSD	87	72	115	78	103	83	0

#### QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(15-120) FBP = 2-FLUOROBIPHENYL  
(10-120) TBP = 2,4,6-TRIBROMOPHENOL  
(41-149) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-LVI



**Attachment A**  
**Semi-volatiles QC Summary Forms – Excursions**  
**SIM**

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\210224LVIical\  
 Data File : ICVa.D  
 Acq On : 24 Feb 2021 05:28 pm  
 Operator : sv119:dv  
 Sample : CQICV,32,,1.0  
 Misc : wgl467822,,ical  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 25 11:20:23 2021  
 Quant Method : i:\8270SIM\SV119\210224LVIical\SIM-LVI\_210224\_sv119.M  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Wed Feb 24 16:30:50 2021  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2 T	1,4-Dioxane	0.000	0.000#	0.0	0#	-1.21#
3 s	2-Fluorophenol	1.130	1.429	-26.5	122	0.00
4 s	Phenol-d6	1.326	1.631	-23.0	120	0.00
5 T	Bis(2-chloroethyl)ether	1.267	1.617	-27.6	126	0.00
6 T	n-nitrosodi-n-propylamine	0.823	1.005	-22.1	122	0.00
7 t	Hexachloroethane	0.591	0.727	-23.0	126	0.00
8 s	Nitrobenzene-d5	1.230	1.506	-22.4	119	0.00
9 i	Naphthalene-d8	1.000	1.000	0.0	100	0.00
10 t	Naphthalene	1.170	1.466	-25.3	126	0.00
11 t	Hexachlorobutadiene	0.204	0.248	-21.6	129	0.00
12 t	2-Methylnaphthalene	0.762	0.969	-27.2	126	0.00
13 t	1-Methylnaphthalene	0.707	0.890	-25.9	126	0.00
14 s	2-Fluorobiphenyl	0.895	1.113	-24.4	126	0.00
15 t	2-Chloronaphthalene	0.736	0.927	-26.0	128	0.00
16 t	2,6-Dinitrotoluene	0.138	0.160	-15.9	125	0.00
17 t	Acenaphthylene	1.174	1.467	-25.0	128	0.00
18 i	Acenaphthene-d10	1.000	1.000	0.0	107	0.00
19 t	Acenaphthene	1.496	1.758	-17.5	128	0.00
20 t	2,4-Dinitrotoluene	0.313	0.374	-19.5	126	0.00
21 t	Fluorene	1.579	1.851	-17.2	128	0.00
22 s	2,4,6-Tribromophenol	0.160	0.194	-21.3	126	0.00
23 i	Phenanthrene-d10	1.000	1.000	0.0	113	0.00
24 T	4,6-Dinitro-o-cresol	*1000.000	988.464	1.2	127	0.00
25 t	Hexachlorobenzene	0.273	0.295	-8.1	131	0.00
26 t	Pentachlorophenol	0.103	0.120	-16.5	127	0.00
27 t	Phenanthrene	1.347	1.468	-9.0	129	0.00
28 t	Anthracene	1.224	1.431	-16.9	130	0.00
29 t	Fluoranthene	1.290	1.519	-17.8	132	0.00
30 t	Pyrene	1.319	1.607	-21.8	133	0.00
31 s	4-Terphenyl-d14	0.898	1.045	-16.4	132	0.00
32 i	Chrysene-d12	1.000	1.000	0.0	120	0.00
33 t	Benzo[a]anthracene	*1000.000	1094.499	-9.4	134	0.00
34 t	3,3'-Dichlorobenzene	0.426	0.444	-4.2	132	0.00
35 t	Chrysene	1.565	1.756	-12.2	135	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\210224LVIical\  
 Data File : ICVa.D  
 Acq On : 24 Feb 2021 05:28 pm  
 Operator : sv119:dv  
 Sample : CQICV,32,,1.0  
 Misc : wgl467822,,ical  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 25 11:20:23 2021  
 Quant Method : i:\8270SIM\SV119\210224LVIical\SIM-LVI\_210224\_sv119.M  
 Quant Title : Semivolatiles by GC/MS by modified 8270  
 QLast Update : Wed Feb 24 16:30:50 2021  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36 T	Bis(2-ethylhexyl)phthalate	0.703	0.695	1.1	132	0.00
37 i	Perylene-d12	1.000	1.000	0.0	122	0.00
38 t	Benzo[b]fluoranthene	1.504	1.608	-6.9	135	0.00
39 t	Benzo[k]fluoranthene	1.497	1.777	-18.7	137	0.00
40 t	Benzo[a]pyrene	1.309	1.452	-10.9	137	0.00
41 t	Indeno[1,2,3-cd]pyrene	1.132	1.177	-4.0	138	0.00
42 t	Dibenzo[a,h]anthracene	1.161	1.331	-14.6	142	0.00
43 t	Benzo[g,h,i]perylene	1.308	1.425	-8.9	142	0.00

\* Evaluation of CC level amount vs concentration.  
 (#) = Out of Range SPCC's out = 0 CCC's out = 0



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : WG1497012-1  
 Client ID : WG1497012-1BLANK  
 Sample Location :  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 497012-1  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2123311  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/11/21 15:08  
 Date Extracted : 05/11/21  
 Dilution Factor : 1  
 Analyst : ALS  
 Instrument ID : SV119  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	0.02	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	0.02	0.10	0.01	J
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.01	0.10	0.01	J
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2123311  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
WP-11 (L2123311-01)	59	51	84	81	90	88	0
WP-12 (L2123311-02)	58	53	78	77	81	92	0
WP-13 (L2123311-03)	38	37	53	58	70	88	0
WP-14 (L2123311-04)	52	51	77	77	62	90	0
WP-15 (L2123311-05)	41	40	62	62	57	86	0
WG1497012-1BLANK	59	49	80	95	84	88	0
WG1497012-2LCS	62	51	78	87	102	91	0
WG1497012-3LCSD	55	43	69	80	95	88	0

#### QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(15-120) FBP = 2-FLUOROBIPHENYL  
(10-120) TBP = 2,4,6-TRIBROMOPHENOL  
(41-149) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-SIM-LVI





**DATA VALIDATION**  
**FOR**  
**60 McCLEAN AVENUE**  
**YONKERS, NY**  
**ORGANIC AND INORGANIC ANALYSIS DATA**

**Laboratory Sample Delivery Group (SDG) No. L2223093**

**Analyses Performed By:**  
**Alpha Analytical**  
**Westborough, Massachusetts**

**For:**  
**Impact Environmental Inc.**  
**Bohemia, NY**

**Data Validation By:**  
**ddms, inc.**  
**St. Paul, Minnesota 55102**

**August 9, 2022**

**2144-000102**  
**60 McLean Avenue\L2223093.docx**

## EXECUTIVE SUMMARY

Validation of the organic and inorganic analyses data prepared by Alpha Analytical Westborough, Massachusetts for 24 soil samples, two field blank (FB) samples, and two trip blank (TB) samples from the 60 McLean Avenue Site has been completed by de maximis Data Management Solutions, Inc. (ddms). Stage 4 validation was performed on the samples. The data were reported by the laboratory under SDG No. L2223093. The following samples were reported:

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SB-7 (0-2)	SB-7 (7-9)	SB-6 (0-2)	SB-6 (7-9)
SB-9 (0-4)	SB-8b (0-3)	SB-12 (0-4)	SB-10a (0-3)
SB-10b (0-3)	SB-16 (0-4)	SB-17 (2-4)	SB-17 (0-2)
SB-19 (0-2)	SB-19 (7-9)	SB-18 (0-2)	SB-18 (7-9)
SB-11 (0-4)	SB-DUP-2	SB-1 (0-2)	SB-2 (0-2)
FIELD BLANK-1	FIELD BLANK-2	TRIP BLANK 1	SB-3 (0-2)
SB-4 (0-2)	SB-5 (0-2)	TRIP BLANK 2	

---

Sample SB-DUP-1 (Included in L2223458. See documentation section) was collected and submitted as a field duplicate of field sample SB-19 (7-9), included with this data package. Both samples of the field duplicate pair SB-DUP-2 and SB-1 (0-2) were submitted together with this SDG.

Based on professional judgment, results for non-detects should be considered to be “U,” not detected, at the analyte-specific reporting limit (RL) to represent the lowest concentration at which the laboratory can detect and accurately quantitate sample concentrations based on the documentation provided. The laboratory reported results as not detected at the method detection limit (MDL). The MDL is an estimated value based on a statistical determination, not a quantitative measurement supported by the data provided and should not be used to report non-detect results. It should also be noted by the data user that the laboratory reported non-detect results, RLs, and MDLS to three significant figures. The level of accuracy portrayed at these concentrations and estimated concentrations is not supported by the data and should not be used.

Below is the Data Usability Summary Report (DUSR) associated with these samples.

<b>Data Usability Summary Report</b>	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes



Data Usability Summary Report	
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See Following Sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes See Attachments A through J

Based on the validation effort, the following data qualifiers were applied:

#### VOCs

- Results for acetone and 2-butanone in FIELD BLANK-1, FIELD BLANK-2, TRIP BLANK 1, and TRIP BLANK 2 were qualified as estimated (UJ) due to high variability from the IC to the second source standard.
- Results qualified estimated (UJ) due to a loss in sensitivity from the initial calibration are summarized in the table in Section A.
- Results for vinyl chloride in SB-19 (0-2') and acetone in FIELD BLANK-1, FIELD BLANK-2, TRIP BLANK-1, and TRIP BLANK-2 were qualified as estimated (UJ) based on low recoveries in the laboratory control sample.
- Results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2-butanone, and n-butylbenzene in SB-4 (0-2) and for all compounds *except acetone and toluene* in SB-5 (0-2) were qualified as estimated (UJ) due to unacceptable matrix spike, matrix spike duplicate, and/or relative percent difference values.
- Results for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-butanone, acetone, and o-xylene in this data set were qualified as estimated (J, UJ) due to poor precision between paired field samples.
- All results for SB-19 (0-2) were qualified estimated (J, UJ) because the sample analyzed was prepared in the laboratory from an unpreserved container.

## SVOCs

### 8270D Fullscan

- Results for phenol, 2-nitrophenol, 4-nitrophenol, 2-chlorophenol, 2-methylphenol, 3&4-methylphenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrophenol, benzoic acid, and benzyl alcohol in FIELD BLANK-1, SB-DUP-2 and SB-10a (0-3) were qualified as estimated (J-, UJ) based on low recovery for the associated surrogate compound.
- Results for phenol, 2-methylphenol, and 3&4-methylphenol in SB-8b (0-3) and SB-8b (0-3) RE were rejected (R) as unusable, based on recoveries less than 10% for associated surrogate compounds.
- The result for pentachlorophenol in SB-3 (0-2) was qualified as estimated (UJ) based on low recovery for the associated surrogate compound.
- Results for acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, hexachlorobenzene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene in SB-8b (0-3), SB-8b (0-3) RE, SB-6 (0-2), SB-10a (0-3), SB-17 (0-2), SB-18 (0-2), and SB-4 (0-2) were qualified as estimated (J-, UJ) based on low recoveries for the associated surrogate compounds.
- Results for all target compounds in FIELD BLANK-2, SB-7 (0-2), SB-17 (2-4), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), and SB-1 (0-2) were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.
- Results for naphthalene and hexachlorobenzene in SB-7 (7-9), SB-10a (0-3), and SB-11 (0-4) were qualified as estimated (J-, UJ) based on low recovery for the surrogate compound associated with these target analytes.
- Results for anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene in SB-6 (7-9), SB-9 (0-4), SB-10b (0-3), SB-16 (0-4), SB-3 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recovery for the associated surrogate.
- Results for all target analytes in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) based on low recoveries in the LCS and/or LCSD.
- Results for all compounds except 2-methylphenol, 3&4-methylphenol, phenol, and indeno(1,2,3-cd)pyrene, in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recoveries in the LCS and/or LCSD.

- Results for 4-chloroaniline in FIELD BLANK-1 and FIELD BLANK-2 were rejected (R) as unusable, based on recoveries less than 10% for the LCS and LCSD.
- Results for all target analytes in SB-12 (0-4), SB-19 (0-2), SB-11 (0-4), SB-18 (7-9), SB-19 (7-9), SB-6 (7-9), SB-17 (2-4), SB-6 (0-2), SB-16 (0-4), SB-7 (7-9), SB-7 (0-2), SB-10a (0-3), SB-1 (0-2), SB-2 (0-2), SB-9 (0-4), SB-17 (0-2), SB-18 (0-2), SB-DUP-2, SB-8b (0-3), SB-8b (0-3) RE, and SB-10b (0-3) were qualified as estimated (J-, UJ) based on low recoveries in the LCS and/or LCSD. Results for phenol, 2-methylphenol, and 3&4-methylphenol in SB-8b (0-3) and SB-8b (0-3) RE were previously rejected based on surrogate recovery <10%. The "R" qualifier takes precedence.
- Results for 4-chloroaniline in FIELD BLANK-1 and FIELD BLANK-2 were rejected (R) as unusable, based on recoveries less than 10% for the LCS and LCSD.
- Results for all target analytes except phenol and 3&4-methylphenol in SB-4 (0-2) and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recoveries in the MS and/or MSD.

#### 8270D SIM

- The result for 2-methylnaphthalene in FIELD BLANK-1 was qualified as not detected (U) at the reporting limit, based on the presence of this compound in the associated method blank at a higher concentration.
- Results for acenaphthylene and pentachlorophenol in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) based on low recoveries in the LCS and/or LCSD.

#### Pesticides

- Results for all target analytes in FIELD BLANK-1, FIELD BLANK-2, SB-7 (0-2), SB-6 (0-2), SB-6 (7-9), SB-12 (0-4), SB-10a (0-3), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), and SB-2 (0-2) were qualified as estimated (UJ) due to low surrogate recoveries.
- Results for 4,4'-DDT and cis-chlordane in SB-10b (0-3) were qualified as estimated with potential low bias (J-) due to a low surrogate recovery on the column from which these results were reported.
- Results for all target analytes in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries. Results for all target analytes except delta-BHC and endosulfan sulfate in FIELD BLANK-1 and FIELD BLANK-2 were also qualified as estimated (UJ) due to LCS/LCSD imprecision.
- Results for delta-BHC, lindane, alpha-BHC, beta-BHC, aldrin, endrin, dieldrin, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, and cis-chlordane in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-

3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), and SB-3 (0-2) were qualified as estimated (J-, UJ) due to low LCS and/or LCSD recoveries.

- Results for heptachlor, endosulfan I, endosulfan sulfate, and cis-chlordane in SB-18 (0-2) and SB-4 (0-2) were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.
- The result for cis-chlordane in SB-5 (0-2) was qualified as estimated (UJ) due to a low LCS recovery.
- The result for cis-chlordane in SB-6 (0-2) was qualified as estimated (J) due to lack of agreement between the two column measurements.

#### PCBs

- The result for Aroclor 1260 in SB-10b (0-3) was qualified as estimated (UJ) due to high %Ds for selected Aroclor 1260 peaks on both columns in the associated ICV standard.
- Results for Aroclor 1260 in SB-18 (0-2) and SB-4 (0-2) were qualified as not detected (U) at the RL due to associated method blank contamination.
- Results for all target Aroclors in SB-7 (7-9), SB-6 (7-9), SB-8b (0-3), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-18 (7-9), SB-DUP-2, SB-2 (0-2), SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) due to low surrogate recoveries on both columns.
- Results for all target Aroclors in SB-5 (0-2) and SB-10b (0-3) were qualified as estimated (UJ) due to low LCS/LCSD recoveries and, for SB-5 (0-2), due to LCS/LCSD imprecision.
- Results for all target Aroclors in SB-5 (0-2) were qualified as estimated (UJ) due to low MS/MSD recoveries.
- Results for Aroclor 1254 and 1260 in SB-8b (0-3) were qualified as estimated (J) due to the potential for contribution from the other Aroclor. The result for Aroclor 1254 in this sample was also qualified as presumed present (N) due to the lack of characteristic chromatographic pattern for this Aroclor.

#### Metals(ICP and ICP-MS)

- Results for selenium in SB-9 (0-4) and SB-17 (2-4) were qualified as not detected (U), at the reporting limit, due to method blank contamination.
- Results for lead in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), SB-DUP-2, SB-1 (0-2), and SB-2 (0-2) were qualified as



estimated and biased high (J+) due to elevated response in the interference check sample solution A (ICSA) standard.

- Results for cadmium in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated and biased high (J+), because the associated ICSA standard was above the MDL.
- Results for cadmium in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), and SB-2 (0-2), and selenium in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2), were qualified as estimated and biased low (UJ) because the absolute value of the negative concentrations reported in the associated ICSA standard were above the MDL.
- Results for nickel in SB-7 (0-2), SB-8b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), and SB-18 (7-9) were qualified as estimated and biased low (J-) because the absolute value of the negative concentrations reported in the associated ICSA standard were above the MDL.
- Results for arsenic in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-DUP-2, SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.
- Results for cadmium in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.
- Results for barium, chromium, manganese, and nickel in all soil samples were qualified as estimated (J) due to elevated RPD between the field duplicate pair.
- Results for beryllium, cadmium, chromium, lead, nickel and zinc in SB-7 (0-2) were qualified as estimated (J-, UJ), biased low, due to low MS and PDS recoveries.
- Results for all ICP metals in SB-4 (0-2) were qualified as estimated (J-, UJ), biased low, due to low MS/MSD and PDS recoveries.
- Results for arsenic, barium, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and zinc in SB-5 (0-2) were qualified as estimated (J-, UJ), biased low, due to low MS and/or MSD and PDS recoveries.
- Results for all barium, chromium and manganese in all soil samples were qualified as estimated (J) due to elevated percent differences in the serial dilution sample.

- Results for copper in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), and SB-4 (0-2) were qualified as estimated (J) due to elevated percent difference in the serial dilution sample.
- Results for cadmium, beryllium and silver in FIELD BLANK-1 and FIELD BLANK-2 were less than the calibration supported RL (0.001 mg/L) and were qualified as estimated (UJ) due to elevated %D in the low-level calibration standard.
- Results for chromium in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) due to the low recovery demonstrated in the low-level continuing calibration verification (LLCCV) standard.
- The result for barium in FIELD BLANK-2 was qualified as estimated and biased high (J+) due to elevated response in the ICSA standard.

#### Mercury (CVAA)

- Results for mercury in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-8b (0-3), SB-10a (0-3), SB-19 (7-9), SB-18 (7-9), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), SB-18 (0-2), and SB-11 (0-4) were qualified as estimated (J-, UJ) due to negative continuing calibration blank associations.
- Results for mercury in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-DUP-1, SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), and SB-4 (0-2) were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.
- The result for mercury in SB-4 (0-2) was qualified as estimated and biased high (J+), based on the elevated MSD recovery.

#### PFAS

- Results for NEtFOSAA and NMeFOSAA in SB-10b (0-3), SB-19 (7-9), SB-DUP-2, SB-3 (0-2), and SB-5 (0-2) were qualified as estimated (UJ) due to low recoveries in associated IC and CC standards.
- Results for NMeFOSSA and NEtFOSAA in SB-19 (7-9), SB-DUP-2, and SB-5 (0-2) and for FOSA in SB-3 (0-2) were qualified as estimated (UJ) due to low labeled analog recoveries.

#### Cyanide

- The results for cyanide in SB-9 (0-4), SB-8b (0-3), SB-10a (0-3), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18

(0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J, UJ) due to low LCS/LCSD recoveries and elevated RPD between the LCS/LCSD.

#### Total Solids

- Results for total solids in SB-10a (0-3), SB-11 (0-4), and SB-1 (0-2) were qualified as estimated (J) due to holding time exceedance.

#### Hexavalent Chromium

- Results for hexavalent chromium in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-10a (0-3), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), and SB-4 (0-2) were qualified as estimated with potential low bias (J-, UJ) due to low LCS recoveries.
- Results for hexavalent chromium in all soil samples except SB-4 (0-2) and SB-7 (0-2) were qualified as estimated (J, UJ) due to low level imprecision in the field and laboratory duplicate pairs.

#### Trivalent Chromium

- Results for trivalent chromium in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-10a (0-3), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), and SB-4 (0-2) were qualified as estimated with potential low bias (J-, UJ) due to low LCS recoveries seen in the hexavalent chromium analysis.
- Results for trivalent chromium in all soil samples except SB-4 (0-2) and SB-7 (0-2) were qualified as estimated (J) because of the low-level imprecision seen in the hexavalent chromium field and laboratory duplicate pairs.
- Result for trivalent chromium in all soil samples were qualified as estimated (J), because the field duplicate RPD was elevated, as well as the serial dilution percent difference in the total chromium analysis.

All other results were determined to be valid as reported by the laboratory.

This report should be considered part of the data package for all future distributions of the data.

## INTRODUCTION

Analyses for the requested parameters were performed by the laboratory according to the following analytical methods:

Volatile Organic Compounds (VOCs)	SW846 Method 8260C
Semivolatile Organic Compounds (SVOCs)	SW846 Method 8270D SW846 Method 8270DSIM
Organochlorine Pesticides	SW846 Method 8081B
Polychlorinated Biphenyls	SW846 Method 8082A
Total Metals	SW846 Method 6010C SW846 Method 6020B SW846 Method 7471B
Polyfluorinated Alkyl Substances (PFAS)	EPA Method 537 (M)
Total Cyanide	SW846 9012B
Hexavalent Chromium	SW846 7196A
Total Solids	SM2540G
Trivalent Chromium	CALC

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

ddms' validation was performed in conformance with the USEPA "National Functional Guidelines (NFG) for Organic Data Review" (2020), the USEPA "National Functional Guidelines for Inorganic Data Review" (2004), ddms' Standard Operating Procedures (SOPs) for the methods followed, the requirements of the analytical methods followed, and the specifications of the project-specific Quality Assurance Project Plan (QAPP). Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the CLP. This requires that the data package be presented in accordance with the CLP requirements, so that sufficient supporting documentation is available to facilitate the validation effort. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for validation.



During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the NFG:

**U** The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

**J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**J+** The result is an estimated quantity, but the result may be biased high.

**J-** The result is an estimated quantity, but the result may be biased low.

**NJ** The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

**UJ** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

## **I. Holding Times, Preservation and Sample Integrity**

Copies of the applicable chain of custody (COC) records were included in the data package, documenting sample collection dates of May 2 and 3, 2022. The samples were received at the laboratory on May 3, 2022.

The temperatures of the coolers upon receipt at the laboratory (3.4°C to 4.7°C) were acceptable (QC <6°C). Sample SB-19 (0-2) was received in appropriate containers (vials) for the Volatile Organics by EPA Method 5035/8260 Low-Level analysis; however, the initial analysis failed with low internal standards and the second Low-Level vial was disposed of due to laboratory error. With the client's authorization, a sample aliquot was taken from an unpreserved container (jar) and preserved appropriately. All results for SB-19 (0-2) were qualified estimated (J, UJ) on this basis. All other samples were prepared and analyzed within method holding times.

The total solids analysis was performed 2 days after the 7-day holding time for SB-10A (0-3), SB-11 (0-4), and SB-1 (0-2). Results for total solids in SB-10A (0-3), SB-11 (0-4), and SB-1 (0-2) were qualified as estimated (J). The user is cautioned that total solids is used in all dry weight calculation adjustments and affects may have bearing on all associated analysis for those samples.

## **II. Documentation**

The following documentation issues were observed during the validation effort:

- Sample SB-DUP-1 was included on the COC for this data set but was missing from the cooler. It was included in the cooler with SDG L2223458 and was also included on the COC for that SDG.
- Dates and times of collection recorded on the COC records did not match the dates and times of collection listed on the sample containers for SB-18 (0-2), SB-18 (7-9), SB-3 (0-2), and SB-4 (0-2). The client requested that the COC recorded dates and times of collection be used for all of these samples.
- PFAS analyses were not requested on the COC records for SB-DUP-2, FIELD BLANK-1, or SB-5 (0-2), but sample containers for this analysis parameter were received. The PFAS analyses of these samples were performed at the client's request.
- Raw data for a method blank, LCS, and LCSD from PCBs extraction batch WG1638462-1 were included in the data package. This extraction batch is not associated with any of the site samples; therefore, the data were not reviewed as a part of the validation effort.
- Raw data for the 1.0 ng/mL standard of the PFAS initial calibration run on April 27, 2022, on instrument LCMS01 were not included in the data package. Instead, two sets of raw data for the 0.50 ng/mL standard were provided. On request, the

laboratory provided the raw data for the 1.0 ng/mL standard, which were reviewed and verified by the validator. At the discretion of the data user, the laboratory should be requested to revise the data package to include this documentation so that complete and accurate documentation is available for future reference.

- The internal standard used to calculate concentrations of PFTTrDA in the calibration standards and laboratory QC samples could not be determined from the information in the data package as received. On request, the laboratory explained that the area used for this calculation is the average of the areas of internal standards M2PFTeDA and MPFDOA. This was confirmed by the validator. At the discretion of the data user, the laboratory should be requested to provide this information in the data package so that complete information is available for future reference.

The remainder of this report discusses the review effort for each of the parameters. The tables below document the quality control (QC) elements reviewed for each analysis parameter. Where a quality indicator was deemed acceptable after thorough review, no further discussion is included in this report. Detailed findings are included for each quality element that impacted the usability of the reported results. Additional information or explanation is included as needed, to provide support for decisions made, based on the validator's best professional judgment.

Where a result was qualified J+ or J- and J, the J qualifier takes precedence. Where a result was qualified biased high and low for differing data quality excursions, the final qualifier is J with an indeterminate bias.

### III. VOCs

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Surrogates	Y
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	N
MS/MSD	N
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	N/A

#### A. Calibration

Data for two ICs were provided, one instrument VOA127 and one on instrument VOA129 supporting the soil sample analyses and one IC on GONZO supporting the aqueous sample analyses. All of the IC relative response factors (RRFs) and percent relative

standard deviations (%RSDs) were acceptable except for 1,4-dioxane (0.003 on instruments VOA127 and VOA 129 and 0.002 on GONZO). A review of other laboratory quality control data supports the laboratory's ability to detect and accurately quantify the compounds. No data were qualified on this basis.

Initial calibration verification (ICV) standards were analyzed after each of the ICs; all percent differences (%Ds) were acceptable in the associated ICV standard with the exception of acetone (24.6%D) and 2-butanone (20.2%D) in the GONZO ICV. Results for acetone and 2-butanone in FIELD BLANK-1, FIELD BLANK-2, TRIP BLANK 1, and TRIP BLANK 2 were qualified as estimated (UJ) due to high variability from the IC to the second source standard.

Four CC standards were analyzed in support of the samples in this data set. All RRFs and %Ds were acceptable with the exceptions summarized below.

Parameter	%D	Samples Affected	Qualifier Applied
<i>Batch 1636811-2</i>			
2-Butanone	-21.9	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (7-9) SB-18 (0-2) SB-18 (7-9) SB-11 (0-4) SB-DUP-2 SB-1 (0-2)	UJ
<i>Batch 1637092-2</i>			
n-Propylbenzene	+25.7	SB-2 (0-2)	none
1,3,5-Trimethylbenzene	+24.1	SB-3 (0-2)	
1,2,4-Trimethylbenzene	+23.9	SB-4 (0-2)	
sec-Butylbenzene	+24.9	SB-5 (0-2)	
n-Butylbenzene	+35.7		
<i>Batch 1638217-2</i>			
Vinyl chloride	-30.4	SB-19 (0-2)	UJ
1,1-Dichloroethene	-24.3		
Acetone	-24.3		
trans-1,2-Dichloroethene	-20.4		



Parameter	%D	Samples Affected	Qualifier Applied
Carbon tetrachloride	-24.3		
1,1,1-Trichloroethane	-21.0		
Batch 1638761-2			
Vinyl chloride	+26.7	FIELD BLANK-1	none
Acetone	-21.9	FIELD BLANK-2	UJ
2-Butanone	-25.0	TRIP BLANK 1 TRIP BLANK 2	UJ

The excursions in Batch 1637092 CC all represent an increase in sensitivity. Since none of the compounds were detected in any of the samples in that analytical batch, no data required qualification on this basis. Results were qualified as detailed in the table above.

### B. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Four LCS/LCSD pairs were prepared and analyzed with the field samples. Recoveries for all spiked compounds assessed were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1637092-3/4</i>					
n-Butylbenzene	136	a	a	SB-2 (0-2) SB-3 (0-2) SB-4 (0-2) SB-5 (0-2)	none
<i>Batch 1638217-3/4</i>					
Vinyl chloride	a	57	a	SB-19 (0-2)	UJ
<i>Batch 1638761-3/4</i>					
Acetone	a	64	a	FIELD BLANK-1 FIELD BLANK-2 TRIP BLANK-1 TRIP BLANK-2	UJ

Results for vinyl chloride in SB-19 (0-2) and acetone in FIELD BLANK-1, FIELD BLANK-2, TRIP BLANK-1, and TRIP BLANK-2 were qualified as estimated (UJ) based on low recoveries in the LCSD.

There were no detections of n-butylbenzene in the field samples; therefore, no action was necessary for this compound.

### C. Matrix Spike (MS)/MS Duplicate (MSD)

Samples SB-4 (0-2) and SB-5 (0-2) were prepared as MS/MSD pairs. Recoveries and precision between paired recoveries were acceptable (70-130% R and <50% RPD), with the following exceptions:

Compound	MS %R	MSD %R	RPD	Samples Affected	Qualifier Applied
SB-4 (0-2)					
1,2-Dichlorobenzene	63	a	a	SB-4 (0-2)	UJ
1,3-Dichlorobenzene	61	a	a		
1,4-Dichlorobenzene	59	68	a		
2-Butanone	68	a	a		
n-Butylbenzene	62	68	a		
SB-5 (0-2)					
Methylene chloride	a	a	39	SB-5 (0-2)	UJ
1,1-Dichloroethane	a	a	36		
Chloroform	a	a	35		
Carbon tetrachloride	a	a	32		
Tetrachloroethene	a	67	a		
Chlorobenzene	a	64	a		
1,2-Dichloroethane	a	a	35		
1,1,1-Trichloroethane	a	a	34		
Benzene	a	a	31		
Ethylbenzene	a	64	a		
Vinyl chloride	a	a	37		
1,1-Dichloroethene	a	a	37		
trans-1,2-Dichloroethene	a	a	41		
Trichloroethene	a	a	31		
1,2-Dichlorobenzene	a	54	a		
1,3-Dichlorobenzene	a	50	a		
1,4-Dichlorobenzene	69	48	a		
Methyl tert butyl ether	a	a	31		
p/m-Xylene	a	59	a		
o-Xylene	a	62	a		
cis-1,2-Dichloroethene	a	a	40		
2-Butanone	a	67	31		
n-Butylbenzene	a	45	a		
sec-Butylbenzene	a	53	a		
tert-Butylbenzene	a	57	a		
n-Propylbenzene	a	55	a		
1,3,5-Trimethylbenzene	a	57	a		
1,2,4-Trimethylbenzene	a	56	a		
1,4-Dioxane	a	a	40		

Results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2-butanone, and n-butylbenzene in SB-4 (0-2) and for all compounds *except acetone and toluene* in SB-5 (0-2) were qualified as estimated (UJ) due to unacceptable MS, MSD, and/or RPD results.

#### D. Field Duplicates

Based on documentation from the client, SB-DUP-1 (SDG L2223458) was submitted as a field duplicate of SB-19 (7-9).

Compound	SB-19 (7-9)	SB-19 (7-9) RL	SB-DUP-1	SB-DUP-1 RL
1,2,4-Trimethylbenzene	ND	2.2	0.4 J	2.3
1,3,5-Trimethylbenzene	ND	2.2	0.45 J	2.3
2-Butanone	ND	11	4.4 J	11
Acetone	ND	11	31	11
o-Xylene	ND	1.1	0.53 J	1.1

SB-DUP-2 was submitted as a field duplicate of SB-1 (0-2).

Compound	SB-1 (0.2)	SB-1 (0.2) RL	SB-DUP-2	SB-DUP-2 RL
1,2,4-Trimethylbenzene	1.0 J	2.7	0.51 J	2.9
1,3,5-Trimethylbenzene	0.32 J	2.7	ND	2.9

Results for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-butanone, acetone, and o-xylene in all samples except SB-1 (0-2) and SB-DUP-2 were qualified as estimated (J, UJ) on this basis.

#### IV. SVOCs (8270D Fullscan)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	Y
MS/MSD	N
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

## A. Calibration

Three initial calibrations were provided in support of the samples results, one performed on 1/22/22 on instrument GCMS5, one on 4/20-21/22 on instrument DAKOTA, and one on 5/10-11/22 on instrument SV112. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after each IC; all percent differences (%Ds) were acceptable ( $\leq 20\%$ ) in the ICV standards, for the target compounds reported for the associated samples.

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable ( $\leq 20\%$ ) with the following exceptions:

CC Date	Compound	%D	Samples Affected	Qualifier Applied
5/7/2022 @ 11:12 am DAKOTA	2,4-Dinitrophenol	+36.0	QC samples only	none
5/8/22 @ 9:29 DAKOTA	2,4-Dinitrophenol	+49.9	FIELD BLANK-1	none
	4,6-Dinitro-o-creson	+32.4	FIELD BLANK-2	
5/11/22 @ 11:43 pm SV112	2,4-Dinitrophenol	-20.6	No target compounds for the associated samples	none
	Pentachlorophenol	-25.5		
	Chrysene	-21.1		
	bis(2-Ethylhexyl)phthalate	-24.8		

The high %Ds for 2,4-dinitrophenol and 4,6-dinitro-o-cresol represent increases in sensitivity and these compounds were not detected in FIELD BLANK-1 and FIELD BLANK-2; therefore, no action was necessary. The compounds exhibiting excursions in the 5/11/22 CC listed above were only reported in FIELD BLANK-1 and FIELD BLANK-2, none of the soil samples; therefore, no action was warranted for these excursions.

## B. Blanks

Laboratory blanks were prepared and analyzed for each of the extraction batches. Two field blanks were submitted with the field samples. None of the target compounds reported in the field samples were detected in any of the laboratory method blanks.

2-Methylnaphthalene was detected in FIELD BLANK-1 at a concentration of 0.04 J  $\mu\text{g/L}$ . This compound was reported only in the two field blanks; therefore, no action was necessary with respect to the field samples.

## C. Surrogates

Six surrogate compounds were added before extraction to all QC and field samples. Recoveries for the surrogates were acceptable (70-130%) with the exceptions detailed below:



Sample	2FP	PHL	NBZ	FBP	TBP	TPHd14	Qualifier Applied
FIELD BLANK-1	a	59	a	a	a	a	J-, UJ
FIELD BLANK-2	57	47	63	67	66	63	
SB-7 (0-2)	66	66	58	65	62	62	
SB-7 (7-9)	a	a	67	a	a	a	
SB-6 (0-2)	a	a	62	a	a	65	
SB-6 (7-9)	a	a	a	a	a	69	
SB-9 (0-4)	a	a	a	a	a	62	
SB-8b (0-3)	4	24	62	61	1	54	
SB-8b (0-3) RE	7	34	62	59	1	51	
SB-10a (0-3)	69	a	69	a	65	a	
SB-10b (0-3)	a	a	a	a	a	69	
SB-16 (0-4)	a	a	a	a	a	69	
SB-17 (2-4)	63	62	54	61	62	60	
SB-17 (0-2)	a	a	69	a	a	63	
SB-19 (0-2)	64	65	57	62	69	55	
SB-19 (7-9)	69	a	62	68	69	63	
SB-18 (0-2)	a	a	64	63	a	51	
SB-18 (7-9)	68	68	62	65	66	53	
SB-11 (0-4)	a	a	67	a	a	a	
SB-DUP-2	52	a	a	a	42	a	
SB-1 (0-2)	25	53	58	62	17	54	
SB-3 (0-2)	a	a	a	a	66	56	
SB-4 (0-2)	a	a	69	57	a	46	
SB-5 (0-2)	a	a	a	a	a	63	

Results for phenol, 2-nitrophenol, 4-nitrophenol, 2-chlorophenol, 2-methylphenol, 3&4-methylphenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrophenol, benzoic acid, and benzyl alcohol in FIELD BLANK-1, SB-DUP-2 and SB-10a (0-3) were qualified as estimated (J-, UJ) based on low recovery for the associated surrogate compound.

Results for phenol, 2-methylphenol, and 3&4-methylphenol in SB-8b (0-3) and SB-8b (0-3) RE were rejected (R) as unusable, based on recoveries less than 10% for associated surrogate compounds.

The result for pentachlorophenol in SB-3 (0-2) was qualified as estimated (UJ) based on low recovery for the associated surrogate compound.

Results for acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, hexachlorobenzene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene in SB-8b (0-3), SB-8b (0-3) RE, SB-6 (0-2), SB-10a (0-3), SB-17 (0-2), SB-18 (0-2), and SB-

4 (0-2) were qualified as estimated (J-, UJ) based on low recoveries for the associated surrogate compounds.

Results for all target compounds in FIELD BLANK-2, SB-7 (0-2), SB-17 (2-4), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), and SB-1 (0-2) were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.

Results for naphthalene and hexachlorobenzene in SB-7 (7-9), SB-10a (0-3), and SB-11 (0-4) were qualified as estimated (J-, UJ) based on low recovery for the surrogate compound associated with these target analytes.

Results for anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene in SB-6 (7-9), SB-9 (0-4), SB-10b (0-3), SB-16 (0-4), SB-3 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recovery for the associated surrogate.

#### D. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Four LCS/LCSD pairs were prepared and analyzed with the field samples. Recoveries for spiked compounds assessed (data validation limits 70-130% R) and agreement between paired results (<20 RPD) were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1635274-2/3</i>					
Acenaphthene	65	62	a	FIELD BLANK-1 FIELD BLANK-2	J-, UJ
1,2,4-Trichlorobenzene	59	58	a		
Hexachlorobenzene	63	59	a		
bis(2-Chloroethyl)ether	62	58	a		
2-Chloronaphthalene	58	59	a		
1,2-Dichlorobenzene	59	56	a		
1,3-Dichlorobenzene	58	56	a		
1,4-Dichlorobenzene	58	56	a		
3,3'-Dichlorobenzidine	56	53	a		
2,6-Dinitrotoluene	a	68	a		
Fluoranthene	66	66	a		
4-Chlorophenyl phenyl ether	66	61	a		
4-Bromophenyl phenyl ether	61	59	a		
bis(2-Chloroisopropyl)ether	59	56	a		
bis(2-Chloroethoxy)methane	61	58	a		
Hexachlorobutadiene	58	59	a		

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Hexachlorocyclopentadiene	46	46	a		
Hexachloroethane	57	57	a		
Isophorone	55	53	a		
Naphthalene	61	62	a		
Nitrobenzene	67	63	a		
n-Nitrosodiphenylamine	65	62	a		
n-Nitrosodi-n-propylamine	59	58	a		
bis(2-Ethylhexyl)phthalate	65	66	a		
Butyl benzyl phthalate	63	61	a		
Di-n-butylphthalate	62	64	a		
Di-n-octylphthalate	65	64	a		
Diethyl phthalate	65	62	a		
Dimethyl phthalate	60	60	a		
Benzo(a)anthracene	67	69	a		
Benzo(a)pyrene	a	69	a		
Acenaphthylene	58	58	a		
Anthracene	65	64	a		
Anthracene	65	64	a		
Fluorene	67	63	a		
Phenanthrene	68	66	a		
Pyrene	67	65	a		
Biphenyl	63	60	a		
4-Chloroaniline	7	7	a		
2-Nitroaniline	a	69	a		
3-Nitroaniline	20	19	a		
4-Nitroaniline	54	54	a		
Dibenzofuran	67	64	a		
2-Methylnaphthalene	60	60	a		
1,2,4,5-Tetrachlorobenzene	59	57	a		
Acetophenone	60	60	a		
2,4,6-Trichlorophenol	61	60	a		
4-Chloro-3-methylphenol	64	62	a		
2-Chlorophenol	62	60	a		
2,4-Dichlorophenol	64	63	a		
2,4-Dimethylphenol	63	56	a		
2-Nitrophenol	69	67	a		
4-Nitrophenol	64	61	a		
2,4-Dinitrophenol	66	61	a		
Pentachlorophenol	55	62	a		
Phenol	45	42	a		
2-Methylphenol	61	58	a		
3&4-Methylphenol	61	55	a		

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
2,4,5-Trichlorophenol	61	62	a		
Benzoic acid	40	45	a		
Benzyl alcohol	55	54	a		
Carbazole	a	69	a		
Batch 1635635-2/3					
Acenaphthene	64	63	a	SB-12 (0-4) SB-19 (0-2) SB-11 (0-4) SB-18 (7-9) SB-19 (7-9) SB-6 (7-9) SB-17 (2-4) SB-6 (0-2) SB-16 (0-4) SB-7 (7-9) SB-7 (0-2) SB-10a (0-3) SB-1 (0-2) SB-2 (0-2) SB-9 (0-4) SB-17 (0-2) SB-18 (0-2) SB-DUP-2 SB-8b (0-3) SB-10b (0-3)	
Hexachlorobenzene	67	69	a		
Fluoranthene	67	66	a		
Naphthalene	59	60	a		
Benzo(a)anthracene	68	68	a		
Benzo(a)pyrene	a	66	a		
Benzo(b)fluoranthene	69	64	a		
Benzo(k)fluoranthene	66	64	a		
Chrysene	65	64	a		
Acenaphthylene	66	a	a		
Anthracene	65	65	a		
Benzo(ghi)perylene	67	64	a		
Fluorene	66	67	a		
Phenanthrene	64	63	a		
Dibenz(a,h)anthracene	67	66	a		
Indeno(1,2,3-cd)pyrene	a	67	a		
Pyrene	65	63	a		
Dibenzofuran	66	65	a		
Pentachlorophenol	54	58	a		
Phenol	62	65	a		
2-Methylphenol	63	67	a		
3&4-Methylphenol	64	a	a		
Batch 1635905-2/3					
Acenaphthene	65	a	a	SB-3 (0-2) SB-4 (0-2) SB-5 (0-2)	J-, UJ
Hexachlorobenzene	61	68	a		
Fluoranthene	67	a	a		
Naphthalene	66	a	a		
Benzo(a)anthracene	63	69	a		
Benzo(a)pyrene	58	63	a		
Benzo(b)fluoranthene	58	63	a		
Benzo(k)fluoranthene	60	65	a		
Chrysene	61	67	a		
Acenaphthylene	68	a	a		
Anthracene	64	a	a		
Benzo(ghi)perylene	66	a	a		
Fluorene	67	a	a		
Phenanthrene	67	a	a		



Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Dibenz(a,h)anthracene	64	a	a		
Pyrene	66	a	a		
Dibenzofuran	67	a	a		
Pentachlorophenol	61	68	a		
Batch 1639053-2/3					
Acenaphthene	57	a	38	SB-8b (0-3) RE	J-, UJ
Hexachlorobenzene	57	a	35		
Fluoranthene	61	a	35		
Naphthalene	56	a	39		
Benzo(a)anthracene	60	a	36		
Benzo(a)pyrene	55	a	33		
Benzo(b)fluoranthene	55	a	33		
Benzo(k)fluoranthene	53	a	38		
Chrysene	57	a	36		
Acenaphthylene	60	a	39		
Anthracene	60	a	36		
Benzo(ghi)perylene	59	a	37		
Fluorene	59	a	38		
Phenanthrene	60	a	36		
Dibenz(a,h)anthracene	56	a	40		
Indeno(1,2,3-cd)pyrene	59	a	38		
Pyrene	60	a	37		
Dibenzofuran	59	a	39		
Pentachlorophenol	37	a	51		
Phenol	64	a	38		
2-Methylphenol	61	a	39		
3&4-Methylphenol	68	a	37		

Results for all target analytes in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) based on low recoveries in the LCS and/or LCSD.

Results for all compounds except 2-methylphenol, 3&4-methylphenol, phenol, and indeno(1,2,3-cd)pyrene, in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recoveries in the LCS and/or LCSD.

Results for 4-chloroaniline in FIELD BLANK-1 and FIELD BLANK-2 were rejected (R) as unusable, based on recoveries less than 10% for the LCS and LCSD.

Results for all target analytes in SB-12 (0-4), SB-19 (0-2), SB-11 (0-4), SB-18 (7-9), SB-19 (7-9), SB-6 (7-9), SB-17 (2-4), SB-6 (0-2), SB-16 (0-4), SB-7 (7-9), SB-7 (0-2), SB-10a (0-3), SB-1 (0-2), SB-2 (0-2), SB-9 (0-4), SB-17 (0-2), SB-18 (0-2), SB-DUP-2, SB-8b (0-3), SB-8b (0-3) RE, and SB-10b (0-3) were qualified as estimated (J-, UJ) based on low recoveries in the LCS and/or LCSD. Results for phenol, 2-methylphenol, and 3&4-

methylphenol in SB-8b (0-3) and SB-8b (0-3) RE were previously rejected based on surrogate recovery <10%. The “R” qualifier takes precedence.

Results for 4-chloroaniline in FIELD BLANK-1 and FIELD BLANK-2 were rejected (R) as unusable, based on recoveries less than 10% for the LCS and LCSD.

### E. Matrix Spike (MS)/MS Duplicate (MSD)

Two MS/MSD pairs were prepared and analyzed with the field samples. Recoveries for all spiked compounds assessed (validation limits 70-130% R) and agreement between paired results (<50 RPD) was acceptable, with the following exceptions.

Compound	MS %R	MSD %R	RPD	Samples Affected	Qualifier Applied
Batch 1635905-4/5 – Parent sample SB-4 (0-2)					
Acenaphthene	a	56	a	SB-4 (0-2)	J-, UJ
Hexachlorobenzene	63	49	a		
Fluoranthene	a	57	a		
Naphthalene	a	60	a		
Benzo(a)anthracene	68	55	a		
Benzo(a)pyrene	58	46	a		
Benzo(b)fluoranthene	65	46	a		
Benzo(k)fluoranthene	57	48	a		
Chrysene	66	52	a		
Acenaphthylene	a	60	a		
Anthracene	67	55	a		
Benzo(ghi)perylene	64	50	a		
Fluorene	a	57	a		
Phenanthrene	a	59	a		
Dibenz(a,h)anthracene	64	50	a		
Indeno(1,2,3-cd)pyrene	68	53	a		
Pyrene	a	56	a		
Dibenzofuran	a	57	a		
Pentachlorophenol	66	53	a		
2-Methylphenol	a	65	a		
Batch 1635905-6/7 – Parent sample SB-5 (0-2)					
Acenaphthene	a	56	a	SB-5 (0-2)	J-, UJ
Hexachlorobenzene	63	49	a		
Fluoranthene	a	57	a		
Naphthalene	a	60	a		
Benzo(a)anthracene	68	55	a		
Benzo(a)pyrene	58	46	a		
Benzo(b)fluoranthene	65	46	a		
Benzo(k)fluoranthene	57	48	a		
Chrysene	66	52	a		

Compound	MS %R	MSD %R	RPD	Samples Affected	Qualifier Applied
Acenaphthylene	a	60	a		
Anthracene	67	55	a		
Benzo(ghi)perylene	64	50	a		
Fluorene	a	57	a		
Phenanthrene	a	59	a		
Dibenz(a,h)anthracene	64	50	a		
Indeno(1,2,3-cd)pyrene	68	53	a		
Pyrene	a	56	a		
Dibenzofuran	a	57	a		
Pentachlorophenol	66	53	a		
2-Methylphenol	a	65	a		

Results for all target analytes except phenol and 3&4-methylphenol in SB-4 (0-2) and SB-5 (0-2) were qualified as estimated (J-, UJ) based on low recoveries in the MS and/or MSD.

#### F. Field Duplicates

Sample SB-DUP-1 (included in SDG L2223458) was submitted as a field duplicate of SB-19 (7-9) included in this SDG. Sample SB-DUP-2 was submitted as a field duplicate for SB-1 (0-2), both reported with this dataset. None of the reported target analytes were detected in either sample of either of the field duplicate pairs.

#### V. SVOCs (Method 8270D SIM)

Only the 2 FBs were run for SIM – PAH and dioxane

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	Y
Field Duplicates	NA
MS/MSD	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

## A. Calibration

One initial calibration, performed on 2/9/22 on instrument SB128, was provided in support of the acid- and base/neutral- extractable semivolatile compound results reported for the two field blanks. Another IC was performed on 5/4/22 on instrument PSH22 for 1,4-dioxane only. Calibration was established using average response factors, linear regression, and isotope dilution (1,4-dioxane only). All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after each of the ICs and all percent differences (%Ds) in these ICVs were acceptable ( $\leq 20\%$ ).

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable ( $\leq 20\%$ ), with one exception:

CC Date	Compound	%D	Samples Affected	Qualifier Applied
5/8/22 @ 07:19 SV128	bis(2-Ethylhexyl)phthalate	+21.9	FIELD BLANK-1 FIELD BLANK-2	J, UJ

The high %D represents an increase in sensitivity for bis(2-ethylhexyl)phthalate, indicating the potential for high bias. This compound was not detected in either of the field blanks; therefore, no action was necessary.

## B. Blanks

Two method blanks were prepared with the two field blank samples, one with the analytical batch extracted for acid- and base/neutral extractable compounds and a second for the extraction for 1,4-dioxane, only. The following compounds were detected in the associated method blank:

Blank	Compound	%D	Samples Affected	Qualifier Applied
WG1635276-1	Fluoranthene	0.03 J $\mu\text{g/L}$	FIELD BLANK-1	none
	Naphthalene	0.31 J $\mu\text{g/L}$	FIELD BLANK-2	
	Benzo(a)anthracene	0.02 J $\mu\text{g/L}$		
	Benzo(b)fluoranthene	0.01 J $\mu\text{g/L}$		
	Phenanthrene	0.02 J $\mu\text{g/L}$		
	2-Methylnaphthalene	0.07 J $\mu\text{g/L}$		U

The result for 2-methylnaphthalene in FIELD BLANK-1 was qualified as not detected (U) at the reporting limit, based on the presence of this compound in the associated method blank at a higher concentration. None of the other analytes detected in the method blank were detected in either field blank.



### C. Surrogates

Six surrogate compounds (2-fluorophenol [2FP], phenol-d<sub>5</sub> [PHL], nitrobenzene-d<sub>5</sub> [NBZ], fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], and terphenyl-d<sub>14</sub> [TPHd14]) were added before extraction to all QC and field samples. Of these, the three base/neutral extractable surrogate compounds (NBZ, FBP, and TPHd14), the acid-extractable compound 2,4,6-tribromophenol (TBP), and 1,4-dioxane-d<sub>8</sub> (DXd8, applicable to the 1,4-dioxane analyses only) have bearing on the selected target compounds. Recoveries for these surrogates were acceptable (70-130% for acid- and base/neutral extractable surrogates and 30-130% for 1,4-dioxane-d<sub>8</sub>) with the exceptions detailed below:

Sample	DXd8	2FP	PHL	NBZ	FBP	TBP	TPHd14	Qualifier Applied
FIELD BLANK-1	a	a	a	a	a	137	a	none
FIELD BLANK-2	a	61	a	a	a	a	a	

Only pentachlorophenol was associated with 2,4,6-tribromophenol and this compound was not detected in FIELD BLANK-1 and 2-fluorophenol is not associated with any of the target compounds reported; therefore, no action was necessary.

### D. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

One LCS/LCSD pair was prepared and analyzed with each extraction batch. Recoveries for all spiked compounds assessed (70-130% R) and agreement between paired results (<20 RPD) were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1635276-2/3</i>					
Acenaphthylene	69	64	a	FIELD BLANK-1	J-, UJ
Pentachlorophenol	a	62	a	FIELD BLANK-2	

Results for acenaphthylene and pentachlorophenol in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) based on low recoveries in the LCS and/or LCSD.

## VI. Pesticides

Review Element	Acceptable?
Calibration - IC, ICV, CCV	Y
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	Y

Review Element	Acceptable?
Compound Identification	Y
Compound Quantitation	N

## A. Calibration

Three initial calibrations were associated with the sample analyses; these were run on September 13, 2021, on instrument PEST10, on January 31, 2022, on instrument PEST18, and on April 22, 2022, on instrument PEST20. Calibration factors (CFs) and %RSDs were correctly calculated and reported. All %RSDs were all less than the maximum acceptance limit of 20%. ICV standards were analyzed after each IC. The %Ds for all target analyte peaks on both columns in the ICV standards were less than the maximum acceptance limit of 20%.

Six CC standards were analyzed with the samples. CFs and %Ds for all analyte 1260 peaks on both columns were correctly calculated and reported. The %D values were less than the maximum acceptance limit of 20%, with the following exceptions:

CC Standard	Analyte	Column	%D	Associated Samples	Qualifier Applied
5/9/22 @ 10:27 PEST10	Tetrachloro-m-xylene	Column 1	21.2	FIELD BLANK-1 FIELD BLANK-2	none
5/9/22 @ 14:17 PEST18	Decachlorobiphenyl	Column 2	23.4	SB-7 (7-9) SB-6 (0-2) SB-9 (0-4) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-18 (7-9) SB-3 (0-2) SB-DUP-2 SB-1 (0-2) SB-2 (0-2)	none
5/11/22 @ 08:07 PEST20	4,4'-DDD	Column 2	20.1	SB-8b (0-3)	none
5/17/22 @ 08:55 PEST10	Decachlorobiphenyl	Column 2	34.3	SB-5 (0-2)	none

Decachlorobiphenyl and tetrachloro-m-xylene are the surrogate compounds used for these analyses. Since surrogate compound concentrations are calculated using responses from the IC rather than the CC standard, no action was taken based on the high %D for these analytes in the CC standards run on May 9 and 17, 2022, on instrument PEST10 and on May 9, 2022, on instrument PEST18.

For the May 11, 2022, CC standard, the %D for 4,4'-DDD was acceptable on Column 2, and this compound was not detected in the associated site sample. Therefore, based on professional judgment, no action was necessary on this basis.

## B. Surrogate Recovery

Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1	TCX %R Column 2	DCB %R Column 1	DCB %R Column 2	Qualifier
FIELD BLANK-1	58	64	67	a	J-, UJ
FIELD BLANK-2	55	59	48	59	
SB-7 (0-2)	60	66	a	a	
SB-6 (0-2)	62	69	68	59	
SB-6 (7-9)	58	64	a	a	
SB-8b (0-3)	0	0	0	0	none
SB-12 (0-4)	64	a	a	61	J-, UJ
SB-10a (0-3)	50	53	57	49	
SB-10b (0-3)	65	a	a	a	
SB-17 (2-4)	57	62	a	60	
SB-17 (0-2)	62	67	a	65	
SB-19 (0-2)	61	68	a	a	
SB-19 (7-9)	63	66	a	a	
SB-18 (7-9)	61	69	a	62	
SB-11 (0-4)	62	66	a	a	
SB-DUP-2	69	a	a	a	none
SB-1 (0-2)	65	a	a	68	UJ
SB-2 (0-2)	59	65	a	60	
SB-3 (0-2)	58	a	a	a	none
SB-4 (0-2)	a	a	a	69	

a = acceptable

Results for all target analytes in FIELD BLANK-1, FIELD BLANK-2, SB-7 (0-2), SB-6 (0-2), SB-6 (7-9), SB-12 (0-4), SB-10a (0-3), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), and SB-2 (0-2) were qualified as estimated (UJ) due to low surrogate recoveries.

For SB-10b (0-3), three of four surrogate recoveries were acceptable. However, positive results for 4,4'-DDT and cis-chlordane were reported from the primary column, and the recovery of TCX on this column was low. Results for 4,4'-DDT and cis-chlordane in SB-10b (0-3) were qualified as estimated with potential low bias (J-) due to a low surrogate recovery on the column from which these results were reported. Based on professional judgment, since no other target analytes were detected in the sample, and both surrogate recoveries on the secondary column were acceptable, no additional action was taken.

For SB-DUP-2, SB-3 (0-2), and SB-4 (0-2), three of four surrogate recoveries were acceptable, and no target analytes were detected in the samples. Therefore, based on professional judgment, no action was taken.

Sample SB-8b (0-3) was analyzed at a 20-fold dilution; according to the case narrative, the dilution was performed due to the matrix of the sample. As a result, concentrations of the surrogate compounds were diluted out, and no action was taken.

### C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Four LCS/LCSD pairs were prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Batch WG1635259-2/3					
delta-BHC	50	61	a	FIELD BLANK-1 FIELD BLANK-2	UJ
Lindane	53	68	25		
alpha-BHC	55	69	24		
beta-BHC	53	a	35		
Heptachlor	54	68	23		
Aldrin	53	67	22		
Endrin	54	69	25		
Dieldrin	55	a	25		
4,4'-DDE	52	68	26		
4,4'-DDD	57	a	25		
4,4'-DDT	55	a	25		
Endosulfan I	50	64	24		
Endosulfan II	53	65	21		
Endosulfan sulfate	52	62	a		
cis-Chlordane	49	62	24		
Batch WG1635623-2/3					
delta-BHC	65	a	a	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-18 (7-9) SB-11 (0-4)	J-, UJ
Lindane	68	a	a		
alpha-BHC	67	a	a		
beta-BHC	67	a	a		
Aldrin	63	a	a		
Endrin	66	a	a		
Dieldrin	66	a	a		
4,4'-DDE	60	67	a		
4,4'-DDD	67	a	a		
4,4'-DDT	58	63	a		
Endosulfan I	60	67	a		
Endosulfan II	65	a	a		
Endosulfan sulfate	56	57	a		
cis-Chlordane	54	60	a		



Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
				SB-DUP-2 SB-1 (0-2) SB-2 (0-2) SB-3 (0-2)	
Batch WG16535789-2/3					
Heptachlor	67	58	a	SB-18 (0-2) SB-4 (0-2)	UJ
Endosulfan I	a	69	a		
Endosulfan sulfate	a	67	a		
cis-Chlordane	69	61	a		
Batch WG1639033-2/3					
cis-Chlordane	66	a	a	SB-5 (0-2)	UJ

Results for all target analytes in FIELD BLANK-1 and FIELD BLANK-2, for delta-BHC, lindane, alpha-BHC, beta-BHC, aldrin, endrin, dieldrin, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, and cis-chlordane in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (7-9), SB-11 (0-4), SB-DUP-2, SB-1 (0-2), SB-2 (0-2), and SB-3 (0-2), for heptachlor, endosulfan I, endosulfan sulfate, and cis-chlordane in SB-18 (0-2) and SB-4 (0-2), and for cis-chlordane in SB-5 (0-2) were qualified as estimated (J-, UJ) due to low LCS and/or LCSD recoveries.

Results for all target analytes except delta-BHC and endosulfan sulfate in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) due to LCS/LCSD imprecision.

#### D. Compound Quantitation

Target analytes concentrations and RLs were correctly calculated and reported. For all detected analytes except cis-chlordane in SB-6 (0-2), the laboratory reported the higher of the two column measurements. Agreement between the two measurements was acceptable (QC <40 RPD), except for cis-chlordane in SB-6 (0-2) (98 RPD). The result for cis-chlordane in SB-6 (0-2) was qualified as estimated (J) due to lack of agreement between the two column measurements.

#### VII. PCBs

Review Element	Acceptable?
Calibration - IC, ICV, CCV	N
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	N
Compound Identification	N
Compound Quantitation	Y

NA = not analyzed

## A. Calibration

Five initial calibrations were associated with the sample analyses; these were run on November 23, 2021, on instrument PEST13, on March 1, 2022, on instrument PEST21, on April 11, 2022, on instrument PEST23, on April 19-20, 2022, on instrument PEST2, and on April 25, 2022, on instrument PEST7. Calibration factors (CFs) and %RSDs were correctly calculated and reported. All %RSDs were all less than the maximum acceptance limit of 20%. ICV standards for Aroclor 1248 and the Aroclor 1016/1260, Aroclor 1242/1268, Aroclor 1232/1262, and Aroclor 1221/1254 mixtures were analyzed after each IC, and %Ds for all selected Aroclor peaks on both columns in the ICV standards were less than the maximum acceptance limit of 20%, with the following exceptions:

ICV Standard	Aroclor	Column	%D	Associated Samples	Qualifier Applied
4/11/22 @ 22:42 PEST23	Aroclor 1260-3	CLP-Pesticide	21.1	Lab QC Samples Only	none
	Aroclor 1260-4		20.3		
	Aroclor 1260-4	CLP-Pesticide II	20.3		
4/19/22 @ 21:10 PEST2	Aroclor 1232-2	CLP-Pesticide II	24.1	FIELD BLANK-1 FIELD BLANK-2	none
4/19/22 @ 22:27 PEST2	Aroclor 1248-2	CLP-Pesticide	21.4		
4/25/22 @ 18:02 PEST7	Aroclor 1260-3	CLP-Pesticide	20.7	SB-10b (0-3)	UJ
	Aroclor 1260-4		20.3		
	Aroclor 1260-4	CLP-Pesticide II	20.2		

The result for Aroclor 1260 in SB-10b (0-3) was qualified as estimated (UJ) due to high %Ds for selected Aroclor 1260 peaks on both columns in the associated ICV standard.

For the April 19, 2022, Aroclor 1232 and Aroclor 1248 ICV standards, %Ds were high on only one column, and the affected Aroclor was not detected in the associated samples. Therefore, based on professional judgment, no action was taken on this basis.

Eleven CC standards were analyzed with the samples. CFs and %Ds for all selected Aroclor 1016 and 1260 peaks on both columns were correctly calculated and reported. The %D values were less than the maximum acceptance limit of 20%, with the following exceptions:

CC Standard	Aroclor	Column	%D	Associated Samples	Qualifier Applied
5/10/22 @ 07:18 PEST21	Decachlorobiphenyl	CLP-Pesticide II	22.3	SB-8b (0-3)	none
5/16/22 at 12:48 PEST2	Aroclor 1260-4	CLP-Pesticide II	21.1	FIELD BLANK-1	none
5/18/22 at 10:31 PEST23	Decachlorobiphenyl	CLP-Pesticide	29.1	Lab QC Samples Only	none
	Aroclor 1260-3		21.1		
	Decachlorobiphenyl	CLP-Pesticide II	23.3		
5/19/22 @ 06:42 PEST7	Tetrachloro-m-xylene	CLP-Pesticide II	23.6	SB-10b (0-3)	none
	Aroclor 1016-3		21.2		
	Aroclor 1260-3		20.4		

CC Standard	Aroclor	Column	%D	Associated Samples	Qualifier Applied
	Aroclor 1260-4		21.9		
	Aroclor 1260-5		20.5		

Decachlorobiphenyl and tetrachloro-m-xylene are the surrogate compounds used for these analyses. Since surrogate compound concentrations are calculated using responses from the IC rather than the CC standard, no action was taken based on the high %D for these analytes in the CC standards run on May 10, 2022, on instrument PEST21, and on May 19, 2022, on instrument PEST7.

Since no site sample analyses were associated with the CC standard run on instrument PEST23, no action was necessary based on the high %Ds.

For all other high Aroclor peak %Ds listed above, the %Ds were acceptable on the other column and the Aroclor was not detected in the associated site samples. Therefore, based on professional judgment, no action was necessary on this basis.

## B. Blanks

Seven method blanks were prepared and analyzed with the site samples. Two field blanks (FIELD BLANK-1 and FIELD BLANK-2) were submitted with the field samples. The following analytes were detected in these blanks:

Blank ID	Analyte	Concentration (µg/kg)	Associated Samples	Qualifier
Method Blank WG1635783-1	Aroclor 1260	14.4 J	SB-18 (0-2) SB-4 (0-2)	U
Method Blank WG1636093-1	Aroclor 1260	14.6 J	SB-8b (0-3)	none

Results for Aroclor 1260 in SB-18 (0-2) and SB-4 (0-2) were qualified as not detected (U) at the RL due to associated method blank contamination. The concentration of Aroclor 1260 in SB-8b (0-3) was significantly greater than the method blank concentration; therefore, no action was warranted.

## C. Surrogate Recovery

Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1*	TCX %R Column 2**	DCB %R Column 1	DCB %R Column 2	Qualifier
SB-7 (7-9)	52	52	44	42	UJ
SB-6 (0-2)	a	a	a	69	none
SB-6 (7-9)	64	64	65	61	UJ
SB-8b (0-3)	65	66	60	58	

Sample	TCX %R Column 1*	TCX %R Column 2**	DCB %R Column 1	DCB %R Column 2	Qualifier
SB-12 (0-4)	39	39	31	31	
SB-10b (0-3)	65	66	62	64	
SB-16 (0-4)	63	63	65	59	
SB-17 (2-4)	61	61	a	a	
SB-17 (0-2)	66	65	67	63	
SB-19 (0-2)	55	55	55	53	
SB-18 (0-2)	a	a	a	65	none
SB-18 (7-9)	66	66	58	56	J-, UJ
SB-DUP-2	61	61	61	58	
SB-2 (0-2)	66	67	69	68	
SB-3 (0-2)	67	67	69	65	
SB-4 (0-2)	a	a	69	64	
SB-5 (0-2)	58	50	56	52	

\*CLP-Pesticide column

\*\*CLP-Pesticide II column

a = acceptable

Results for all target Aroclors in SB-7 (7-9), SB-6 (7-9), SB-8b (0-3), SB-12 (0-4), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-18 (7-9), SB-DUP-2, SB-2 (0-2), SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J-, UJ) due to low surrogate recoveries on both columns. Based on professional judgment, since TCX recoveries on both columns and DCB recoveries on the CLP-Pesticide column in SB-6 (0-2) and SB-18 (0-2) were acceptable and no target Aroclors were detected in these samples, no action was necessary due to the low DCB recoveries on the CLP-Pesticide II column.

#### D. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Seven LCS/LCSD pairs were prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Batch WG1636668-2/3					
Aroclor 1016	61 / a	49 / 58	a / 23	SB-5 (0-2)	UJ
Aroclor 1260	55 / 48	63 / 56	a / a		
Batch WG1639652-2/3					
Aroclor 1016	68 / 65	a / 58	a / a	SB-10b (0-3)	UJ
Aroclor 1260	55 / 48	63 / 56	a / a		

a = acceptable

Results for all target Aroclors in SB-5 (0-2) and SB-10b (0-3) were qualified as estimated (UJ) due to low LCS/LCSD recoveries and, for SB-5 (0-2), due to LCS/LCSD imprecision. Total PCBs results were also qualified as estimated (UJ).



### E. Matrix Spike (MS)/MS Duplicate (MSD)

Samples SB-4 (0-2) and SB-5 (0-2) were prepared as MS/MSD pairs. Recoveries and precision between paired recoveries were acceptable (70-130% R and <50% RPD), with the following exceptions:

Compound	MS %R	MSD %R	RPD	Samples Affected	Qualifier Applied
<i>Parent Sample SB-5 (0-2)</i>					
Aroclor 1016	48 / 42	55 / 44	a / a	SB-5 (0-2)	UJ
Aroclor 1260	44 / 40	46 / 42	a / a		

a = acceptable

Results for all target Aroclors in SB-5 (0-2) were qualified as estimated (UJ) due to low MS/MSD recoveries. Total PCBs results were also qualified as estimated (UJ).

### F. Compound Identification and Quantitation

With one exception, target Aroclors were correctly identified where present in the samples based on the presence peaks at appropriate retention times relative to the calibration standards and representative chromatographic patterns. Aroclor 1254 was identified in SB-8b (0-3). While peaks are present at the appropriate retention times on both columns for this Aroclor, the peak pattern representative of this Aroclor is not visible in either sample chromatogram. The result for Aroclor 1254 in SB-8b (0-3) was qualified as presumed present (N) on this basis.

Aroclors 1254 and 1260 were reported in SB-8b (0-3). These two Aroclors share peaks, and the chromatographic patterns overlap. Based on professional judgment, results for Aroclor 1254 and 1260 in SB-8b (0-3) were qualified as estimated (J) due to the potential for contribution from the other Aroclor.

## VIII. ICP Metals

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	N
Interference Check Samples	N
Laboratory Control Samples	Y
Laboratory and Field Duplicates	N
Matrix Spike / Matrix Spike Duplicates	N
Post Digestion Spikes	N
Serial Dilution Analysis	N
Compound Quantitation	Y

## A. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. Two preparation blanks for total ICP metals were prepared and analyzed with the samples. The following analytes were detected in these blanks:

Blank ID	Analyte	Concentration (mg/kg)	Associated Samples	Qualifier
MB(WG1639550-1BLANK)	Chromium	0.212	SB-7 (0-2)	none
	Nickel	0.100	SB-7 (7-9)	none
	Zinc	0.156	SB-6 (0-2)	none
			SB-6 (7-9)	
			SB-9 (0-4)	
			SB-8b (0-3)	
			SB-12 (0-4)	
			SB-10a (0-3)	
			SB-10b (0-3)	
			SB-16 (0-4)	
			SB-17 (2-4)	
			SB-17 (0-2)	
			SB-19 (0-2)	
			SB-19 (7-9)	
			SB-18 (0-2)	
			SB-18 (7-9)	
			SB-11 (0-4)	
			SB-DUP-2	
			SB-5 (0-2)	
			SB-1 (0-2)	
			SB-2 (0-2)	
	Selenium	0.144	SB-9 (0-4)	U
			SB-17 (2-4)	none
SB-7 (0-2)				
SB-7 (7-9)				
SB-6 (0-2)				
SB-6 (7-9)				
SB-9 (0-4)				
SB-8b (0-3)				
SB-12 (0-4)				
SB-10a (0-3)				
SB-10b (0-3)				
SB-16 (0-4)				
SB-17 (0-2)				
SB-19 (0-2)				
SB-19 (7-9)				
SB-18 (0-2)				
SB-18 (7-9)				
SB-11 (0-4)				
SB-DUP-2				
SB-5 (0-2)				
SB-1 (0-2)				
SB-2 (0-2)				

Blank ID	Analyte	Concentration (mg/kg)	Associated Samples	Qualifier
CCB1 (R1568724-23 5/26/22 @ 12:47)	Selenium	0.12	SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2)	none
CCB1 (R1568724-27 5/26/22 @ 14:58)	Beryllium	0.028	SB-19 (0-2)	none
ICB1 (R1568724-37 5/26/22 @ 18:29)	Beryllium	0.016	SB-19 (7-9) SB-18 (0-2) SB-18 (7-9)	none
CCB1 (R1568724-39 5/26/22 @ 19:16)	Beryllium	0.016	SB-11 (0-4)	none
	Chromium	0.056	SB-DUP-2	none
	Manganese	0.072	SB-2 (0-2)	none
CCB1 (R1568724-41 5/26/22 @ 19:53)	Beryllium	0.016	SB-1 (0-2)	none
CCB1 (R1568724-43 5/26/22 @ 20:09)	Beryllium	0.016		none

The results for selenium in SB-9 (0-4) and SB-17 (2-4) were qualified as not detected (U) at the reporting limit due to method blank contamination. All other blank contamination (method and continuing calibration) was detected at less than actionable contamination levels and did not warrant qualification.

## B. Interference Check Samples (ICSA/ICSAB)

The interference check samples associated with these samples were acceptable for all analytes with exceptions in the ICSA standard. All ICSAB recoveries were within acceptance criteria (85-115%).

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
ICSA1 (R1568724-15 5/26/22 @ 09:23)	Barium	0.00380	SB-7 (0-2)	none
	Cadmium	-0.00340	SB-7 (7-9)	UJ
	Manganese	0.00410	SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3)	none

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
			SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-18 (0-2) SB-18 (7-9) SB-11 (0-4) SB-DUP-2 SB-1 (0-2) SB-2 (0-2)	
	Lead	0.00820	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-18 (7-9) SB-DUP-2 SB-1 (0-2) SB-2 (0-2)	J+
			SB-8b (0-3) SB-16 (0-4) SB-18 (0-2) SB-11 (0-4)	none
	Nickel	-0.00430	SB-7 (0-2) SB-8b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-18 (0-2) SB-18 (7-9)	J-
			SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-11 (0-4) SB-DUP-2	none



ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
			SB-1 (0-2) SB-2 (0-2)	
ICSA1 (R1570013-9 5/31/22 @ 09:02)	Barium	0.00320	SB-3 (0-2)	J+
	Cadmium	0.0020	SB-4 (0-2)	J+
	Chromium	0.00190	SB-5 (0-2)	none
	Lead	0.00730		J+
	Selenium	-0.00730		UJ

The ICSA standards in both of the analytical runs were detected above the MDL for barium (MDL – 0.00174 mg/L) and lead (MDL – 0.00268 mg/L). Each of these instances exhibited an elevated response with potential for high bias in the associated samples. The barium concentrations in the associated samples were detected above actionable levels and did not warrant qualification. Results for lead in all samples except SB-8b (0-3), SB-16 (0-4), SB-18 (0-2), and SB-11 (0-4) were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. The results for cadmium in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated and biased high (J+), because the associated ICSA standard was above the MDLs (0.000980 mg/L). The results for cadmium in all samples except SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) and selenium in SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated and biased low (UJ) because the absolute value of the negative concentrations reported in the associated ICSA standard were above the MDL (0.000980 mg/L and 0.00258 mg/L, respectively). The results of less than ten times the RL for nickel in SB-7 (0-2), SB-8b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-18 (0-2), and SB-18 (7-9) were qualified as estimated and biased low (J-) because the absolute value of the negative concentrations reported in the associated ICSA standard were above the MDL (0.00242 mg/L). All other associated samples were either not detected and associated with detected interferences or the samples were above the actionable levels and associated with negative interferences.

### C. Laboratory and Field Duplicates

A laboratory duplicate was performed on SB-7 (0-2) in compliance with the analytical method, and all analyte concentrations were within the acceptance limit (<50%). SB-DUP-1 was collected as a field duplicate of SB-3 (0-2). This duplicate pair is split between two SDGs: L2223093 and L2223458. It is identified in both validation reports, and only the samples included in SDG L2223093 will be discussed below. SB-DUP-2 was collected as a field duplicate of SB-5 (0-2). The field duplicate pairs were within acceptance limits with exceptions noted in the table below:

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
<i>Field Duplicate Pair: SB-3 (0-2) : SB-DUP-1</i>				
Arsenic	ND	0.898	N/C	SB-7 (0-2)

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
Barium	71.1	18.5	117	SB-7 (7-9)
Chromium	13.0	6.74	63.4	SB-6 (0-2)
Manganese	102	52.5	64	SB-6 (7-9)
Nickel	21.2	7.23	98.3	SB-9 (0-4)
				SB-8b (0-3)
				SB-12 (0-4)
				SB-10a (0-3)
				SB-10b (0-3)
				SB-16 (0-4)
				SB-17 (2-4)
				SB-17 (0-2)
				SB-19 (0-2)
				SB-19 (7-9)
				SB-DUP-1
				SB-18 (0-2)
				SB-18 (7-9)
				SB-11 (0-4)
				SB-1 (0-2)
				SB-2 (0-2)
				SB-3 (0-2)
				SB-4 (0-2)
<i>Field Duplicate Pair: SB-5 (0-2) : SB-DUP-2</i>				
Arsenic	0.610	ND	N/C	SB-7 (0-2)
Barium	27.8	219	154	SB-7 (7-9)
Cadmium	0.336	ND	N/C	SB-6 (0-2)
Chromium	14.9	32.2	73.5	SB-6 (7-9)
Copper	7.10	16.1	77.6	SB-9 (0-4)
Manganese	225	86.2	89.2	SB-8b (0-3)
Nickel	8.17	31.2	117	SB-12 (0-4)
Zinc	17.2	29.4	52.4	SB-10a (0-3)
				SB-10b (0-3)
				SB-16 (0-4)
				SB-17 (2-4)
				SB-17 (0-2)
				SB-19 (0-2)
				SB-19 (7-9)
				SB-DUP-2
				SB-18 (0-2)
				SB-18 (7-9)
				SB-11 (0-4)
				SB-1 (0-2)
				SB-2 (0-2)
				SB-4 (0-2)
				SB-5 (0-2)

N/C – Not Calculated

Results for arsenic in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2),

SB-19 (0-2), SB-19 (7-9), SB-DUP-2, SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), SB-4 (0-2), and SB-5 (0-2) were qualified as estimated (J, UJ), due to lack of confirmation in the field duplicate pair. Results for cadmium in all samples except SB-3 (0-2) were qualified as estimated (J, UJ), due to lack of confirmation in the field duplicate pair. Results for barium, chromium, manganese, and nickel in all samples were qualified as estimated (J) due to elevated RPD between the field duplicate pairs.

#### D. Matrix Spike, Matrix Spike Duplicate and Post Digestion Spike (PDS)

Three MS/MSD/PDS samples were prepared and analyzed with the site samples. Percent recoveries (%Rs) and relative percent differences (RPDs) were acceptable (validation QC 75-125%R, RPDs ≤20 RPD), with the exceptions noted below.

Analyte	MS %R	MSD %R	MS/MSD RPD	PDS
<i>QC Sample: SB-7 (0-2)</i>				
Beryllium	74	N/A	N/C	71
Cadmium	72	N/A	N/C	63
Chromium	74	N/A	N/C	67
Lead	74	N/A	N/C	65
Nickel	73	N/A	N/C	63
Zinc	74	N/A	N/C	64
<i>QC Sample: SB-4 (0-2)</i>				
Arsenic	71	67	a	72
Barium	64	64	a	67
Beryllium	66	63	a	66
Cadmium	63	58	a	64
Chromium	57	51	a	56
Copper	52	67	a	64
Lead	59	54	a	58
Manganese	66	67	a	53
Nickel	56	52	a	59
Selenium	57	52	a	57
Silver	68	64	a	63
Zinc	59	51	a	61
<i>QC Sample: SB-5 (0-2)</i>				
Arsenic	70	71	a	69
Barium	65	67	a	63
Beryllium	64	65	a	63
Cadmium	70	70	a	68
Chromium	60	67	a	55
Copper	67	67	a	63
Lead	60	60	a	57
Manganese	a	60	a	NA
Nickel	60	62	a	58
Selenium	62	62	a	63
Silver	a	66	a	63
Zinc	64	66	a	58

a = acceptable

NA - Not Analyzed

Although spike recoveries fell outside of acceptance limits for manganese in SB-5 (0-2) MS, the parent sample concentrations were more than four times the spike concentrations added. There is no expectation of acceptable recoveries at these spike levels, and qualification was not warranted. The results for beryllium, cadmium, chromium, lead, nickel and zinc in SB-7 (0-2) were qualified as estimated (J-, UJ), biased low due to low MS and PDS recoveries. The results for all ICP metals in SB-4 (0-2) were qualified as estimated (J-, UJ), biased low, due to low MS/MSD and PDS recoveries. The results for arsenic, barium, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and zinc in SB-5 (0-2) were qualified as estimated (J-, UJ), biased low, due to low MS and/or MSD and PDS recoveries. The user is cautioned that matrix effects seen in the above qualified samples, may also be applicable to other site samples.

### E. Serial Dilution

Serial dilutions were performed on SB-7 (0-2), SB-4 (0-2), and SB-5 (0-2) at 5-fold dilutions. Most percent differences (%Ds) were acceptable (<20%), with exceptions noted in the table below:

Analyte	SD %D
<i>QC Sample: SB-7 (0-2)</i>	
Barium	62
Chromium	34
Copper	32
Manganese	27
<i>QC Sample: SB-4 (0-2)</i>	
Barium	34
Chromium	36
Copper	29
Manganese	37
<i>QC Sample: SB-5 (0-2)</i>	
Barium	33
Chromium	34
Manganese	35

The results for all barium, chromium and manganese in all samples were qualified as estimated (J), due to elevated percent differences in the serial dilution sample. The results for copper in all samples except to SB-5 (0-2) were qualified as estimated (J) due to elevated percent difference in the serial dilution sample.

### F. Analyte Quantitation

Sample SB-1 (0-2) was analyzed at a 5-fold dilution to bring the sample concentrations within the instrument calibration range. All analytes were reported from the dilution. All sample concentrations, RLs, and MDLs were appropriately raised to reflect the dilution factors applied.



## IX. ICP-MS Metals

Review Element	Acceptable?
ICP-MS Instrument Tunes	Y
Calibrations - ICs, ICVs, CCVs	N
Laboratory and Field Blanks	N
Interference Check Samples	N
Laboratory Control Samples	Y
Field Duplicates	N/A
Matrix Spike / Matrix Spike Duplicates	Y
Post Digestion Spikes	N/A
Serial Dilution Analysis	Y
Internal Standard Recoveries	Y
Compound Quantitation	Y

N/A – Not Analyzed

### A. Calibrations – ICs, ICVs, CCVs

Two initial calibrations were established on 5/24/22 on instrument ICPMSQ. Calibration criteria ( $R^2 > 0.995$  for the linear regression) were met for all reported analytes. The calculated percent differences for all non-zero standards were within the 30% limit except for cadmium (-37.5%D), silver (-34.5%D), and beryllium (-40.5) in the lowest calibration standard. Results for cadmium, beryllium and silver in both samples were less than the calibration supported RL of 0.001 mg/L and qualified as estimated (UJ), due to elevated %D in the low-level calibration standard.

A low-level continuing calibration verification (LLCCV) was analyzed at the beginning of the analytical sequence. All recoveries were within the 65-135% limit with exceptions following:

LLCCV ID	Analyte	%D	Associated Samples	Qualifier
LLCCV 5/24/22 @ 08:46:33	Chromium	63	FIELD BLANK-1	UJ
	Copper	138	FIELD BLANK-2	none

Results for chromium in FIELD BLANK-1 and FIELD BLANK-2 were qualified as estimated (UJ) due to the low recovery demonstrated in the LLCCV standard. Results may be biased low, or the limit of detection may be higher than reported. The elevated copper recovery in the LLCCV standard did not warrant qualification in associated non-detected samples.

### B. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. A single preparation blank was prepared and analyzed with the samples. Two field blanks (FIELD BLANK-1 and FIELD BLANK-2) were submitted with the soil samples in this SDG. The

FIELD BLANK-2 was detected for barium (0.00095 mg/L or 0.158 mg/kg). All ICP soil results were compared against the ICP-MS FB detection for barium. Results were greater than the blank action level and did not warrant qualification.

### C. Interference Check Samples (ICSA/ICSAB)

The interference check samples associated with these samples were acceptable for all analytes with one exception in the ICSA standard. All ICSAB recoveries were within acceptance criteria (85-115%).

ICSA Standard	Analyte	Concentration (ug/L)	Associated Samples	Qualifier
ICSA1 (R1567696-3 5/24/22 @ 08:51)	Barium	0.250	FIELD BLANK-1 FIELD BLANK-2	none
				J+

The ICSA was detected above the MDL for barium (MDL – 0.000173 mg/L), exhibiting an elevated response with potential for high bias in low level samples. The result for barium in FIELD BLANK-2 was qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. FIELD BLANK-1 was not detected and did not warrant qualification.

### D. Analyte Quantitation

Both samples were analyzed, as prepared, without dilution. Sample concentrations, RLs, and MDLs were verified through the raw data and preparatory logs provided in the data package.

### X. Mercury (Cold Vapor Atomic Absorption)

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	N
Laboratory Control Samples	Y
Field Duplicates	N
Matrix Spike / Matrix Spike Duplicates	N
Post Digestion Spikes	Y
Serial Dilution Analysis	N/A
Analyte Quantitation	Y

N/A – Not Analyzed

### A. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. Two soil preparation blanks and one water preparation blank for mercury were prepared and

analyzed with the samples. Two field blanks (FIELD BLANK-1 and FIELD BLANK-2) were prepared and analyzed in this SDG. Blanks were not detected with exceptions:

Blank ID	Analyte	Concentration (mg/kg)	Associated Samples	Qualifier
CCB (R1565896-4 5/18/22 @ 20:30:09)	Mercury	-0.101	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-12 (0-4) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-8b (0-3) SB-10a (0-3)	J-, UJ
CCB (R1565896-8 5/18/22 @ 22:03)	Mercury	-0.100	SB-19 (7-9) SB-18 (7-9) SB-DUP-2 SB-1 (0-2) SB-2 (0-2) SB-18 (0-2) SB-11 (0-4)	J-, UJ

The continuing calibration blanks bracketing the above documented samples demonstrated negative concentrations, indicating a potential for low bias in the associated samples. Results for mercury in the above samples qualified as estimated (J-, UJ) due to negative blank associations.

## B. Field Duplicates

SB-DUP-1 was collected as a field duplicate of SB-3 (0-2). This duplicate pair is split between two SDGs: L2223093 and L2223458. It is identified in both validation reports, but only the samples included in SDG L2223093 will be discussed below. SB-DUP-2 was collected as a field duplicate of SB-5 (0-2). Both samples were not detected, and relative percent differences were not calculated. The field duplicate pair was within acceptance limits with exceptions noted in the table below:

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
<i>Field Duplicate Pair: SB-3 (0-2) : SB-DUP-1</i>				
Mercury	2.0	ND	N/C	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3)

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
				SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-DUP-1 SB-18 (0-2) SB-18 (7-9) SB-11 (0-4) SB-1 (0-2) SB-2 (0-2) SB-3 (0-2) SB-4 (0-2)

N/C – Not Calculated

Results for mercury in SB-7 (0-2), SB-7 (7-9), SB-6 (0-2), SB-6 (7-9), SB-9 (0-4), SB-8b (0-3), SB-12 (0-4), SB-10a (0-3), SB-10b (0-3), SB-16 (0-4), SB-17 (2-4), SB-17 (0-2), SB-19 (0-2), SB-19 (7-9), SB-DUP-1, SB-18 (0-2), SB-18 (7-9), SB-11 (0-4), SB-1 (0-2), SB-2 (0-2), SB-3 (0-2), and SB-4 (0-2) were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.

### C. Matrix Spike, Matrix Spike Duplicate and Post Digestion Spike (PDS)

Three MS/MSD/PDS samples were prepared and analyzed with the site samples [SB-4 (0-2), SB-5 (0-2) and SB-7 (0-2)]. Percent recoveries (%Rs) and relative percent differences (RPDs) were acceptable (validation QC 80-120%R, RPDs ≤20 RPD), with the exceptions noted below.

Analyte	MS %R	MSD %R	MS/MSD RPD
<i>QC Sample: SB-4 (0-2)</i>			
Mercury	a	143	a
<i>QC Sample: SB-5 (0-2)</i>			
Mercury	130	123	a

The result for mercury in SB-4 (0-2) was qualified as estimated and biased high (J+), based on the elevated MSD recovery. SB-5 (0-2) was not detected for mercury and did not warrant qualification. The user is cautioned that matrix effects seen in the above qualified samples, may also be applicable to other site samples.



## D. Analyte Quantitation

All samples were analyzed, as prepared, without secondary analytical dilutions. Calculations were verified from the raw data and preparation sheets provided in the data package. All sample concentrations, RLs, and MDLs were appropriately reported.

## XI. PFAS

Review Element	Acceptable?
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Labeled Analogs	N
LCS/LCSD	Y
Field Duplicates	Y
MS/MSD	N
Internal Standard Responses	Y
Compound Identification	Y

### A. Calibration

Three initial calibrations were associated with the sample analyses; these were run on April 27 and 29, 2022, on instrument LCMS01 and on April 13, 2022, on instrument LCMS02. RRFs and %RSDs were correctly calculated and reported. All %RSDs were all less than the maximum acceptance limit of 20%. Recoveries of the target analytes were within the acceptance limits (50-150% for the low concentration IC standard and 70-130% for all other IC standards), with the following exceptions:

IC Standard	Analyte	%R	Associated Samples	Qualifier Applied
4/13/22 IC – 0.50 ng/mL	branched NEtFOSAA	31.0	SB-10b (0-3)	UJ
4/13/22 IC – 1.0 ng/mL	branched NEtFOSAA	9.1	SB-19 (7-9)	
	linear NMeFOSAA	61.6	SB-DUP-2	
	branched NMeFOSAA	41.3	SB-3 (0-2)	
4/13/22 IC – 2.0 ng/mL	branched NEtFOSAA	46.9	SB-5 (0-2)	
4/13/22 IC – 5.0 ng/mL	branched NEtFOSAA	56.1		

Results for NEtFOSAA and NMeFOSAA in SB-10b (0-3), SB-19 (7-9), SB-DUP-2, SB-3 (0-2), and SB-5 (0-2) were qualified as estimated (UJ) due to low recoveries in associated IC standards.

ICV standards were analyzed after each IC, and %Rs for the target analytes were within the acceptance limits of 70-130%.

Fifteen CC standards were analyzed with the samples. The %Rs for the target analytes were within the acceptance limits (50-150% for the 0.50 ng/mL CC standard and 70-130% for the 10 ng/mL CC standard), with the following exceptions:

CC Standard	Analyte	%R	Associated Samples	Qualifier Applied
5/11/22 @ 14:28 – LCMS02	branched NMeFOSAA	12.5	SB-10b (0-3)	UJ
	branched NEtFOSAA	15.0	SB-19 (7-9)	
5/11/22 @ 21:43 – LCMS02	branched NMeFOSAA	47.9	SB-DUP-2	
			SB-3 (0-2)	
			SB-5 (0-2)	
5/12/22 @ 05:27 – LCMS02	branched NMeFOSAA	39.6	SB-5 (0-2)	
	branched NEtFOSAA	14.0		

Results for NEtFOSAA and NMeFOSAA in SB-10b (0-3), SB-19 (7-9), SB-DUP-2, SB-3 (0-2), and SB-5 (0-2) were qualified as estimated (UJ) due to low recoveries in associated CC standards.

Where a recovery was high and the associated compound was not detected in the sample, no qualification of sample results was warranted, and the recovery is not detailed above.

### B. Labeled Analogs

Eighteen labeled analogs (also referred to as extraction standards) were used. Percent recoveries (%Rs) of the labeled analogs were assessed against validation criteria of 40-140%R. Exceedances that impacted sample results are detailed below:

Sample	Labeled Analog	%R	Native Compound	Qualifier Applied
SB-19 (7-9)	D3-NMeFOSAA	17	NMeFOSAA	UJ
	D5-NEtFOSAA	18	NEtFOSAA	
S-DUP-2	D3-NMeFOSAA	38	NMeFOSAA	
	D5-NEtFOSAA	33	NEtFOSAA	
SB-3 (0-2)	M8FOSA	18	FOSA	
SB-5 (0-2)	D3-NMeFOSAA	22	NMeFOSAA	
	D5-NEtFOSAA	27	NEtFOSAA	

Results for NMeFOSSA and NEtFOSAA in SB-19 (7-9), SB-DUP-2, and SB-5 (0-2) and for FOSA in SB-3 (0-2) were qualified as estimated (UJ) due to low labeled analog recoveries.

### C. Field Duplicates

Sample SB-DUP-1 was submitted as a field duplicate of SB-19 (7-9). Results for SB-DUP-1 were reported in SDG L2223458. No target analytes were detected in either of these samples.

Sample SB-DUP-2 was submitted as a field duplicate of SB-1 (0-2). Sample SB-1 (0-2) was not analyzed for PFAS.

### D. Matrix Spike/Matrix Spike Duplicate

Sample SB-5 (0-2) was prepared as an MS/MSD pair. MS/MSD %Rs were within the acceptance limits of 70-130%, and RPDs were less than the maximum acceptance limit of 50 RPD, except for PFTrDA (136%, 151%). Since the recoveries were high and

PFTTrDA was not detected in SB-5 (0-2), no action was necessary due to the high recoveries.

## XII. Cyanide

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	N
Laboratory Control Samples	N
Laboratory and Field Duplicates	Y
Matrix Spike / Matrix Spike Duplicates	Y
Compound Quantitation	Y

### A. Laboratory and Field Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. A single aqueous method blank, multiple soil method blanks, and two field blanks (FIELD BLANK-1; FIELD BLANK-2) were prepared and analyzed with the samples. Blanks were free of contamination and interferences with exception of FIELD BLANK-1 (0.004mg/L). All cyanide soil results were not detected or greater than the contamination level and did not warrant qualification.

### B. Laboratory Control Samples

Multiple LCS/LCSD pairs were prepared and analyzed with the site samples. Percent recoveries and relative percent differences were with acceptance limits (85-115%R; 20%RPD) with the following exceptions:

Analyte	LCS %R	LCSD %R	LCS/LCSD RPD	Affected Samples	Qualifiers Applied
<b>LCS/LCSD(WG1638806-2/ WG1638806-3)</b>					
Cyanide	59	76	32	SB-9 (0-4) SB-8b (0-3) SB-10a (0-3)	J, UJ
<b>LCS/LCSD(WG1638810-2/WG1638810-3)</b>					
Cyanide	71	76	21	SB-12 (0-4) SB-10b (0-3) SB-16 (0-4) SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9)	UJ
<b>LCS/LCSD(WG1639289-2/WG1639289-3)</b>					
Cyanide	42	84	67	SB-18 (0-2) SB-18 (7-9) SB-11 (0-4) SB-DUP-2 SB-1 (0-2) SB-2 (0-2) SB-3 (0-2)	UJ

Analyte	LCS %R	LCSD %R	LCS/LCSD RPD	Affected Samples	Qualifiers Applied
				SB-5 (0-2)	
<b>LCS/LCSD(WG1639292-2/WG1639292-3)</b>					
Cyanide	42	84	67	SB-4 (0-2)	UJ

a = acceptable

Results for cyanide in all above samples were qualified as estimated (J, UJ) due to low LCS/LCSD recoveries and elevated LCS/LCSD RPDs.

### XIII. Hexavalent Chromium

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	N
Laboratory and Field Duplicates	N
Matrix Spikes	Y
Post Digestion Spikes	Y
Compound Quantitation	Y

#### A. Laboratory Control Samples

An LCS were prepared and analyzed with each preparation batch. Percent recoveries were with acceptance limits (80-120%R) with the following exceptions:

Analyte	LCS %R	Affected Samples	Qualifiers Applied
<b>LCS(WG1634981-2)</b>			
Hexavalent Chromium	70	SB-7 (0-2) SB-7 (7-9) SB-6 (0-2) SB-6 (7-9) SB-9 (0-4) SB-8b (0-3) SB-12 (0-4) SB-10a (0-3) SB-10b (0-3) SB-16 (0-4)	J-, UJ
<b>LCS(WG1634982-2)</b>			
Hexavalent Chromium	70	SB-17 (2-4) SB-17 (0-2) SB-19 (0-2) SB-19 (7-9) SB-18 (0-2) SB-18 (7-9)	J-, UJ



Analyte	LCS %R	Affected Samples	Qualifiers Applied
		SB-11 (0-4) SB-DUP-2 SB-1 (0-2) SB-4 (0-2)	

The results for hexavalent chromium in the above samples were qualified as estimated (J-, UJ), with low bias, due to low LCS recoveries.

## B. Laboratory and Field Duplicates

SB-DUP-2 was submitted as a field duplicate of SB-5 (0-2). A laboratory duplicate was prepared and analyzed with each batch of samples. All results were in agreement with each other, with the exception of the laboratory duplicate performed on SB-5 (0-2) (ND/0.361 mg/kg) and the field duplicate pair (ND/0.427). Both sets of duplicate analysis on SB-5 (0-2) showed low level imprecision. Results for hexavalent chromium in all soil samples except SB-4 (0-2) and SB-7 (0-2) were qualified as estimated (J, UJ) due to low level imprecision in the field and lab duplicates.

## XIV. Total Solids

Review Element	Acceptable?
Laboratory and Field Duplicates	Y
Compound Quantitation	Y

Aside from the holding time exceedance in SB-10a (0-3), SB-11 (0-4), and SB-1 (0-2) that was discussed at the beginning of the report, all results were acceptable as reported.

## XV. Trivalent Chromium

Review Element	Acceptable?
Compound Quantitation	Y

All results were correctly calculated from the total chromium and hexavalent chromium results. Since trivalent chromium results are based on total chromium and hexavalent chromium analyses, any qualifiers applied to either total chromium or hexavalent chromium results, are also applied to trivalent chromium results.

**Attachment A**  
**Volatiles QC Summary Forms - Excursions**

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Case Narrative (continued)

date/time is reported as 03-MAY-22 12:50.

L2223093-27: Sample containers for PFAS were received for the "SB-5 (0-2)" sample, but were not listed on the chain of custody. At the client's request, the analysis was performed.

#### Volatile Organics

L2223093-13: The sample was received in appropriate containers (vials) for the Volatile Organics by EPA Method 5035/8260 Low-Level analysis; however, the initial analysis failed with low internal standards and the second Low-Level vial was disposed of due to laboratory error. With the client's authorization, a sample aliquot was taken from an unpreserved container (jar) and preserved appropriately. Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

#### Semivolatile Organics

L2223093-06: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (4%) and 2,4,6-tribromophenol (1%); however, re-extraction achieved similar results: 2-fluorophenol (7%) and 2,4,6-tribromophenol (1%). The results of both extractions are reported.

The WG1635274-2/-3 LCS/LCSD recoveries, associated with L2223093-22 and -23, are below the acceptance criteria for 4-chloroaniline (7%/7%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

#### Semivolatile Organics by SIM

The WG1635276-1 Method Blank, associated with L2223093-22 and -23, has a concentration above the reporting limit for naphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2223093-14, -19, -27, and WG1636990-3/-4: Extracted Internal Standard recoveries were outside the

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220425N\  
 Data File : VG220425N20.D  
 Acq On : 26 Apr 2022 2:56 am  
 Operator : GONZO:MKS  
 Sample : C8260STD10PPB  
 Misc : WG1631147  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 26 12:03:27 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220425N\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2 TP	Dichlorodifluoromethane	0.150	0.174	-16.0	111	0.00
3 TP	Chloromethane	0.187	0.214	-14.4	113	0.00
4 TC	Vinyl chloride	0.187	0.204	-9.1	107	0.00
5 TP	Bromomethane	0.102	0.114	-11.8	140	0.00
6 TP	Chloroethane	0.140	0.150	-7.1	104	0.00
7 TP	Trichlorofluoromethane	0.272	0.283	-4.0	103	0.00
8 TP	Ethyl ether	0.079	0.090	-13.9	116	0.00
10 TC	1,1-Dichloroethene	0.152	0.147	3.3	96	0.00
11 TP	Carbon disulfide	0.417	0.431	-3.4	108	0.00
12 TP	Freon-113	0.159	0.164	-3.1	103	0.00
13 TP	Iodomethane	* 10.000	5.169	48.3#	58	0.00
14 TP	Acrolein	0.030	0.025	16.7	86	0.00
15 TP	Methylene chloride	0.169	0.164	3.0	100	0.00
17 TP	Acetone	* 10.000	7.544	24.6#	88	0.00
18 TP	trans-1,2-Dichloroethene	0.164	0.162	1.2	98	0.00
19 TP	Methyl acetate	0.118	0.101	14.4	90	0.00
20 TP	Methyl tert-butyl ether	0.430	0.421	2.1	103	0.00
21 TP	tert-Butyl alcohol	0.017	0.014	17.6	88	0.00
22 TP	Diisopropyl ether	0.599	0.538	10.2	94	0.00
23 TP	1,1-Dichloroethane	0.323	0.324	-0.3	101	0.00
24 TP	Halothane	0.129	0.125	3.1	97	0.00
25 TP	Acrylonitrile	0.060	0.054	10.0	93	0.00
26 TP	Ethyl tert-butyl ether	0.535	0.475	11.2	92	0.00
27 TP	Vinyl acetate	0.413	0.304	26.4#	91	0.00
28 TP	cis-1,2-Dichloroethene	0.190	0.179#	5.8	97	0.00
29 TP	2,2-Dichloropropane	0.264	0.238	9.8	92	0.00
30 TP	Bromochloromethane	0.083	0.083#	0.0	98	0.00
31 TP	Cyclohexane	0.330	0.295	10.6	92	0.00
32 TC	Chloroform	0.319	0.289	9.4	93	0.00
33 TP	Ethyl acetate	0.179	0.141	21.2#	86	0.00
34 TP	Carbon tetrachloride	0.235	0.218	7.2	97	0.00
35 TP	Tetrahydrofuran	0.057	0.048	15.8	84	0.00
36 S	Dibromofluoromethane	0.265	0.260	1.9	102	0.00
37 TP	1,1,1-Trichloroethane	0.270	0.284	-5.2	107	0.00
39 TP	2-Butanone	0.084	0.067	20.2#	83	0.00
40 TP	1,1-Dichloropropene	0.232	0.224	3.4	99	0.00
41 TP	Benzene	0.704	0.656	6.8	96	0.00
42 TP	tert-Amyl methyl ether	0.471	0.395	16.1	89	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220425N\  
 Data File : VG220425N20.D  
 Acq On : 26 Apr 2022 2:56 am  
 Operator : GONZO:MKS  
 Sample : C8260STD10PPB  
 Misc : WG1631147  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 26 12:03:27 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220425N\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43 S	1,2-Dichloroethane-d4	0.313	0.321	-2.6	101	0.00
44 TP	1,2-Dichloroethane	0.239	0.223	6.7	97	0.00
47 TP	Methyl cyclohexane	0.328	0.289	11.9	90	0.00
48 TP	Trichloroethene	0.192	0.183#	4.7	99	0.00
50 TP	Dibromomethane	0.105	0.097	7.6	95	0.00
51 TC	1,2-Dichloropropane	0.190	0.176	7.4	96	0.00
53 TP	2-Chloroethyl vinyl ether	0.110	0.091	17.3	86	0.00
54 TP	Bromodichloromethane	0.249	0.223#	10.4	95	0.00
57 TP	1,4-Dioxane	0.00194	0.00179#	7.7	90	0.00
58 TP	cis-1,3-Dichloropropene	0.282	0.256#	9.2	93	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
60 S	Toluene-d8	1.253	1.261	-0.6	101	0.00
61 TC	Toluene	0.562	0.531	5.5	97	0.00
62 TP	4-Methyl-2-pentanone	0.076	0.063	17.1	87	0.00
63 TP	Tetrachloroethene	0.248	0.236	4.8	97	0.00
65 TP	trans-1,3-Dichloropropene	0.323	0.288#	10.8	94	0.00
67 TP	Ethyl methacrylate	0.270	0.235	13.0	91	0.00
68 TP	1,1,2-Trichloroethane	0.157	0.140#	10.8	95	0.00
69 TP	Chlorodibromomethane	0.217	0.194#	10.6	96	0.00
70 TP	1,3-Dichloropropane	0.322	0.289	10.2	92	0.00
71 TP	1,2-Dibromoethane	0.191	0.169#	11.5	92	0.00
72 TP	2-Hexanone	0.177	0.138	22.0#	82	0.00
73 TP	Chlorobenzene	0.629	0.603	4.1	100	0.00
74 TC	Ethylbenzene	1.133	1.065	6.0	97	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.221	0.203	8.1	99	0.00
76 TP	p/m Xylene	0.439	0.418	4.8	99	0.00
77 TP	o Xylene	0.433	0.407	6.0	100	0.00
78 TP	Styrene	0.710	0.679	4.4	101	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
80 TP	Bromoform	0.248	0.211	14.9	97	0.00
82 TP	Isopropylbenzene	1.972	1.839	6.7	99	0.00
83 S	4-Bromofluorobenzene	0.841	0.822	2.3	102	0.00
84 TP	Bromobenzene	0.478	0.452	5.4	99	0.00
85 TP	n-Propylbenzene	2.395	2.250	6.1	99	0.00
86 TP	1,4-Dichlorobutane	0.627	0.567	9.6	98	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.408	0.352	13.7	95	0.00
88 TP	4-Ethyltoluene	1.981	1.862	6.0	100	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220425N\  
 Data File : VG220425N20.D  
 Acq On : 26 Apr 2022 2:56 am  
 Operator : GONZO:MKS  
 Sample : C8260STD10PPB  
 Misc : WG1631147  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 26 12:03:27 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220425N\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
89 TP	2-Chlorotoluene	1.390	1.255	9.7	98	0.00
90 TP	1,3,5-Trimethylbenzene	1.718	1.549	9.8	96	0.00
91 TP	1,2,3-Trichloropropane	0.378	0.312	17.5	93	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.135	0.105	22.2#	87	0.00
93 TP	4-Chlorotoluene	1.425	1.286	9.8	97	0.00
94 TP	tert-Butylbenzene	1.474	1.366	7.3	99	0.00
97 TP	1,2,4-Trimethylbenzene	1.644	1.503	8.6	98	0.00
98 TP	sec-Butylbenzene	2.263	2.069	8.6	96	0.00
99 TP	p-Isopropyltoluene	1.920	1.751	8.8	98	0.00
100 TP	1,3-Dichlorobenzene	0.925	0.864	6.6	100	0.00
101 TP	1,4-Dichlorobenzene	0.935	0.871	6.8	99	0.00
102 TP	p-Diethylbenzene	1.102	0.976	11.4	95	0.00
103 TP	n-Butylbenzene	1.651	1.561	5.5	102	0.00
104 TP	1,2-Dichlorobenzene	0.865	0.793	8.3	97	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.326	1.123	15.3	99	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.075	0.064	14.7	89	0.00
107 TP	1,3,5-Trichlorobenzene	0.619	0.576	6.9	99	0.00
108 TP	Hexachlorobutadiene	0.295	0.280	5.1	98	0.00
109 TP	1,2,4-Trichlorobenzene	0.499	0.460	7.8	101	0.00
110 TP	Naphthalene	0.971	0.826	14.9	97	0.00
111 TP	1,2,3-Trichlorobenzene	0.406	0.367#	9.6	98	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 11 CCC's out = 0

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220509P\  
 Data File : V29220509P01.D  
 Acq On : 09 May 2022 08:05 pm  
 Operator : VOA129:AJK  
 Sample : WG1636811-2  
 Misc : WG1636811,ICAL18964  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 20:48:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220509P\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00
2 TP	Dichlorodifluoromethane	0.318	0.227	28.6#	79	0.00
3 TP	Chloromethane	0.458	0.407	11.1	97	0.00
4 TC	Vinyl chloride	0.365	0.332	9.0	97	0.00
5 TP	Bromomethane	* 40.000	41.339	-3.3	110	0.00
6 TP	Chloroethane	0.211	0.198	6.2	98	0.00
7 TP	Trichlorofluoromethane	0.418	0.377	9.8	99	0.00
8 TP	Ethyl ether	0.133	0.133	0.0	105	0.00
10 TC	1,1-Dichloroethene	0.247	0.236	4.5	104	0.00
11 TP	Carbon disulfide	0.713	0.655	8.1	99	0.00
12 TP	Freon-113	0.251	0.242	3.6	104	0.00
14 TP	Acrolein	0.065	0.055	15.4	93	0.00
15 TP	Methylene chloride	* 40.000	40.385	-1.0	104	0.00
17 TP	Acetone	* 40.000	33.185	17.0	99	0.00
18 TP	trans-1,2-Dichloroethene	0.285	0.275	3.5	103	0.00
19 TP	Methyl acetate	* 40.000	35.500	11.3	92	0.00
20 TP	Methyl tert-butyl ether	0.676	0.677	-0.1	105	0.00
21 TP	tert-Butyl alcohol	0.046	0.034	26.1#	88	0.00
22 TP	Diisopropyl ether	1.108	1.170	-5.6	107	0.00
23 TP	1,1-Dichloroethane	0.577	0.559	3.1	104	0.00
24 TP	Halothane	0.205	0.202	1.5	105	0.00
25 TP	Acrylonitrile	0.123	0.111	9.8	96	0.00
26 TP	Ethyl tert-butyl ether	0.921	0.977	-6.1	106	0.00
27 TP	Vinyl acetate	0.816	0.804	1.5	105	0.00
28 TP	cis-1,2-Dichloroethene	0.315	0.303	3.8	102	0.00
29 TP	2,2-Dichloropropane	0.409	0.403	1.5	105	0.00
30 TP	Bromochloromethane	0.141	0.139	1.4	106	0.00
31 TP	Cyclohexane	0.617	0.616	0.2	107	0.00
32 TC	Chloroform	0.519	0.493	5.0	101	0.00
33 TP	Ethyl acetate	0.398	0.343	13.8	98	0.00
34 TP	Carbon tetrachloride	0.371	0.343	7.5	98	0.00
35 TP	Tetrahydrofuran	0.145	0.124	14.5	92	0.00
36 S	Dibromofluoromethane	0.251	0.248	1.2	106	0.00
37 TP	1,1,1-Trichloroethane	0.405	0.393	3.0	100	0.00
39 TP	2-Butanone	0.192	0.150	21.9#	85	0.00
40 TP	1,1-Dichloropropene	0.370	0.364	1.6	102	0.00
41 TP	Benzene	1.118	1.101	1.5	102	0.00
42 TP	tert-Amyl methyl ether	0.665	0.698	-5.0	107	0.00
43 S	1,2-Dichloroethane-d4	0.317	0.295	6.9	100	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220509P\  
 Data File : V29220509P01.D  
 Acq On : 09 May 2022 08:05 pm  
 Operator : VOA129:AJK  
 Sample : WG1636811-2  
 Misc : WG1636811,ICAL18964  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 20:48:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220509P\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.418	0.384	8.1	98	0.00
47 TP	Methyl cyclohexane	0.476	0.476	0.0	104	0.00
48 TP	Trichloroethene	0.284	0.278	2.1	99	0.00
50 TP	Dibromomethane	0.167	0.157	6.0	100	0.00
51 TC	1,2-Dichloropropane	0.321	0.328	-2.2	105	0.00
53 TP	2-Chloroethyl vinyl ether	0.189	0.127	32.8#	70	0.00
54 TP	Bromodichloromethane	0.352	0.347	1.4	102	0.00
57 TP	1,4-Dioxane	0.00345	0.00284#	17.7	85	0.01
58 TP	cis-1,3-Dichloropropene	* 40.000	37.249	6.9	104	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
60 S	Toluene-d8	1.335	1.352	-1.3	104	0.00
61 TC	Toluene	* 40.000	39.124	2.2	100	0.00
62 TP	4-Methyl-2-pentanone	0.166	0.164	1.2	99	0.00
63 TP	Tetrachloroethene	0.383	0.396	-3.4	105	0.00
65 TP	trans-1,3-Dichloropropene	* 40.000	37.046	7.4	103	0.00
67 TP	Ethyl methacrylate	0.428	0.432	-0.9	102	0.00
68 TP	1,1,2-Trichloroethane	0.257	0.270	-5.1	103	0.00
69 TP	Chlorodibromomethane	* 40.000	38.683	3.3	103	0.00
70 TP	1,3-Dichloropropane	0.559	0.571	-2.1	103	0.00
71 TP	1,2-Dibromoethane	0.296	0.312	-5.4	102	0.00
72 TP	2-Hexanone	0.357	0.307	14.0	96	0.00
73 TP	Chlorobenzene	1.041	1.041	0.0	104	0.00
74 TC	Ethylbenzene	1.811	1.780	1.7	102	0.00
75 TP	1,1,1,2-Tetrachloroethane	* 40.000	37.348	6.6	101	0.00
76 TP	p/m Xylene	0.675	0.696	-3.1	104	0.00
77 TP	o Xylene	0.653	0.672	-2.9	104	0.00
78 TP	Styrene	1.054	1.110	-5.3	103	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
80 TP	Bromoform	0.425	0.411	3.3	102	0.00
82 TP	Isopropylbenzene	3.395	3.517	-3.6	102	0.00
83 S	4-Bromofluorobenzene	0.936	0.944	-0.9	101	0.00
84 TP	Bromobenzene	0.809	0.851	-5.2	105	0.00
85 TP	n-Propylbenzene	4.096	4.264	-4.1	103	0.00
86 TP	1,4-Dichlorobutane	1.338	1.363	-1.9	103	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.763	0.769	-0.8	98	0.00
88 TP	4-Ethyltoluene	3.375	3.515	-4.1	105	0.00
89 TP	2-Chlorotoluene	2.488	2.555	-2.7	103	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220509P\  
 Data File : V29220509P01.D  
 Acq On : 09 May 2022 08:05 pm  
 Operator : VOA129:AJK  
 Sample : WG1636811-2  
 Misc : WG1636811,ICAL18964  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 20:48:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220509P\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TP	1,3,5-Trimethylbenzene	2.872	2.959	-3.0	102	0.00
91 TP	1,2,3-Trichloropropane	0.706	0.677	4.1	97	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.299	0.270	9.7	89	0.00
93 TP	4-Chlorotoluene	2.571	2.646	-2.9	105	0.00
94 TP	tert-Butylbenzene	2.483	2.601	-4.8	103	0.00
97 TP	1,2,4-Trimethylbenzene	2.806	2.894	-3.1	101	0.00
98 TP	sec-Butylbenzene	3.730	3.923	-5.2	103	0.00
99 TP	p-Isopropyltoluene	3.117	3.358	-7.7	104	0.00
100 TP	1,3-Dichlorobenzene	1.622	1.721	-6.1	109	0.00
101 TP	1,4-Dichlorobenzene	1.638	1.719	-4.9	107	0.00
102 TP	p-Diethylbenzene	1.841	1.937	-5.2	102	0.00
103 TP	n-Butylbenzene	2.900	3.028	-4.4	102	0.00
104 TP	1,2-Dichlorobenzene	1.514	1.601	-5.7	106	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.562	2.239	12.6	84	0.00
106 TP	1,2-Dibromo-3-chloropropane *	40.000	34.700	13.2	99	0.00
107 TP	1,3,5-Trichlorobenzene	1.160	1.142	1.6	100	0.00
108 TP	Hexachlorobutadiene	0.573	0.617	-7.7	108	0.00
109 TP	1,2,4-Trichlorobenzene	1.054	1.064	-0.9	101	0.00
110 TP	Naphthalene	2.623	2.624	-0.0	101	0.00
111 TP	1,2,3-Trichlorobenzene	1.013	1.022	-0.9	103	0.00

\* Evaluation of CC level amount vs concentration.  
 (#) = Out of Range SPCC's out = 1 CCC's out = 0

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA127\2022\220510B\  
 Data File : V27220510B01.D  
 Acq On : 10 May 2022 09:56 am  
 Operator : VOA127:NLK  
 Sample : WG1637092-2  
 Misc : WG1637092,ICAL18933  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 11:13:15 2022  
 Quant Method : I:\VOLATILES\VOA127\2022\220510B\V127\_220413B\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 14 07:05:09 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	61	-0.02
2 TP	Dichlorodifluoromethane	0.273	0.304	-11.4	64	0.00
3 TP	Chloromethane	0.227	0.265	-16.7	70	0.00
4 TC	Vinyl chloride	0.257	0.292	-13.6	65	0.00
5 TP	Bromomethane	* 40.000	46.078	-15.2	61	0.00
6 TP	Chloroethane	0.161	0.186	-15.5	68	0.00
7 TP	Trichlorofluoromethane	0.458	0.484	-5.7	60	0.00
8 TP	Ethyl ether	0.125	0.130	-4.0	59	-0.01
10 TC	1,1-Dichloroethene	0.269	0.275	-2.2	61	-0.01
11 TP	Carbon disulfide	0.722	0.769	-6.5	63	0.00
12 TP	Freon-113	0.269	0.293	-8.9	61	0.00
14 TP	Acrolein	0.033	0.034	-3.0	57	-0.01
15 TP	Methylene chloride	0.284	0.280	1.4	60	-0.01
17 TP	Acetone	* 40.000	42.612	-6.5	57	-0.02
18 TP	trans-1,2-Dichloroethene	0.281	0.297	-5.7	62	-0.01
19 TP	Methyl acetate	0.165	0.136	17.6	50	-0.01
20 TP	Methyl tert-butyl ether	0.583	0.615	-5.5	59	-0.01
21 TP	tert-Butyl alcohol	0.034	0.026	23.5#	45#	-0.02
22 TP	Diisopropyl ether	0.640	0.733	-14.5	65	-0.02
23 TP	1,1-Dichloroethane	0.452	0.482	-6.6	63	-0.01
24 TP	Halothane	0.214	0.226	-5.6	60	-0.02
25 TP	Acrylonitrile	0.072	0.064	11.1	52	-0.02
26 TP	Ethyl tert-butyl ether	0.647	0.733	-13.3	63	-0.02
27 TP	Vinyl acetate	0.437	0.522	-19.5	66	-0.02
28 TP	cis-1,2-Dichloroethene	0.315	0.318	-1.0	60	-0.02
29 TP	2,2-Dichloropropane	0.429	0.475	-10.7	64	-0.02
30 TP	Bromochloromethane	0.159	0.155	2.5	57	-0.02
31 TP	Cyclohexane	0.382	0.478	-25.1#	69	-0.01
32 TC	Chloroform	0.509	0.527	-3.5	61	-0.02
33 TP	Ethyl acetate	0.224	0.197	12.1	52	-0.02
34 TP	Carbon tetrachloride	0.396	0.428	-8.1	60	-0.02
35 TP	Tetrahydrofuran	0.067	0.070	-4.5	58	-0.02
36 S	Dibromofluoromethane	0.293	0.269	8.2	58	-0.01
37 TP	1,1,1-Trichloroethane	0.416	0.462	-11.1	62	-0.01
39 TP	2-Butanone	0.110	0.096	12.7	50	-0.02
40 TP	1,1-Dichloropropene	0.311	0.381	-22.5#	65	-0.02
41 TP	Benzene	0.979	1.088	-11.1	64	-0.02
42 TP	tert-Amyl methyl ether	0.633	0.679	-7.3	61	-0.01
43 S	1,2-Dichloroethane-d4	0.294	0.276	6.1	60	-0.02

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA127\2022\220510B\  
 Data File : V27220510B01.D  
 Acq On : 10 May 2022 09:56 am  
 Operator : VOA127:NLK  
 Sample : WG1637092-2  
 Misc : WG1637092,ICAL18933  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 11:13:15 2022  
 Quant Method : I:\VOLATILES\VOA127\2022\220510B\V127\_220413B\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 14 07:05:09 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.338	0.354	-4.7	61	-0.01
47 TP	Methyl cyclohexane	0.416	0.505	-21.4#	67	-0.02
48 TP	Trichloroethene	0.265	0.300	-13.2	64	-0.01
50 TP	Dibromomethane	0.173	0.165	4.6	57	-0.01
51 TC	1,2-Dichloropropane	0.240	0.264	-10.0	63	-0.02
53 TP	2-Chloroethyl vinyl ether	0.135	0.144	-6.7	57	-0.01
54 TP	Bromodichloromethane	0.374	0.375	-0.3	58	-0.01
57 TP	1,4-Dioxane	0.00295	0.00271#	8.1	59	-0.02
58 TP	cis-1,3-Dichloropropene	0.385	0.428	-11.2	60	-0.01
59 I	Chlorobenzene-d5	1.000	1.000	0.0	61	0.00
60 S	Toluene-d8	1.227	1.277	-4.1	62	0.00
61 TC	Toluene	0.818	0.907	-10.9	65	-0.01
62 TP	4-Methyl-2-pentanone	0.100	0.093	7.0	48#	-0.01
63 TP	Tetrachloroethene	0.408	0.462	-13.2	63	0.00
65 TP	trans-1,3-Dichloropropene	0.434	0.483	-11.3	58	-0.01
67 TP	Ethyl methacrylate	0.358	0.355	0.8	53	0.00
68 TP	1,1,2-Trichloroethane	0.214	0.229	-7.0	56	-0.01
69 TP	Chlorodibromomethane	0.345	0.352	-2.0	53	-0.01
70 TP	1,3-Dichloropropane	0.442	0.484	-9.5	59	0.00
71 TP	1,2-Dibromoethane	0.272	0.287	-5.5	56	0.00
72 TP	2-Hexanone	0.204	0.167	18.1	46#	0.00
73 TP	Chlorobenzene	0.953	1.017	-6.7	60	0.00
74 TC	Ethylbenzene	1.531	1.730	-13.0	62	-0.01
75 TP	1,1,1,2-Tetrachloroethane	0.333	0.368	-10.5	57	0.00
76 TP	p/m Xylene	0.638	0.704	-10.3	60	0.00
77 TP	o Xylene	0.627	0.673	-7.3	58	0.00
78 TP	Styrene	1.049	1.098	-4.7	56	-0.01
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	55	0.00
80 TP	Bromoform	0.449	0.417	7.1	46#	0.00
82 TP	Isopropylbenzene	2.570	3.148	-22.5#	60	-0.01
83 S	4-Bromofluorobenzene	0.746	0.819	-9.8	61	0.00
84 TP	Bromobenzene	0.755	0.816	-8.1	55	0.00
85 TP	n-Propylbenzene	2.985	3.752	-25.7#	61	-0.01
86 TP	1,4-Dichlorobutane	0.636	0.736	-15.7	58	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.516	0.584	-13.2	52	0.00
88 TP	4-Ethyltoluene	2.589	3.194	-23.4#	60	0.00
89 TP	2-Chlorotoluene	1.818	2.548	-40.2#	68	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA127\2022\220510B\  
 Data File : V27220510B01.D  
 Acq On : 10 May 2022 09:56 am  
 Operator : VOA127:NLK  
 Sample : WG1637092-2  
 Misc : WG1637092,ICAL18933  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 11:13:15 2022  
 Quant Method : I:\VOLATILES\VOA127\2022\220510B\V127\_220413B\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 14 07:05:09 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TP	1,3,5-Trimethylbenzene	2.216	2.749	-24.1#	60	0.00
91 TP	1,2,3-Trichloropropane	0.448	0.495	-10.5	53	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.156	0.171	-9.6	51	0.00
93 TP	4-Chlorotoluene	1.921	2.256	-17.4	59	0.00
94 TP	tert-Butylbenzene	1.992	2.380	-19.5	58	0.00
97 TP	1,2,4-Trimethylbenzene	2.174	2.693	-23.9#	59	0.00
98 TP	sec-Butylbenzene	2.820	3.523	-24.9#	60	0.00
99 TP	p-Isopropyltoluene	2.495	3.120	-25.1#	59	0.00
100 TP	1,3-Dichlorobenzene	1.449	1.639	-13.1	55	-0.01
101 TP	1,4-Dichlorobenzene	1.468	1.636	-11.4	55	0.00
102 TP	p-Diethylbenzene	1.461	1.861	-27.4#	61	0.00
103 TP	n-Butylbenzene	2.039	2.767	-35.7#	63	0.00
104 TP	1,2-Dichlorobenzene	1.373	1.500	-9.2	53	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.098	2.700	-28.7#	62	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.123	0.111	9.8	43#	0.00
107 TP	1,3,5-Trichlorobenzene	1.104	1.375	-24.5#	60	0.00
108 TP	Hexachlorobutadiene	0.650	0.751	-15.5	56	0.00
109 TP	1,2,4-Trichlorobenzene	1.011	1.201	-18.8	58	0.00
110 TP	Naphthalene	2.102	2.200	-4.7	51	0.00
111 TP	1,2,3-Trichlorobenzene	0.963	1.076	-11.7	56	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 1 CCC's out = 0



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220511A\  
 Data File : V29220511A03.D  
 Acq On : 11 May 2022 07:38 am  
 Operator : VOA129:NLK  
 Sample : WG1638217-2  
 Misc : WG1638217,ICAL18964  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 08:02:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220511A\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	104	0.00
2 TP	Dichlorodifluoromethane	0.318	0.167	47.5#	57	0.00
3 TP	Chloromethane	0.458	0.317	30.8#	75	0.00
4 TC	Vinyl chloride	0.365	0.254	30.4#	73	0.00
5 TP	Bromomethane	* 40.000	35.069	12.3	92	0.00
6 TP	Chloroethane	0.211	0.162	23.2#	79	0.00
7 TP	Trichlorofluoromethane	0.418	0.293	29.9#	76	0.00
8 TP	Ethyl ether	0.133	0.121	9.0	94	0.00
10 TC	1,1-Dichloroethene	0.247	0.187	24.3#	81	0.01
11 TP	Carbon disulfide	0.713	0.533	25.2#	80	0.00
12 TP	Freon-113	0.251	0.188	25.1#	79	0.00
14 TP	Acrolein	0.065	0.054	16.9	90	0.00
15 TP	Methylene chloride	* 40.000	34.921	12.7	89	0.00
17 TP	Acetone	* 40.000	30.286	24.3#	90	0.01
18 TP	trans-1,2-Dichloroethene	0.285	0.227	20.4#	84	0.00
19 TP	Methyl acetate	* 40.000	33.511	16.2	86	0.00
20 TP	Methyl tert-butyl ether	0.676	0.628	7.1	96	0.00
21 TP	tert-Butyl alcohol	0.046	0.035	23.9#	89	0.01
22 TP	Diisopropyl ether	1.108	1.042	6.0	94	0.00
23 TP	1,1-Dichloroethane	0.577	0.468	18.9	86	0.00
24 TP	Halothane	0.205	0.166	19.0	85	0.00
25 TP	Acrylonitrile	0.123	0.110	10.6	93	0.00
26 TP	Ethyl tert-butyl ether	0.921	0.891	3.3	95	0.00
27 TP	Vinyl acetate	0.816	0.731	10.4	94	0.00
28 TP	cis-1,2-Dichloroethene	0.315	0.261	17.1	87	0.01
29 TP	2,2-Dichloropropane	0.409	0.329	19.6	84	0.00
30 TP	Bromochloromethane	0.141	0.126	10.6	95	0.00
31 TP	Cyclohexane	0.617	0.476	22.9#	82	0.00
32 TC	Chloroform	0.519	0.418	19.5	84	0.00
33 TP	Ethyl acetate	0.398	0.327	17.8	92	0.00
34 TP	Carbon tetrachloride	0.371	0.281	24.3#	79	0.00
35 TP	Tetrahydrofuran	0.145	0.116	20.0	85	0.01
36 S	Dibromofluoromethane	0.251	0.251	0.0	106	0.00
37 TP	1,1,1-Trichloroethane	0.405	0.320	21.0#	80	0.00
39 TP	2-Butanone	0.192	0.158	17.7	88	0.00
40 TP	1,1-Dichloropropene	0.370	0.295	20.3#	81	0.01
41 TP	Benzene	1.118	0.935	16.4	86	0.00
42 TP	tert-Amyl methyl ether	0.665	0.652	2.0	98	0.00
43 S	1,2-Dichloroethane-d4	0.317	0.301	5.0	101	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220511A\  
 Data File : V29220511A03.D  
 Acq On : 11 May 2022 07:38 am  
 Operator : VOA129:NLK  
 Sample : WG1638217-2  
 Misc : WG1638217,ICAL18964  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 08:02:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220511A\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.418	0.347	17.0	87	0.00
47 TP	Methyl cyclohexane	0.476	0.372	21.8#	80	0.00
48 TP	Trichloroethene	0.284	0.237	16.5	83	0.00
50 TP	Dibromomethane	0.167	0.146	12.6	92	0.00
51 TC	1,2-Dichloropropane	0.321	0.289	10.0	91	0.00
53 TP	2-Chloroethyl vinyl ether	0.189	0.173	8.5	94	0.00
54 TP	Bromodichloromethane	0.352	0.315	10.5	91	0.00
57 TP	1,4-Dioxane	0.00345	0.00289#	16.2	85	0.01
58 TP	cis-1,3-Dichloropropene	* 40.000	33.640	15.9	93	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
60 S	Toluene-d8	1.335	1.336	-0.1	102	0.00
61 TC	Toluene	* 40.000	32.557	18.6	82	0.00
62 TP	4-Methyl-2-pentanone	0.166	0.158	4.8	94	0.00
63 TP	Tetrachloroethene	0.383	0.324	15.4	85	0.00
65 TP	trans-1,3-Dichloropropene	* 40.000	34.478	13.8	95	0.00
67 TP	Ethyl methacrylate	0.428	0.417	2.6	98	0.00
68 TP	1,1,2-Trichloroethane	0.257	0.253	1.6	95	0.00
69 TP	Chlorodibromomethane	* 40.000	36.239	9.4	95	0.00
70 TP	1,3-Dichloropropane	0.559	0.528	5.5	94	0.00
71 TP	1,2-Dibromoethane	0.296	0.292	1.4	94	0.00
72 TP	2-Hexanone	0.357	0.311	12.9	96	0.00
73 TP	Chlorobenzene	1.041	0.897	13.8	88	0.00
74 TC	Ethylbenzene	1.811	1.497	17.3	85	0.00
75 TP	1,1,1,2-Tetrachloroethane	* 40.000	33.940	15.2	91	0.00
76 TP	p/m Xylene	0.675	0.590	12.6	87	0.00
77 TP	o Xylene	0.653	0.581	11.0	89	0.00
78 TP	Styrene	1.054	0.976	7.4	90	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
80 TP	Bromoform	0.425	0.394	7.3	98	0.00
82 TP	Isopropylbenzene	3.395	2.887	15.0	85	0.00
83 S	4-Bromofluorobenzene	0.936	0.938	-0.2	101	0.00
84 TP	Bromobenzene	0.809	0.737	8.9	92	0.00
85 TP	n-Propylbenzene	4.096	3.490	14.8	85	0.00
86 TP	1,4-Dichlorobutane	1.338	1.247	6.8	95	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.763	0.718	5.9	92	0.00
88 TP	4-Ethyltoluene	3.375	2.912	13.7	87	0.00
89 TP	2-Chlorotoluene	2.488	2.172	12.7	88	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA129\2022\220511A\  
 Data File : V29220511A03.D  
 Acq On : 11 May 2022 07:38 am  
 Operator : VOA129:NLK  
 Sample : WG1638217-2  
 Misc : WG1638217,ICAL18964  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 08:02:32 2022  
 Quant Method : I:\VOLATILES\VOA129\2022\220511A\V129\_220422N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Mon Apr 25 06:44:01 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TP	1,3,5-Trimethylbenzene	2.872	2.466	14.1	85	0.00
91 TP	1,2,3-Trichloropropane	0.706	0.641	9.2	93	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.299	0.256	14.4	85	0.00
93 TP	4-Chlorotoluene	2.571	2.256	12.3	90	0.00
94 TP	tert-Butylbenzene	2.483	2.128	14.3	85	0.00
97 TP	1,2,4-Trimethylbenzene	2.806	2.469	12.0	87	0.00
98 TP	sec-Butylbenzene	3.730	3.141	15.8	83	0.00
99 TP	p-Isopropyltoluene	3.117	2.739	12.1	85	0.00
100 TP	1,3-Dichlorobenzene	1.622	1.467	9.6	94	0.00
101 TP	1,4-Dichlorobenzene	1.638	1.497	8.6	94	0.00
102 TP	p-Diethylbenzene	1.841	1.593	13.5	85	0.00
103 TP	n-Butylbenzene	2.900	2.420	16.6	82	0.00
104 TP	1,2-Dichlorobenzene	1.514	1.417	6.4	95	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.562	1.911	25.4#	72	0.00
106 TP	1,2-Dibromo-3-chloropropane *	40.000	32.981	17.5	94	0.00
107 TP	1,3,5-Trichlorobenzene	1.160	0.997	14.1	88	0.00
108 TP	Hexachlorobutadiene	0.573	0.492	14.1	87	0.00
109 TP	1,2,4-Trichlorobenzene	1.054	0.948	10.1	90	0.00
110 TP	Naphthalene	2.623	2.469	5.9	96	0.00
111 TP	1,2,3-Trichlorobenzene	1.013	0.934	7.8	95	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 1 CCC's out = 2

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220513A\  
 Data File : VG220513A02.D  
 Acq On : 13 May 2022 9:02 am  
 Operator : GONZO:PD  
 Sample : WG1638761-2 (Sig #1); 8260 CCAL (Sig #2)  
 Misc : WG1638761,ICAL18969 (Sig #1); WG,ICAL18969 (Sig #2)  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:25:05 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220513A\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	69	0.00
2 TP	Dichlorodifluoromethane	0.150	0.222	-48.0#	97	0.00
3 TP	Chloromethane	0.187	0.224	-19.8	81	0.00
4 TC	Vinyl chloride	0.187	0.237	-26.7#	85	0.00
5 TP	Bromomethane	0.102	0.103	-1.0	87	0.00
6 TP	Chloroethane	0.140	0.210	-50.0#	100	0.00
7 TP	Trichlorofluoromethane	0.272	0.294	-8.1	73	0.00
8 TP	Ethyl ether	0.079	0.074	6.3	65	0.00
10 TC	1,1-Dichloroethene	0.152	0.153	-0.7	68	0.00
11 TP	Carbon disulfide	0.417	0.452	-8.4	77	0.00
12 TP	Freon-113	0.159	0.179	-12.6	77	0.00
14 TP	Acrolein	0.030	0.024	20.0	56	0.00
15 TP	Methylene chloride	0.169	0.179	-5.9	74	0.00
17 TP	Acetone	* 10.000	7.813	21.9#	62	0.00
18 TP	trans-1,2-Dichloroethene	0.164	0.177	-7.9	73	0.00
19 TP	Methyl acetate	0.118	0.102	13.6	62	0.00
20 TP	Methyl tert-butyl ether	0.430	0.373	13.3	62	0.00
21 TP	tert-Butyl alcohol	0.017	0.012	29.4#	48#	0.00
22 TP	Diisopropyl ether	0.599	0.563	6.0	67	0.00
23 TP	1,1-Dichloroethane	0.323	0.332	-2.8	71	0.00
24 TP	Halothane	0.129	0.142	-10.1	75	0.00
25 TP	Acrylonitrile	0.060	0.054	10.0	62	0.00
26 TP	Ethyl tert-butyl ether	0.535	0.453	15.3	60	0.00
27 TP	Vinyl acetate	0.413	0.368	10.9	75	0.00
28 TP	cis-1,2-Dichloroethene	0.190	0.191#	-0.5	70	0.00
29 TP	2,2-Dichloropropane	0.264	0.263	0.4	70	0.00
30 TP	Bromochloromethane	0.083	0.090#	-8.4	72	0.00
31 TP	Cyclohexane	0.330	0.334	-1.2	71	0.00
32 TC	Chloroform	0.319	0.323	-1.3	71	0.00
33 TP	Ethyl acetate	0.179	0.139	22.3#	58	0.00
34 TP	Carbon tetrachloride	0.235	0.248	-5.5	75	0.00
35 TP	Tetrahydrofuran	0.057	0.053	7.0	63	0.00
36 S	Dibromofluoromethane	0.265	0.265	0.0	71	0.00
37 TP	1,1,1-Trichloroethane	0.270	0.288	-6.7	74	0.00
39 TP	2-Butanone	0.084	0.063	25.0#	53	0.00
40 TP	1,1-Dichloropropene	0.232	0.246	-6.0	74	0.00
41 TP	Benzene	0.704	0.726	-3.1	72	0.00
42 TP	tert-Amyl methyl ether	0.471	0.372	21.0#	57	0.00
43 S	1,2-Dichloroethane-d4	0.313	0.324	-3.5	69	0.00



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220513A\  
 Data File : VG220513A02.D  
 Acq On : 13 May 2022 9:02 am  
 Operator : GONZO:PD  
 Sample : WG1638761-2 (Sig #1); 8260 CCAL (Sig #2)  
 Misc : WG1638761, ICAL18969 (Sig #1); WG, ICAL18969 (Sig #2)  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:25:05 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220513A\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.239	0.241	-0.8	71	0.00
47 TP	Methyl cyclohexane	0.328	0.332	-1.2	70	0.00
48 TP	Trichloroethene	0.192	0.195#	-1.6	71	0.00
50 TP	Dibromomethane	0.105	0.107	-1.9	71	0.00
51 TC	1,2-Dichloropropane	0.190	0.195	-2.6	72	0.00
54 TP	Bromodichloromethane	0.249	0.260#	-4.4	75	0.00
57 TP	1,4-Dioxane	0.00194	0.00180#	7.2	62	0.00
58 TP	cis-1,3-Dichloropropene	0.282	0.274#	2.8	68	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	69	0.00
60 S	Toluene-d8	1.253	1.280	-2.2	70	0.00
61 TC	Toluene	0.562	0.580	-3.2	73	0.00
62 TP	4-Methyl-2-pentanone	0.076	0.061	19.7	57	0.00
63 TP	Tetrachloroethene	0.248	0.261	-5.2	73	0.00
65 TP	trans-1,3-Dichloropropene	0.323	0.301	6.8	67	0.00
67 TP	Ethyl methacrylate	0.270	0.223	17.4	59	0.00
68 TP	1,1,2-Trichloroethane	0.157	0.157#	0.0	73	0.00
69 TP	Chlorodibromomethane	0.217	0.227	-4.6	77	0.00
70 TP	1,3-Dichloropropane	0.322	0.320	0.6	70	0.00
71 TP	1,2-Dibromoethane	0.191	0.188#	1.6	70	0.00
72 TP	2-Hexanone	0.177	0.128	27.7#	52	0.00
73 TP	Chlorobenzene	0.629	0.652	-3.7	74	0.00
74 TC	Ethylbenzene	1.133	1.148	-1.3	72	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.221	0.224	-1.4	74	0.00
76 TP	p/m Xylene	0.439	0.460	-4.8	75	0.00
77 TP	o Xylene	0.433	0.442	-2.1	74	0.00
78 TP	Styrene	0.710	0.725	-2.1	74	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	74	0.00
80 TP	Bromoform	0.248	0.237	4.4	77	0.00
82 TP	Isopropylbenzene	1.972	1.911	3.1	73	0.00
83 S	4-Bromofluorobenzene	0.841	0.784	6.8	69	0.00
84 TP	Bromobenzene	0.478	0.468	2.1	73	0.00
85 TP	n-Propylbenzene	2.395	2.332	2.6	73	0.00
86 TP	1,4-Dichlorobutane	0.627	0.557	11.2	69	0.00
87 TP	1,1,1,2,2-Tetrachloroethane	0.408	0.392	3.9	75	0.00
88 TP	4-Ethyltoluene	1.981	1.950	1.6	75	0.00
89 TP	2-Chlorotoluene	1.390	1.338	3.7	75	0.00
90 TP	1,3,5-Trimethylbenzene	1.718	1.679	2.3	74	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2022\220513A\  
 Data File : VG220513A02.D  
 Acq On : 13 May 2022 9:02 am  
 Operator : GONZO:PD  
 Sample : WG1638761-2 (Sig #1); 8260 CCAL (Sig #2)  
 Misc : WG1638761, ICAL18969 (Sig #1); WG, ICAL18969 (Sig #2)  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:25:05 2022  
 Quant Method : I:\VOLATILES\Gonzo\2022\220513A\G\_220425N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Tue Apr 26 12:00:50 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 TP	1,2,3-Trichloropropane	0.378	0.339	10.3	72	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.135	0.093	31.1#	55	0.00
93 TP	4-Chlorotoluene	1.425	1.387	2.7	75	0.00
94 TP	tert-Butylbenzene	1.474	1.465	0.6	75	0.00
97 TP	1,2,4-Trimethylbenzene	1.644	1.583	3.7	74	0.00
98 TP	sec-Butylbenzene	2.263	2.268	-0.2	75	0.00
99 TP	p-Isopropyltoluene	1.920	1.885	1.8	75	0.00
100 TP	1,3-Dichlorobenzene	0.925	0.957	-3.5	79	0.00
101 TP	1,4-Dichlorobenzene	0.935	0.951	-1.7	77	0.00
102 TP	p-Diethylbenzene	1.102	1.069	3.0	74	0.00
103 TP	n-Butylbenzene	1.651	1.635	1.0	76	0.00
104 TP	1,2-Dichlorobenzene	0.865	0.873	-0.9	76	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.326	1.135	14.4	72	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.075	0.065	13.3	64	0.00
107 TP	1,3,5-Trichlorobenzene	0.619	0.610	1.5	75	0.00
108 TP	Hexachlorobutadiene	0.295	0.285	3.4	71	0.00
109 TP	1,2,4-Trichlorobenzene	0.499	0.465	6.8	73	0.00
110 TP	Naphthalene	0.971	0.802	17.4	67	0.00
111 TP	1,2,3-Trichlorobenzene	0.406	0.368#	9.4	70	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 9 CCC's out = 1

# Laboratory Control Sample Summary

## Form 3

### Volatiles

**Client** : Impact Environmental **Lab Number** : L2223093  
**Project Name** : 60 MCLEAN AVENUE **Project Number** : 15514  
**Matrix** : WATER  
**LCS Sample ID** : WG1638761-3 **Analysis Date** : 05/13/22 09:02 **File ID** : VG220513A02  
**LCSD Sample ID** : WG1638761-4 **Analysis Date** : 05/13/22 09:28 **File ID** : VG220513A03

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	9.5	95	5	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
Tetrachloroethene	10	10	100	10	9.6	96	4	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
1,2-Dichloroethane	10	10	100	10	9.8	98	2	70-130	20
1,1,1-Trichloroethane	10	11	110	10	10	100	10	67-130	20
Benzene	10	10	100	10	9.8	98	2	70-130	20
Toluene	10	10	100	10	9.9	99	1	70-130	20
Ethylbenzene	10	10	100	10	9.6	96	4	70-130	20
Vinyl chloride	10	13	130	10	12	120	8	55-140	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20
Trichloroethene	10	10	100	10	9.7	97	3	70-130	20
1,2-Dichlorobenzene	10	10	100	10	9.9	99	1	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	8.7	87	10	8.3	83	5	63-130	20
p/m-Xylene	20	21	105	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	9.7	97	3	70-130	20
Acetone	10	7.8	78	10	6.4	64	20	58-148	20
2-Butanone	10	7.4	74	10	7.9	79	7	63-138	20
n-Butylbenzene	10	9.9	99	10	9.6	96	3	53-136	20
sec-Butylbenzene	10	10	100	10	9.7	97	3	70-130	20



# Laboratory Control Sample Summary

## Form 3

### Volatiles

**Client** : Impact Environmental      **Lab Number** : L2223093  
**Project Name** : 60 MCLEAN AVENUE      **Project Number** : 15514  
**Matrix** : SOIL  
**LCS Sample ID** : WG1637092-3      **Analysis Date** : 05/10/22 09:56      **File ID** : V27220510B01  
**LCSD Sample ID** : WG1637092-4      **Analysis Date** : 05/10/22 10:15      **File ID** : V27220510B02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Methylene chloride	40	39	98	40	36	89	10	70-130	30
1,1-Dichloroethane	40	43	107	40	38	95	12	70-130	30
Chloroform	40	41	104	40	37	92	12	70-130	30
Carbon tetrachloride	40	43	108	40	38	96	12	70-130	30
Tetrachloroethene	40	45	113	40	41	102	10	70-130	30
Chlorobenzene	40	43	107	40	39	98	9	70-130	30
1,2-Dichloroethane	40	42	105	40	39	98	7	70-130	30
1,1,1-Trichloroethane	40	44	111	40	39	98	12	70-130	30
Benzene	40	45	111	40	40	100	10	70-130	30
Toluene	40	44	111	40	40	100	10	70-130	30
Ethylbenzene	40	45	113	40	41	102	10	70-130	30
Vinyl chloride	40	46	114	40	39	97	16	67-130	30
1,1-Dichloroethene	40	41	102	40	36	90	13	65-135	30
trans-1,2-Dichloroethene	40	42	106	40	37	94	12	70-130	30
Trichloroethene	40	45	113	40	40	101	11	70-130	30
1,2-Dichlorobenzene	40	44	109	40	40	100	9	70-130	30
1,3-Dichlorobenzene	40	45	113	40	41	102	10	70-130	30
1,4-Dichlorobenzene	40	45	111	40	40	100	10	70-130	30
Methyl tert butyl ether	40	42	105	40	42	104	1	66-130	30
p/m-Xylene	80	88	110	80	80	100	10	70-130	30
o-Xylene	80	86	107	80	78	97	10	70-130	30
cis-1,2-Dichloroethene	40	40	101	40	36	90	12	70-130	30
Acetone	40	43	106	40	39	98	8	54-140	30
2-Butanone	40	35	87	40	34	85	2	70-130	30
n-Butylbenzene	40	54	136 Q	40	47	118	14	70-130	30
sec-Butylbenzene	40	50	125	40	45	112	11	70-130	30





# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1638217-3      Analysis Date : 05/11/22 07:38      File ID : V29220511A03  
 LCSD Sample ID : WG1638217-4      Analysis Date : 05/11/22 08:17      File ID : V29220511A05

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Methylene chloride	40	35	87	40	36	89	2	70-130	30
1,1-Dichloroethane	40	33	81	40	34	85	5	70-130	30
Chloroform	40	32	80	40	34	85	6	70-130	30
Carbon tetrachloride	40	30	76	40	33	83	9	70-130	30
Tetrachloroethene	40	34	85	40	38	94	10	70-130	30
Chlorobenzene	40	35	86	40	36	89	3	70-130	30
1,2-Dichloroethane	40	33	83	40	33	83	0	70-130	30
1,1,1-Trichloroethane	40	32	79	40	34	86	8	70-130	30
Benzene	40	34	84	40	35	87	4	70-130	30
Toluene	40	33	81	40	34	86	6	70-130	30
Ethylbenzene	40	33	83	40	35	88	6	70-130	30
Vinyl chloride	40	28	70	40	23	57	Q 20	67-130	30
1,1-Dichloroethene	40	30	76	40	31	78	3	65-135	30
trans-1,2-Dichloroethene	40	32	80	40	34	85	6	70-130	30
Trichloroethene	40	33	83	40	36	90	8	70-130	30
1,2-Dichlorobenzene	40	37	94	40	37	92	2	70-130	30
1,3-Dichlorobenzene	40	36	90	40	36	91	1	70-130	30
1,4-Dichlorobenzene	40	37	91	40	36	91	0	70-130	30
Methyl tert butyl ether	40	37	93	40	37	92	1	66-130	30
p/m-Xylene	80	70	87	80	73	92	6	70-130	30
o-Xylene	80	71	89	80	74	92	3	70-130	30
cis-1,2-Dichloroethene	40	33	83	40	35	86	4	70-130	30
Acetone	40	30	76	40	33	81	6	54-140	30
2-Butanone	40	33	82	40	33	82	0	70-130	30
n-Butylbenzene	40	33	83	40	35	88	6	70-130	30
sec-Butylbenzene	40	34	84	40	36	90	7	70-130	30



# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Matrix : WATER  
 LCS Sample ID : WG1638761-3 Analysis Date : 05/13/22 09:02 File ID : VG220513A02  
 LCSD Sample ID : WG1638761-4 Analysis Date : 05/13/22 09:28 File ID : VG220513A03

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	9.5	95	5	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
Tetrachloroethene	10	10	100	10	9.6	96	4	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
1,2-Dichloroethane	10	10	100	10	9.8	98	2	70-130	20
1,1,1-Trichloroethane	10	11	110	10	10	100	10	67-130	20
Benzene	10	10	100	10	9.8	98	2	70-130	20
Toluene	10	10	100	10	9.9	99	1	70-130	20
Ethylbenzene	10	10	100	10	9.6	96	4	70-130	20
Vinyl chloride	10	13	130	10	12	120	8	55-140	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20
Trichloroethene	10	10	100	10	9.7	97	3	70-130	20
1,2-Dichlorobenzene	10	10	100	10	9.9	99	1	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	8.7	87	10	8.3	83	5	63-130	20
p/m-Xylene	20	21	105	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	9.7	97	3	70-130	20
Acetone	10	7.8	78	10	6.4	64	20	58-148	20
2-Butanone	10	7.4	74	10	7.9	79	7	63-138	20
n-Butylbenzene	10	9.9	99	10	9.6	96	3	53-136	20
sec-Butylbenzene	10	10	100	10	9.7	97	3	70-130	20



# Matrix Spike Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-5 (0-2)  
 Lab Sample ID : L2223093-27  
 Matrix Spike : WG1637092-6  
 Matrix Spike Dup : WG1637092-7

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/10/22 14:25  
 MS Analysis Date : 05/10/22 19:00  
 MSD Analysis Date : 05/10/22 19:20

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Methylene chloride	ND	128	100	79	112	110	96	7	70-130	30
1,1-Dichloroethane	ND	128	110	86	112	120	105	7	70-130	30
Chloroform	ND	128	100	81	112	110	100	8	70-130	30
Carbon tetrachloride	ND	128	110	86	112	120	105	6	70-130	30
Tetrachloroethene	ND	128	99	77	112	100	92	5	70-130	30
Chlorobenzene	ND	128	93	72	112	97	86	5	70-130	30
1,2-Dichloroethane	ND	128	110	83	112	120	104	9	70-130	30
1,1,1-Trichloroethane	ND	128	110	89	112	120	108	7	70-130	30
Benzene	ND	128	110	88	112	120	108	7	70-130	30
Toluene	ND	128	100	81	112	110	98	6	70-130	30
Ethylbenzene	ND	128	97	75	112	100	88	3	70-130	30
Vinyl chloride	ND	128	120	95	112	130	114	5	67-130	30
1,1-Dichloroethene	ND	128	110	82	112	110	100	6	65-135	30
trans-1,2-Dichloroethene	ND	128	110	83	112	110	100	6	70-130	30
Trichloroethene	ND	128	110	85	112	120	103	6	70-130	30
1,2-Dichlorobenzene	ND	128	81	63 Q	112	82	73	1	70-130	30
1,3-Dichlorobenzene	ND	128	79	61 Q	112	80	71	1	70-130	30
1,4-Dichlorobenzene	ND	128	76	59 Q	112	77	68 Q	1	70-130	30
Methyl tert butyl ether	ND	128	120	94	112	130	117	9	66-130	30
p/m-Xylene	ND	257	180	70	225	190	83	3	70-130	30
o-Xylene	ND	257	180	71	225	190	84	3	70-130	30
cis-1,2-Dichloroethene	ND	128	100	79	112	110	97	8	70-130	30



# Matrix Spike Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-5 (0-2)  
 Lab Sample ID : L2223093-27  
 Matrix Spike : WG1637092-6  
 Matrix Spike Dup : WG1637092-7

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/10/22 14:25  
 MS Analysis Date : 05/10/22 19:00  
 MSD Analysis Date : 05/10/22 19:20

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Acetone	ND	128	110	83	112	120	108	14	54-140	30
2-Butanone	ND	128	88	68 Q	112	98	87	10	70-130	30
n-Butylbenzene	ND	128	79	62 Q	112	77	68 Q	3	70-130	30
sec-Butylbenzene	ND	128	90	70	112	87	78	3	70-130	30
tert-Butylbenzene	ND	128	94	73	112	93	83	1	70-130	30
n-Propylbenzene	ND	128	94	73	112	95	84	1	70-130	30
1,3,5-Trimethylbenzene	ND	128	94	73	112	95	84	1	70-130	30
1,2,4-Trimethylbenzene	ND	128	91	71	112	92	81	0	70-130	30
1,4-Dioxane	ND	6420	5500	85	5620	6500	116	18	65-136	30



# Matrix Spike Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-4 (0-2)  
 Lab Sample ID : L2223093-26  
 Matrix Spike : WG1637092-8  
 Matrix Spike Dup : WG1637092-9

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/10/22 14:06  
 MS Analysis Date : 05/10/22 18:40  
 MSD Analysis Date : 05/11/22 16:35

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Methylene chloride	ND	83.5	66	79	127	98	77	39 Q	70-130	30
1,1-Dichloroethane	ND	83.5	73	88	127	110	83	36 Q	70-130	30
Chloroform	ND	83.5	70	84	127	100	79	35 Q	70-130	30
Carbon tetrachloride	ND	83.5	74	89	127	100	81	32 Q	70-130	30
Tetrachloroethene	ND	83.5	72	86	127	85	67 Q	16	70-130	30
Chlorobenzene	ND	83.5	67	80	127	81	64 Q	20	70-130	30
1,2-Dichloroethane	ND	83.5	71	85	127	100	80	35 Q	70-130	30
1,1,1-Trichloroethane	ND	83.5	77	92	127	110	85	34 Q	70-130	30
Benzene	ND	83.5	77	92	127	110	83	31 Q	70-130	30
Toluene	ND	83.5	73	87	127	92	73	23	70-130	30
Ethylbenzene	ND	83.5	72	86	127	82	64 Q	13	70-130	30
Vinyl chloride	ND	83.5	77	92	127	110	87	37 Q	67-130	30
1,1-Dichloroethene	ND	83.5	68	82	127	100	78	37 Q	65-135	30
trans-1,2-Dichloroethene	ND	83.5	66	78	127	100	78	41 Q	70-130	30
Trichloroethene	ND	83.5	72	87	127	99	78	31 Q	70-130	30
1,2-Dichlorobenzene	ND	83.5	63	75	127	69	54 Q	9	70-130	30
1,3-Dichlorobenzene	ND	83.5	61	72	127	64	50 Q	6	70-130	30
1,4-Dichlorobenzene	ND	83.5	58	69 Q	127	62	48 Q	6	70-130	30
Methyl tert butyl ether	ND	83.5	83	100	127	110	90	31 Q	66-130	30
p/m-Xylene	ND	167	140	81	254	150	59 Q	11	70-130	30
o-Xylene	ND	167	140	83	254	160	62 Q	13	70-130	30
cis-1,2-Dichloroethene	ND	83.5	65	78	127	98	77	40 Q	70-130	30



# Matrix Spike Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-4 (0-2)  
 Lab Sample ID : L2223093-26  
 Matrix Spike : WG1637092-8  
 Matrix Spike Dup : WG1637092-9

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/10/22 14:06  
 MS Analysis Date : 05/10/22 18:40  
 MSD Analysis Date : 05/11/22 16:35

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Acetone	ND	83.5	78	94	127	99	78	23	54-140	30
2-Butanone	ND	83.5	62	74	127	85	67	Q 31	70-130	30
n-Butylbenzene	ND	83.5	66	79	127	57	45	Q 15	70-130	30
sec-Butylbenzene	ND	83.5	73	87	127	67	53	Q 9	70-130	30
tert-Butylbenzene	ND	83.5	74	88	127	72	57	Q 2	70-130	30
n-Propylbenzene	ND	83.5	74	88	127	70	55	Q 5	70-130	30
1,3,5-Trimethylbenzene	ND	83.5	75	89	127	72	57	Q 3	70-130	30
1,2,4-Trimethylbenzene	ND	83.5	73	87	127	71	56	Q 3	70-130	30
1,4-Dioxane	ND	4180	3800	90	6350	5700	89	40 Q	65-136	30



**Attachment B**  
**Semi-volatiles Full Scan QC Summary Forms – Excursions**

# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Matrix : WATER  
 LCS Sample ID : WG1635274-2 Analysis Date : 05/07/22 12:42 File ID : 635274-2  
 LCSD Sample ID : WG1635274-3 Analysis Date : 05/07/22 13:05 File ID : 635274-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Acenaphthene	18	12.	65	18	11.	62	5	37-111	30
1,2,4-Trichlorobenzene	18	11.	59	18	10.	58	2	39-98	30
Hexachlorobenzene	18	11.	63	18	11.	59	7	40-140	30
Bis(2-chloroethyl)ether	18	11.	62	18	11.	58	7	40-140	30
2-Chloronaphthalene	18	11.	58	18	11.	59	2	40-140	30
1,2-Dichlorobenzene	18	11.	59	18	10.	56	5	40-140	30
1,3-Dichlorobenzene	18	10.	58	18	10.	56	4	40-140	30
1,4-Dichlorobenzene	18	10.	58	18	10.	56	4	36-97	30
3,3'-Dichlorobenzidine	18	10.	56	18	9.7	53	6	40-140	30
2,4-Dinitrotoluene	18	13.	74	18	13.	72	3	48-143	30
2,6-Dinitrotoluene	18	13.	70	18	12.	68	3	40-140	30
Fluoranthene	18	12.	66	18	12.	66	0	40-140	30
4-Chlorophenyl phenyl ether	18	12.	66	18	11.	61	8	40-140	30
4-Bromophenyl phenyl ether	18	11.	61	18	11.	59	3	40-140	30
Bis(2-chloroisopropyl)ether	18	11.	59	18	10.	56	5	40-140	30
Bis(2-chloroethoxy)methane	18	11.	61	18	10.	58	5	40-140	30
Hexachlorobutadiene	18	10.	58	18	11.	59	2	40-140	30
Hexachlorocyclopentadiene	18	8.4	46	18	8.3	46	0	40-140	30
Hexachloroethane	18	10.	57	18	10.	57	0	40-140	30
Isophorone	18	10.	55	18	9.6	53	4	40-140	30
Naphthalene	18	11.	61	18	11.	62	2	40-140	30
Nitrobenzene	18	12.	67	18	11.	63	6	40-140	30
NDPA/DPA	18	12.	65	18	11.	62	5	40-140	30
n-Nitrosodi-n-propylamine	18	11.	59	18	11.	58	2	29-132	30
Bis(2-ethylhexyl)phthalate	18	12.	65	18	12.	66	2	40-140	30
Butyl benzyl phthalate	18	11.	63	18	11.	61	3	40-140	30



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635274-2      Analysis Date : 05/07/22 12:42      File ID : 635274-2  
 LCSD Sample ID : WG1635274-3      Analysis Date : 05/07/22 13:05      File ID : 635274-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Di-n-butylphthalate	18	11.	62	18	12.	64	3	40-140	30
Di-n-octylphthalate	18	12.	65	18	12.	64	2	40-140	30
Diethyl phthalate	18	12.	65	18	11.	62	5	40-140	30
Dimethyl phthalate	18	11.	60	18	11.	60	0	40-140	30
Benzo(a)anthracene	18	12.	67	18	12.	69	3	40-140	30
Benzo(a)pyrene	18	13.	70	18	12.	69	1	40-140	30
Benzo(b)fluoranthene	18	13.	70	18	13.	70	0	40-140	30
Benzo(k)fluoranthene	18	13.	71	18	13.	71	0	40-140	30
Chrysene	18	13.	71	18	13.	70	1	40-140	30
Acenaphthylene	18	11.	58	18	10.	58	0	45-123	30
Anthracene	18	12.	65	18	12.	64	2	40-140	30
Benzo(ghi)perylene	18	13.	71	18	13.	71	0	40-140	30
Fluorene	18	12.	67	18	11.	63	6	40-140	30
Phenanthrene	18	12.	68	18	12.	66	3	40-140	30
Dibenzo(a,h)anthracene	18	13.	73	18	13.	71	3	40-140	30
Indeno(1,2,3-cd)pyrene	18	13.	73	18	13.	72	1	40-140	30
Pyrene	18	12.	67	18	12.	65	3	26-127	30
Biphenyl	18	11.	63	18	11.	60	5	40-140	30
4-Chloroaniline	18	1.3	7 Q	18	1.3	7 Q	0	40-140	30
2-Nitroaniline	18	13.	71	18	13.	69	3	52-143	30
3-Nitroaniline	18	3.6	20 Q	18	3.5	19 Q	5	25-145	30
4-Nitroaniline	18	9.8	54	18	9.9	54	0	51-143	30
Dibenzofuran	18	12.	67	18	12.	64	5	40-140	30
2-Methylnaphthalene	18	11.	60	18	11.	60	0	40-140	30
1,2,4,5-Tetrachlorobenzene	18	11.	59	18	10.	57	3	2-134	30
Acetophenone	18	11.	60	18	11.	60	0	39-129	30





# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635274-2      Analysis Date : 05/07/22 12:42      File ID : 635274-2  
 LCSD Sample ID : WG1635274-3      Analysis Date : 05/07/22 13:05      File ID : 635274-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
2,4,6-Trichlorophenol	18	11.	61	18	11.	60	2	30-130	30
p-Chloro-m-cresol	18	12.	64	18	11.	62	3	23-97	30
2-Chlorophenol	18	11.	62	18	11.	60	3	27-123	30
2,4-Dichlorophenol	18	12.	64	18	12.	63	2	30-130	30
2,4-Dimethylphenol	18	11.	63	18	10.	56	12	30-130	30
2-Nitrophenol	18	13.	69	18	12.	67	3	30-130	30
4-Nitrophenol	18	12.	64	18	11.	61	5	10-80	30
2,4-Dinitrophenol	18	12.	66	18	15.	81	20	20-130	30
4,6-Dinitro-o-cresol	18	15.	82	18	14.	80	2	20-164	30
Pentachlorophenol	18	10.	55	18	11.	62	12	9-103	30
Phenol	18	8.2	45	18	7.6	42	7	12-110	30
2-Methylphenol	18	11.	61	18	11.	58	5	30-130	30
3-Methylphenol/4-Methylphenol	18	11.	61	18	10.	55	10	30-130	30
2,4,5-Trichlorophenol	18	11.	61	18	11.	62	2	30-130	30
Benzoic Acid	18	7.2	40	18	8.2	45	12	10-164	30
Benzyl Alcohol	18	10.	55	18	9.8	54	2	26-116	30
Carbazole	18	13.	70	18	12.	69	1	55-144	30



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635635-2      Analysis Date : 05/12/22 01:35      File ID : 635635-2  
 LCSD Sample ID : WG1635635-3      Analysis Date : 05/12/22 01:57      File ID : 635635-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Acenaphthene	1300	830	64	1300	820	63	2	31-137	50
Hexachlorobenzene	1300	880	67	1300	900	69	3	40-140	50
Fluoranthene	1300	870	67	1300	860	66	2	40-140	50
Naphthalene	1300	760	59	1300	790	60	2	40-140	50
Benzo(a)anthracene	1300	880	68	1300	880	68	0	40-140	50
Benzo(a)pyrene	1300	910	70	1300	860	66	6	40-140	50
Benzo(b)fluoranthene	1300	900	69	1300	840	64	8	40-140	50
Benzo(k)fluoranthene	1300	850	66	1300	840	64	3	40-140	50
Chrysene	1300	840	65	1300	830	64	2	40-140	50
Acenaphthylene	1300	860	66	1300	920	70	6	40-140	50
Anthracene	1300	850	65	1300	840	65	0	40-140	50
Benzo(ghi)perylene	1300	870	67	1300	830	64	5	40-140	50
Fluorene	1300	860	66	1300	870	67	2	40-140	50
Phenanthrene	1300	830	64	1300	820	63	2	40-140	50
Dibenzo(a,h)anthracene	1300	870	67	1300	860	66	2	40-140	50
Indeno(1,2,3-cd)pyrene	1300	920	70	1300	880	67	4	40-140	50
Pyrene	1300	840	65	1300	820	63	3	35-142	50
Dibenzofuran	1300	850	66	1300	850	65	2	40-140	50
Pentachlorophenol	1300	700	54	1300	760	58	7	17-109	50
Phenol	1300	810	62	1300	840	65	5	26-90	50
2-Methylphenol	1300	820	63	1300	870	67	6	30-130.	50
3-Methylphenol/4-Methylphenol	1300	830	64	1300	910	70	9	30-130	50



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635905-2      Analysis Date : 05/12/22 02:04      File ID : 635905-2  
 LCSD Sample ID : WG1635905-3      Analysis Date : 05/12/22 02:28      File ID : 635905-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Acenaphthene	1300	850	65	1300	930	71	9	31-137	50
Hexachlorobenzene	1300	800	61	1300	890	68	11	40-140	50
Fluoranthene	1300	880	67	1300	970	74	10	40-140	50
Naphthalene	1300	860	66	1300	940	72	9	40-140	50
Benzo(a)anthracene	1300	830	63	1300	900	69	9	40-140	50
Benzo(a)pyrene	1300	760	58	1300	820	63	8	40-140	50
Benzo(b)fluoranthene	1300	770	58	1300	820	63	8	40-140	50
Benzo(k)fluoranthene	1300	780	60	1300	850	65	8	40-140	50
Chrysene	1300	800	61	1300	880	67	9	40-140	50
Acenaphthylene	1300	900	68	1300	1000	76	11	40-140	50
Anthracene	1300	840	64	1300	920	70	9	40-140	50
Benzo(ghi)perylene	1300	860	66	1300	930	71	7	40-140	50
Fluorene	1300	880	67	1300	960	73	9	40-140	50
Phenanthrene	1300	870	67	1300	960	73	9	40-140	50
Dibenzo(a,h)anthracene	1300	840	64	1300	920	70	9	40-140	50
Indeno(1,2,3-cd)pyrene	1300	910	70	1300	990	76	8	40-140	50
Pyrene	1300	860	66	1300	950	73	10	35-142	50
Dibenzofuran	1300	880	67	1300	960	74	10	40-140	50
Pentachlorophenol	1300	800	61	1300	890	68	11	17-109	50
Phenol	1300	970	74	1300	1100	82	10	26-90	50
2-Methylphenol	1300	920	70	1300	1000	79	12	30-130.	50
3-Methylphenol/4-Methylphenol	1300	1000	77	1300	1100	86	11	30-130	50



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1639053-2      Analysis Date : 05/16/22 23:16      File ID : 639053-2  
 LCSD Sample ID : WG1639053-3      Analysis Date : 05/16/22 23:40      File ID : 639053-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Acenaphthene	1300	750	57	1300	1100	84	38	31-137	50
Hexachlorobenzene	1300	750	57	1300	1000	81	35	40-140	50
Fluoranthene	1300	800	61	1300	1100	87	35	40-140	50
Naphthalene	1300	740	56	1300	1100	83	39	40-140	50
Benzo(a)anthracene	1300	780	60	1300	1100	86	36	40-140	50
Benzo(a)pyrene	1300	720	55	1300	1000	77	33	40-140	50
Benzo(b)fluoranthene	1300	730	55	1300	1000	77	33	40-140	50
Benzo(k)fluoranthene	1300	700	53	1300	1000	78	38	40-140	50
Chrysene	1300	750	57	1300	1100	82	36	40-140	50
Acenaphthylene	1300	800	60	1300	1200	89	39	40-140	50
Anthracene	1300	790	60	1300	1100	86	36	40-140	50
Benzo(ghi)perylene	1300	770	59	1300	1100	86	37	40-140	50
Fluorene	1300	780	59	1300	1100	87	38	40-140	50
Phenanthrene	1300	790	60	1300	1100	86	36	40-140	50
Dibenzo(a,h)anthracene	1300	740	56	1300	1100	84	40	40-140	50
Indeno(1,2,3-cd)pyrene	1300	770	59	1300	1100	87	38	40-140	50
Pyrene	1300	790	60	1300	1100	87	37	35-142	50
Dibenzofuran	1300	780	59	1300	1100	88	39	40-140	50
Pentachlorophenol	1300	480	37	1300	810	62	51 Q	17-109	50
Phenol	1300	840	64	1300	1200	94 Q	38	26-90	50
2-Methylphenol	1300	810	61	1300	1200	91	39	30-130.	50
3-Methylphenol/4-Methylphenol	1300	890	68	1300	1300	99	37	30-130	50



# Matrix Spike Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-4 (0-2)  
 Lab Sample ID : L2223093-26  
 Matrix Spike : WG1635905-4  
 Matrix Spike Dup : WG1635905-5

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/12/22 07:39  
 MS Analysis Date : 05/12/22 06:51  
 MSD Analysis Date : 05/12/22 07:15

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Acenaphthene	ND	1390	970	70	1390	780	56	22	31-137	50
Hexachlorobenzene	ND	1390	870	63	1390	680	49	25	40-140	50
Fluoranthene	ND	1390	1000	72	1390	790	57	23	40-140	50
Naphthalene	ND	1390	1000	72	1390	830	60	19	40-140	50
Benzo(a)anthracene	ND	1390	940	68	1390	760	55	21	40-140	50
Benzo(a)pyrene	ND	1390	810	58	1390	640	46	23	40-140	50
Benzo(b)fluoranthene	ND	1390	900	65	1390	640	46	34	40-140	50
Benzo(k)fluoranthene	ND	1390	790	57	1390	670	48	16	40-140	50
Chrysene	ND	1390	920	66	1390	720	52	24	40-140	50
Acenaphthylene	ND	1390	990	71	1390	830	60	18	40-140	50
Anthracene	ND	1390	930	67	1390	760	55	20	40-140	50
Benzo(ghi)perylene	ND	1390	890	64	1390	700	50	24	40-140	50
Fluorene	ND	1390	980	71	1390	790	57	21	40-140	50
Phenanthrene	ND	1390	1000	72	1390	820	59	20	40-140	50
Dibenzo(a,h)anthracene	ND	1390	890	64	1390	700	50	24	40-140	50
Indeno(1,2,3-cd)pyrene	ND	1390	940	68	1390	740	53	24	40-140	50
Pyrene	ND	1390	1000	72	1390	780	56	25	35-142	50
Dibenzofuran	ND	1390	1000	72	1390	790	57	23	40-140	50
Pentachlorophenol	ND	1390	920	66	1390	730	53	23	17-109	50
Phenol	ND	1390	1200	87	1390	970	70	21	26-90	50
2-Methylphenol	ND	1390	1100	79	1390	900	65	20	30-130.	50
3-Methylphenol/4-Methylphenol	ND	1390	1200	87	1390	980	71	20	30-130	50





# Matrix Spike Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-5 (0-2)  
 Lab Sample ID : L2223093-27  
 Matrix Spike : WG1635905-6  
 Matrix Spike Dup : WG1635905-7

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 Analysis Date : 05/12/22 09:15  
 MS Analysis Date : 05/12/22 08:27  
 MSD Analysis Date : 05/12/22 08:51

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Acenaphthene	ND	1480	910	62	1480	940	64	3	31-137	50
Hexachlorobenzene	ND	1480	730	49	1480	800	54	9	40-140	50
Fluoranthene	240	1480	1200	65	1480	1100	58	9	40-140	50
Naphthalene	ND	1480	960	65	1480	980	66	2	40-140	50
Benzo(a)anthracene	110	1480	1000	68	1480	930	63	7	40-140	50
Benzo(a)pyrene	92J	1480	810	55	1480	780	53	4	40-140	50
Benzo(b)fluoranthene	120	1480	890	52	1480	870	51	2	40-140	50
Benzo(k)fluoranthene	45J	1480	740	50	1480	750	51	1	40-140	50
Chrysene	160	1480	980	56	1480	930	52	5	40-140	50
Acenaphthylene	ND	1480	910	62	1480	960	65	5	40-140	50
Anthracene	ND	1480	890	60	1480	900	61	1	40-140	50
Benzo(ghi)perylene	63J	1480	830	56	1480	850	58	2	40-140	50
Fluorene	ND	1480	910	62	1480	950	64	4	40-140	50
Phenanthrene	210	1480	1200	67	1480	1100	60	9	40-140	50
Dibenzo(a,h)anthracene	ND	1480	790	54	1480	830	56	5	40-140	50
Indeno(1,2,3-cd)pyrene	66J	1480	880	60	1480	910	62	3	40-140	50
Pyrene	230	1480	1200	66	1480	1000	52	18	35-142	50
Dibenzofuran	ND	1480	920	62	1480	950	64	3	40-140	50
Pentachlorophenol	ND	1480	780	53	1480	810	55	4	17-109	50
Phenol	ND	1480	1100	75	1480	1100	74	0	26-90	50
2-Methylphenol	ND	1480	1000	68	1480	1100	74	10	30-130.	50
3-Methylphenol/4-Methylphenol	ND	1480	1100	75	1480	1200	81	9	30-130	50



# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
FIELD BLANK-1 (L2223093-22)	77	59	85	76	84	79	0
FIELD BLANK-2 (L2223093-23)	57	47	63	67	66	63	0
WG1635274-1BLANK	43	22	90	87	76	91	0
WG1635274-2LCS	55	45	71	61	67	64	0
WG1635274-3LCSD	52	40	65	59	64	64	0

#### QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(15-120) FBP = 2-FLUOROBIPHENYL  
(10-120) TBP = 2,4,6-TRIBROMOPHENOL  
(41-149) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-LVI



# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
SB-7 (0-2) (L2223093-01)	66	66	58	65	62	62	0
SB-7 (7-9) (L2223093-02)	75	77	67	78	76	70	0
SB-6 (0-2) (L2223093-03)	72	73	62	71	71	65	0
SB-6 (7-9) (L2223093-04)	79	78	71	77	78	69	0
SB-9 (0-4) (L2223093-05)	80	80	72	77	82	62	0
SB-8B (0-3) (L2223093-06)	4*	24	62	61	1*	54	2
SB-8B (0-3) (L2223093-06RE)	7*	34	62	59	1*	51	2
SB-12 (0-4) (L2223093-07)	82	82	77	82	82	71	0
SB-10A (0-3) (L2223093-08)	69	78	69	79	65	79	0
SB-10B (0-3) (L2223093-09)	71	74	75	73	74	69	0
SB-16 (0-4) (L2223093-10)	78	78	71	79	77	69	0
SB-17 (2-4) (L2223093-11)	63	62	54	61	62	60	0
SB-17 (0-2) (L2223093-12)	74	76	69	72	74	63	0
SB-19 (0-2) (L2223093-13)	64	65	57	62	69	55	0
SB-19 (7-9) (L2223093-14)	69	70	62	68	69	63	0
SB-18 (0-2) (L2223093-16)	70	71	64	63	74	51	0
SB-18 (7-9) (L2223093-17)	68	68	62	65	66	53	0
SB-11 (0-4) (L2223093-18)	73	73	67	72	72	71	0
SB-DUP-2 (L2223093-19)	52	80	79	83	42	74	0
SB-1 (0-2) (L2223093-20)	25	53	58	62	17	54	0
SB-2 (0-2) (L2223093-21)	76	77	71	78	80	73	0
SB-3 (0-2) (L2223093-25)	74	84	82	74	66	56	0
SB-4 (0-2) (L2223093-26)	67	72	69	57	61	46	0
SB-5 (0-2) (L2223093-27)	88	96	94	75	82	63	0
WG1635635-1BLANK	78	78	69	77	68	75	0
WG1635635-2LCS	61	63	58	64	72	66	0
WG1635635-3LCSD	64	66	64	67	75	64	0
WG1635905-1BLANK	82	85	79	78	78	72	0

#### QC LIMITS

(25-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(30-120) FBP = 2-FLUOROBIPHENYL  
(10-136) TBP = 2,4,6-TRIBROMOPHENOL  
(18-120) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-LVI



**Attachment C**  
**Semi-volatiles SIM QC Summary Forms – Excursions**

# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-22  
 Client ID : FIELD BLANK-1  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 23093-22  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 13:00  
 Date Received : 05/03/22  
 Date Analyzed : 05/08/22 13:42  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : JJW  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.04	0.10	0.02	J
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U





# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1635276-1  
 Client ID : WG1635276-1BLANK  
 Sample Location :  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 635276-1  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/07/22 17:13  
 Date Extracted : 05/06/22  
 Dilution Factor : 1  
 Analyst : JJW  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.03	0.10	0.02	J
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.31	0.10	0.05	
56-55-3	Benzo(a)anthracene	0.02	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	0.01	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	0.02	0.10	0.02	J
91-57-6	2-Methylnaphthalene	0.07	0.10	0.02	J
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



**Attachment D**  
**Pesticides QC Summary Forms – Excursions**

# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635259-2      Analysis Date : 05/09/22 10:43      File ID : 18220509a-09  
 LCSD Sample ID : WG1635259-3      Analysis Date : 05/09/22 10:54      File ID : 18220509a-10

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Delta-BHC	0.357	0.180	50	0.357	0.216	61	18	30-150	20
Lindane	0.357	0.189	53	0.357	0.242	68	25 Q	30-150	20
Alpha-BHC	0.357	0.195	55	0.357	0.248	69	24 Q	30-150	20
Beta-BHC	0.357	0.188	53	0.357	0.267	75	35 Q	30-150	20
Heptachlor	0.357	0.193	54	0.357	0.242	68	23 Q	30-150	20
Aldrin	0.357	0.190	53	0.357	0.238	67	22 Q	30-150	20
Endrin	0.357	0.193	54	0.357	0.247	69	25 Q	30-150	20
Dieldrin	0.357	0.198	55	0.357	0.254	71	25 Q	30-150	20
4,4'-DDE	0.357	0.187	52	0.357	0.242	68	26 Q	30-150	20
4,4'-DDD	0.357	0.202	57	0.357	0.260	73	25 Q	30-150	20
4,4'-DDT	0.357	0.196	55	0.357	0.252	71	25 Q	30-150	20
Endosulfan I	0.357	0.180	50	0.357	0.230	64	24 Q	30-150	20
Endosulfan II	0.357	0.188	53	0.357	0.232	65	21 Q	30-150	20
Endosulfan sulfate	0.357	0.184	52	0.357	0.221	62	18	30-150	20
cis-Chlordane	0.357	0.174	49	0.357	0.221	62	24 Q	30-150	20



# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635623-2      Analysis Date : 05/09/22 13:41      File ID : 10220509b-20  
 LCSD Sample ID : WG1635623-3      Analysis Date : 05/09/22 13:52      File ID : 10220509b-21

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Delta-BHC	32.5	21.0	65	31.4	22.2	71	9	30-150	30
Lindane	32.5	22.0	68	31.4	23.0	73	7	30-150	30
Alpha-BHC	32.5	21.8	67	31.4	22.8	73	9	30-150	30
Beta-BHC	32.5	21.9	67	31.4	22.1	70	4	30-150	30
Heptachlor	32.5	23.1	71	31.4	24.4	78	9	30-150	30
Aldrin	32.5	20.6	63	31.4	22.0	70	11	30-150	30
Endrin	32.5	21.4	66	31.4	23.0	73	10	30-150	30
Dieldrin	32.5	21.6	66	31.4	23.6	75	13	30-150	30
4,4'-DDE	32.5	19.6	60	31.4	21.1	67	11	30-150	30
4,4'-DDD	32.5	21.8	67	31.4	23.3	74	10	30-150	30
4,4'-DDT	32.5	18.9	58	31.4	19.7	63	8	30-150	30
Endosulfan I	32.5	19.6	60	31.4	21.1	67	11	30-150	30
Endosulfan II	32.5	21.0	65	31.4	22.1	70	7	30-150	30
Endosulfan sulfate	32.5	18.2	56	31.4	17.8	57	2	30-150	30
cis-Chlordane	32.5	17.7	54	31.4	18.8	60	11	30-150	30



# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635789-2      Analysis Date : 05/09/22 22:49      File ID : 20220509b-10  
 LCSD Sample ID : WG1635789-3      Analysis Date : 05/09/22 23:01      File ID : 20220509b-11

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Delta-BHC	31.9	29.0	91	32.5	25.5	78	15	30-150	30
Lindane	31.9	30.2	95	32.5	26.6	82	15	30-150	30
Alpha-BHC	31.9	31.3	98	32.5	27.5	85	14	30-150	30
Beta-BHC	31.9	26.8	84	32.5	24.5	75	11	30-150	30
Heptachlor	31.9	21.4	67	32.5	19.0	58	14	30-150	30
Aldrin	31.9	26.8	84	32.5	23.5	72	15	30-150	30
Endrin	31.9	28.6	90	32.5	25.3	78	14	30-150	30
Dieldrin	31.9	30.6	96	32.5	27.1	83	15	30-150	30
4,4'-DDE	31.9	31.1	98	32.5	27.8	86	13	30-150	30
4,4'-DDD	31.9	33.1	104	32.5	29.2	90	14	30-150	30
4,4'-DDT	31.9	29.1	91	32.5	25.4	78	15	30-150	30
Endosulfan I	31.9	25.4	80	32.5	22.4	69	15	30-150	30
Endosulfan II	31.9	29.0	91	32.5	25.5	78	15	30-150	30
Endosulfan sulfate	31.9	24.7	77	32.5	21.7	67	14	30-150	30
cis-Chlordane	31.9	21.9	69	32.5	19.7	61	12	30-150	30





# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223093  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1639033-2      Analysis Date : 05/17/22 10:24      File ID : 10220517a-09  
 LCSD Sample ID : WG1639033-3      Analysis Date : 05/17/22 10:35      File ID : 10220517a-10

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Delta-BHC	31.4	22.6	72	31.9	25.3	79	9	30-150	30
Lindane	31.4	23.1	74	31.9	26.2	82	10	30-150	30
Alpha-BHC	31.4	24.2	77	31.9	27.5	86	11	30-150	30
Beta-BHC	31.4	24.7	79	31.9	27.2	85	7	30-150	30
Heptachlor	31.4	25.4	81	31.9	28.8	90	11	30-150	30
Aldrin	31.4	23.2	74	31.9	26.3	82	10	30-150	30
Endrin	31.4	24.8	79	31.9	28.1	88	11	30-150	30
Dieldrin	31.4	25.3	81	31.9	28.5	89	9	30-150	30
4,4'-DDE	31.4	23.3	74	31.9	26.1	82	10	30-150	30
4,4'-DDD	31.4	25.0	80	31.9	28.2	88	10	30-150	30
4,4'-DDT	31.4	25.5	81	31.9	28.6	90	11	30-150	30
Endosulfan I	31.4	22.6	72	31.9	25.5	80	11	30-150	30
Endosulfan II	31.4	24.3	77	31.9	27.6	87	12	30-150	30
Endosulfan sulfate	31.4	22.0	70	31.9	24.5	77	10	30-150	30
cis-Chlordane	31.4	20.8	66	31.9	23.4	73	10	30-150	30



# **Identification Summary** **Form 10** **Pesticides**

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Lab Sample ID** : L2223093-03  
**Client ID** : SB-6 (0-2)  
**Date Analyzed (1)** : 05/09/22 15:13  
**Instrument ID (1)** : PEST18  
**GC Column (1)** : CLPPesticides

**Lab Number** : L2223093  
**Project Number** : 15514  
  
**Date Analyzed (2)** : 05/09/22 15:13  
**Instrument ID (2)** : PEST18  
**GC Column (2)** : CLPPesticidesII

Analyte	Col	RT	RT Window		Concentration	RPD
			From	To		
alpha-Chlordane (cis)	1	3.39	3.34	3.44	1.73J	
	2	4.11	4.06	4.16	0.597J	NC

# Surrogate Recovery Summary

## Form 2

### Pesticides

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Water

GC Column 1: CLPPesticides  
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
FIELD BLANK-1 (L2223093-22)	58	64	67	81			0
FIELD BLANK-2 (L2223093-23)	55	59	48	59			0
WG1635259-1BLANK	59	62	54	52			0
WG1635259-2LCS	53	59	48	53			0
WG1635259-3LCSD	61	66	66	64			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8081



# Surrogate Recovery Summary

## Form 2

### Pesticides

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Soil

GC Column 1: CLPPesticides  
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
SB-7 (0-2) (L2223093-01)	60	66	72	93			0
SB-7 (7-9) (L2223093-02)	71	77	79	69			0
SB-6 (0-2) (L2223093-03)	62	69	68	59			0
SB-6 (7-9) (L2223093-04)	58	64	73	88			0
SB-9 (0-4) (L2223093-05)	74	81	86	73			0
SB-8B (0-3) (L2223093-06D)	0*	0*	0*	0*			4
SB-12 (0-4) (L2223093-07)	64	70	75	61			0
SB-10A (0-3) (L2223093-08)	50	53	57	49			0
SB-10B (0-3) (L2223093-09)	65	75	71	74			0
SB-16 (0-4) (L2223093-10)	72	77	83	71			0
SB-17 (2-4) (L2223093-11)	57	62	70	60			0
SB-17 (0-2) (L2223093-12)	62	67	73	65			0
SB-19 (0-2) (L2223093-13)	61	68	81	98			0
SB-19 (7-9) (L2223093-14)	63	66	76	93			0
SB-18 (0-2) (L2223093-16)	83	84	84	75			0
SB-18 (7-9) (L2223093-17)	61	69	73	62			0
SB-11 (0-4) (L2223093-18)	62	66	76	92			0
SB-DUP-2 (L2223093-19)	69	73	89	73			0
SB-1 (0-2) (L2223093-20)	65	72	79	68			0
SB-2 (0-2) (L2223093-21)	59	65	72	60			0
SB-3 (0-2) (L2223093-25)	58	75	72	75			0
SB-4 (0-2) (L2223093-26)	88	81	84	69			0
SB-5 (0-2) (L2223093-27)	72	81	92	116			0
WG1635623-1BLANK	55	61	65	85			0
WG1635623-2LCS	60	66	73	92			0
WG1635623-3LCSD	64	71	82	101			0
WG1635789-1BLANK	91	86	90	78			0
WG1635789-2LCS	92	89	89	78			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8081



**Attachment E**  
**PCB QC Summary Forms – Excursions**



# Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest7\2022\220425I\  
 Data File : P7220425i-39.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 25 Apr 2022 6:02 pm  
 Operator : pest7:kb  
 Sample : cicv1660,42e,,10747  
 Misc : WG1633747,  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 03 09:45:41 2022  
 Quant Method : I:\PCB\Pest7\2022\220425I\P7\_pcb\_04\_25\_22\_ugL\_ICAL.m  
 Quant Title : pcb  
 QLast Update : Mon May 02 10:10:17 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 i	1660_1br2nb	1.000	1.000	0.0	103	0.00
2 s	2,4,5,6-Tetrachloro-m-xylene	1.165	1.084	7.0	99	0.00
3 s	Decachlorobiphenyl	0.919	0.850	7.5	99	0.00
4 l1	1016-1	0.022	0.019	13.6	96	0.00
5 l1	1016-2	0.047	0.043	8.5	102	0.00
6 l1	1016-3	0.055	0.053	3.6	102	0.00
7 l1	1016-4	0.041	0.039	4.9	102	0.00
8 l1	1016-5	0.032	0.029	9.4	100	0.00
9 l2	1260-1	0.061	0.054	11.5	99	0.00
10 l2	1260-2	0.091	0.085	6.6	101	0.00
11 l2	1260-3	0.058	0.046	20.7#	85	0.00
12 l2	1260-4	0.123	0.098	20.3#	84	0.00
13 l2	1260-5	0.065	0.056	13.8	92	0.00
14 i	2154_1br2nb	1.000	1.000	0.0	98	0.00
23 i	4268_1br2nb	1.000	1.000	0.0	98	0.00
34 i	1248_1br2nb	1.000	1.000	0.0	101	0.00
40 i	3262_1br2nb	1.000	1.000	0.0	101	0.00

Signal #2

1 i	1660_1br2nb	1.000	1.000	0.0	103	0.00
2 s	2,4,5,6-Tetrachloro-m-xyl	1.151	1.073	6.8	98	0.00
3 s	Decachlorobiphenyl	0.786	0.729	7.3	98	0.00
4 l1	1016-1	0.021	0.018	14.3	95	0.00
5 l1	1016-2	0.047	0.043	8.5	101	0.00
6 l1	1016-3	0.052	0.050	3.8	102	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest7\2022\220425I\  
 Data File : P7220425i-39.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 25 Apr 2022 6:02 pm  
 Operator : pest7:kb  
 Sample : cicv1660,42e,,10747  
 Misc : WG1633747,  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 03 09:45:41 2022  
 Quant Method : I:\PCB\Pest7\2022\220425I\P7\_pcb\_04\_25\_22\_ugL\_ICAL.m  
 Quant Title : pcb  
 QLast Update : Mon May 02 10:10:17 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
7 11	1016-4	0.037	0.034	8.1	102	0.00
8 11	1016-5	0.030	0.027	10.0	100	0.00
9 12	1260-1	0.055	0.052	5.5	101	0.00
10 12	1260-2	0.066	0.060	9.1	98	0.00
11 12	1260-3	0.054	0.045	16.7	88	0.00
12 12	1260-4	0.114	0.091	20.2#	84	0.00
13 12	1260-5	0.078	0.065	16.7	88	0.00
14 i	2154_1br2nb	1.000	1.000	0.0	97	0.00
23 i	4268_1br2nb	1.000	1.000	0.0	97	0.00
34 i	1248_1br2nb	1.000	1.000	0.0	101	0.00
40 i	3262_1br2nb	1.000	1.000	0.0	100	0.00

## Evaluate Continuing Calibration Report - Not Found

15 13	1221-2	0.00006	0.00000	100.0#	0#	-2.80#
16 13	1221-3	0.00004	0.00000	100.0#	0#	-2.92#
17 13	1221-4	0.00013	0.00000	100.0#	0#	-2.95#
18 14	1254-1	0.00018	0.00000	100.0#	0#	-4.39#
19 14	1254-2	0.00031	0.00000	100.0#	0#	-4.61#
20 14	1254-3	0.00030	0.00000	100.0#	0#	-4.94#
21 14	1254-4	0.00024	0.00000	100.0#	0#	-5.17#
22 14	1254-5	0.00033	0.00000	100.0#	0#	-5.54#
24 16	1242-1	0.00007	0.00000	100.0#	0#	-2.95#
25 16	1242-2	0.00014	0.00000	100.0#	0#	-3.22#
26 16	1242-3	0.00017	0.00000	100.0#	0#	-3.61#
27 16	1242-4	0.00012	0.00000	100.0#	0#	-3.72#
28 16	1242-5	0.00010	0.00000	100.0#	0#	-4.43#

# Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest21\2022\21220510a\  
 Data File : 21220510a-08.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2022 09:35 am  
 Operator : pest21:er  
 Sample : L2223093-06,42,, re  
 Misc : wgl636532,wgl636093,ical18785  
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 18 16:02:02 2022  
 Quant Method : I:\PCB\Pest21\2022\21220510a\P21\_pcb\_03\_01\_22\_ugL\_ICAL18785.m  
 Quant Title : pcb  
 QLast Update : Wed May 04 12:14:02 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest21\2022\21220510a\21220510a-02.D  
 Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
-----							
Internal Standards							
1) i	1660_1br2nb	1.175	1.254	536.0E6	400.8E6	250.000M4	250.000
	Standard Area 1 : #1 = 469558993					Recovery =	114.14%
	Standard Area 1 : #2 = 360177254					Recovery =	111.29%
14) i	2154_1br2nb	1.175	1.254	536.0E6	400.8E6	250.000M4	250.000
23) i	4268_1br2nb	1.175	1.254	536.0E6	400.8E6	250.000M4	250.000
34) i	1248_1br2nb	1.175	1.254	536.0E6	400.8E6	250.000M4	250.000
40) i	3262_1br2nb	1.175	1.254	536.0E6	400.8E6	250.000M4	250.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.455	1.628	879.0E6	670.3E6	324.543M4	331.893
	Spiked Amount 500.000 Range 30 - 150					Recovery =	64.91% 66.38%
3) s	Decachlorobi	4.009	4.562	583.1E6	403.1E6	301.522	289.291
	Spiked Amount 500.000 Range 30 - 150					Recovery =	60.30% 57.86%
Target Compounds							
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	2.807	3.180	375.6E6	197.8E6	2025.786	1785.129
11) l2	1260-3	0.000	3.574	0	177.6E6	N.D. d	1887.541
12) l2	1260-4	3.276	3.705	551.0E6	399.5E6	2139.267	2061.393
13) l2	1260-5	3.423	3.905	460.3E6	275.1E6	2368.935M1	1997.272
	Sum 1260-1			1386.9E6	1050.1E6	6533.988	7731.335
	Average 1260-1					2177.996	1932.834

# Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest21\2022\21220510a\  
 Data File : 21220510a-08.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2022 09:35 am  
 Operator : pest21:er  
 Sample : L2223093-06,42,, re  
 Misc : wgl636532,wgl636093,ical18785  
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 18 16:02:02 2022  
 Quant Method : I:\PCB\Pest21\2022\21220510a\P21\_pcb\_03\_01\_22\_ugL\_ICAL18785.m  
 Quant Title : pcb  
 QLast Update : Wed May 04 12:14:02 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest21\2022\21220510a\21220510a-02.D  
 Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
15)	13 1221-1	0.000	0.000	0	0	N.D. d	N.D. d
16)	13 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
17)	13 1221-3	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1221-1			0	0	N.D.	N.D.
	Average 1221-1					0.000	0.000
18)	14 1254-1	2.301	2.666f	165.5E6	149.2E6	2137.512M3	2256.857M3
19)	14 1254-2	2.412	2.752f	224.5E6	106.2E6	1661.014M3	1399.269M3
20)	14 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21)	14 1254-4	2.723	3.078f	86926579	193.5E6	805.057	2470.385M3
22)	14 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1254-1			476.9E6	448.9E6	4603.583	6126.512
	Average 1254-1					1534.528	2042.171
24)	16 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25)	16 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26)	16 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27)	16 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28)	16 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1242-1			0	0	N.D.	N.D.
	Average 1242-1					0.000	0.000
29)	19 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30)	19 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31)	19 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32)	19 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33)	19 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1268-1			0	0	N.D.	N.D.
	Average 1268-1					0.000	0.000

# Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest21\2022\21220510a\  
 Data File : 21220510a-08.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2022 09:35 am  
 Operator : pest21:er  
 Sample : L2223093-06,42,, re  
 Misc : wgl636532,wgl636093,ical18785  
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 18 16:02:02 2022  
 Quant Method : I:\PCB\Pest21\2022\21220510a\P21\_pcb\_03\_01\_22\_ugL\_ICAL18785.m  
 Quant Title : pcb  
 QLast Update : Wed May 04 12:14:02 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest21\2022\21220510a\21220510a-02.D  
 Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
35) 17	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) 17	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) 17	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) 17	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) 17	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1248-1			0	0	N.D.	N.D.
	Average 1248-1					0.000	0.000
41) 15	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) 15	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) 15	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) 15	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) 15	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1232-1			0	0	N.D.	N.D.
	Average 1232-1					0.000	0.000
46) 18	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) 18	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) 18	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) 18	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) 18	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1262-1			0	0	N.D.	N.D.
	Average 1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument  
 Sum 1262-1 0 0 N.D. N.D.  
 Average 1262-1 0.000 0.000

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.



# Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest21\2022\21220510a\  
 Data File : 21220510a-08.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2022 09:35 am  
 Operator : pest21:er  
 Sample : L2223093-06,42,, re  
 Misc : wgl636532,wgl636093,ical18785  
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e  
 Integration File signal 2: events2.e  
 Quant Time: May 18 16:02:02 2022  
 Quant Method : I:\PCB\Pest21\2022\21220510a\P21\_pcb\_03\_01\_22\_ugL\_ICAL18785.m  
 Quant Title : pcb  
 QLast Update : Wed May 04 12:14:02 2022  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest21\2022\21220510a\21220510a-02.D  
 Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
-----						
(#)=Recovery Exceeds Compound Acceptance Limits.						
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.						

Sub List : Default - All compounds listed0a\21220510a-02.D••

Data Path : I:\PCB\Pest21\2022\21220510a\

Data File : 21220510a-08.D

Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch

Acq On : 10 May 2022 09:35 am

Operator : pest21:er

Sample : L2223093-06,42,, re

Misc : wgl636532,wgl636093,ical18785

ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e

Integration File signal 2: events2.e

Quant Time: May 18 16:02:02 2022

Quant Method : I:\PCB\Pest21\2022\21220510a\P21\_pcb\_03\_01\_22\_ugL\_ICAL18785.m

Quant Title : pcb

QLast Update : Wed May 04 12:14:02 2022

Response via : Initial Calibration

Integrator: ChemStation

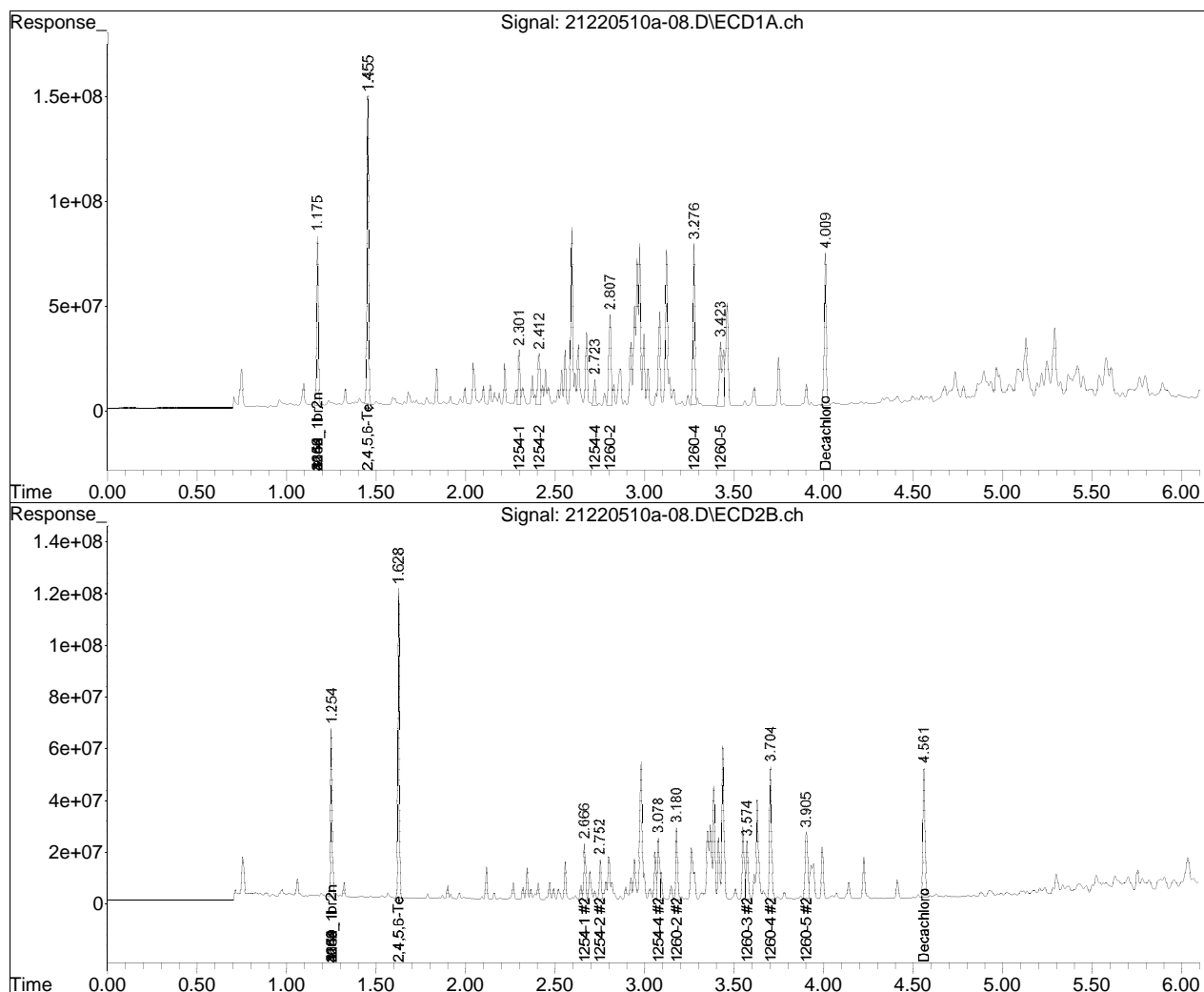
Volume Inj. :

Signal #1 Phase :

Signal #2 Phase:

Signal #1 Info :

Signal #2 Info :



# Laboratory Control Sample Summary

## Form 3

### PCBs

Client	: Impact Environmental	Lab Number	: L2223093
Project Name	: 60 MCLEAN AVENUE	Project Number	: 15514
Matrix	: SOIL		
LCS Sample ID	: WG1636668-2	Analysis Date	: 05/11/22 15:52
LCSD Sample ID	: WG1636668-3	Analysis Date	: 05/11/22 16:00
		File ID	: 23220511a-41
		File ID	: 23220511a-42

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Aroclor 1016	207	127	61	207	151	73	18	40-140	50
Aroclor 1260	207	113	55	207	131	63	14	40-140	50

# Form 3 PCBs

Client	: Impact Environmental	Lab Number	: L2223093
Project Name	: 60 MCLEAN AVENUE	Project Number	: 15514
Matrix	: SOIL		
LCS Sample ID	: WG1639652-2	Analysis Date	: 05/18/22 14:34
LCSD Sample ID	: WG1639652-3	Analysis Date	: 05/18/22 14:42
		File ID	: 23220518a-10
		File ID	: 23220518a-11

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Aroclor 1016	197	134	68	205	145	71	4	40-140	50
Aroclor 1260	197	99.7	50	205	110	54	8	40-140	50

# Results Summary

## Form 1

### Polychlorinated Biphenyls by GC

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1635783-1  
 Client ID : WG1635783-1BLANK  
 Sample Location :  
 Sample Matrix : SOIL  
 Analytical Method : 1,8082A  
 Lab File ID : 21220509a-62  
 Sample Amount : 15.57 g  
 Extraction Method : EPA 3546  
 Extract Volume : 1000 uL  
 GPC Cleanup : N  
 Sulfur Cleanup : Y

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/09/22 21:24  
 Date Extracted : 05/08/22  
 Dilution Factor : 1  
 Analyst : ER  
 Instrument ID : PEST21  
 GC Column : CLP-PesticideII  
 %Solids : NA  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
11096-82-5	Aroclor 1260	14.4	32.1	5.93	J
1336-36-3	PCBs, Total	14.4	32.1	2.85	J





# Results Summary

## Form 1

### Polychlorinated Biphenyls by GC

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1636093-1  
 Client ID : WG1636093-1BLANK  
 Sample Location :  
 Sample Matrix : SOIL  
 Analytical Method : 1,8082A  
 Lab File ID : 13220509a-44  
 Sample Amount : 15.62 g  
 Extraction Method : EPA 3546  
 Extract Volume : 1000 uL  
 GPC Cleanup : N  
 Sulfur Cleanup : Y

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/10/22 00:58  
 Date Extracted : 05/09/22  
 Dilution Factor : 1  
 Analyst : JM  
 Instrument ID : PEST13  
 GC Column : CLP-PesticideII  
 %Solids : NA  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
11096-82-5	Aroclor 1260	14.6	32.0	5.92	J
1336-36-3	PCBs, Total	14.6	32.0	2.84	J



# Matrix Spike Sample Summary

## Form 3

### PCBs

Client	: Impact Environmental	Lab Number	: L2223093
Project Name	: 60 MCLEAN AVENUE	Project Number	: 15514
Client Sample ID	: SB-5 (0-2)	Matrix	: SOIL
Lab Sample ID	: L2223093-27	Analysis Date	: 05/11/22 16:34
Matrix Spike	: WG1636668-4	MS Analysis Date	: 05/11/22 16:42
Matrix Spike Dup	: WG1636668-5	MSD Analysis Date	: 05/11/22 16:51

Parameter	Sample Conc. (ug/kg)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R	Spike Added (ug/kg)	Spike Conc. (ug/kg)	%R			
Aroclor 1016	ND	230	112	49	232	127	55	13	40-140	50
Aroclor 1260	ND	230	101	44	232	106	46	5	40-140	50



# Surrogate Recovery Summary

## Form 2

### PCBs

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Soil

GC Column 1: CLP-Pesticide  
GC Column 2: CLP-PesticideII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
SB-7 (0-2) (L2223093-01)	75	75	75	70			0
SB-7 (7-9) (L2223093-02)	52	52	44	42			0
SB-6 (0-2) (L2223093-03)	74	73	74	69			0
SB-6 (7-9) (L2223093-04)	64	64	65	61			0
SB-9 (0-4) (L2223093-05)	76	77	76	72			0
SB-8B (0-3) (L2223093-06)	65	66	60	58			0
SB-12 (0-4) (L2223093-07)	39	39	31	31			0
SB-10A (0-3) (L2223093-08)	80	79	81	75			0
SB-10B (0-3) (L2223093-09)	65	66	62	64			0
SB-16 (0-4) (L2223093-10)	63	63	65	59			0
SB-17 (2-4) (L2223093-11)	61	61	76	70			0
SB-17 (0-2) (L2223093-12)	66	65	67	63			0
SB-19 (0-2) (L2223093-13)	55	55	55	53			0
SB-19 (7-9) (L2223093-14)	74	74	75	73			0
SB-18 (0-2) (L2223093-16)	77	80	70	65			0
SB-18 (7-9) (L2223093-17)	66	66	58	56			0
SB-11 (0-4) (L2223093-18)	80	80	84	79			0
SB-DUP-2 (L2223093-19)	61	61	61	58			0
SB-1 (0-2) (L2223093-20)	80	80	82	78			0
SB-2 (0-2) (L2223093-21)	66	67	69	68			0
SB-3 (0-2) (L2223093-25)	67	67	69	65			0
SB-4 (0-2) (L2223093-26)	72	72	69	64			0
SB-5 (0-2) (L2223093-27)	58	50	56	52			0
WG1635633-1BLANK	91	91	93	85			0
WG1635633-2LCS	88	88	90	84			0
WG1635633-3LCSD	89	88	91	85			0
WG1635783-1BLANK	78	77	76	71			0
WG1635783-2LCS	78	77	76	71			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8082-LVI



**Attachment F**  
**Metals QC Summary Forms – Excursions**

# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1639550-1  
 Client ID : WG1639550-1BLANK  
 Sample Location :  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1643086.pdf  
 Sample Amount : 1.25g  
 Digestion Method : EPA 3050B

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/26/22 11:59  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE5  
 %Solids : NA  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	ND	0.400	0.083	U
7440-39-3	Barium, Total	ND	0.400	0.070	U
7440-41-7	Beryllium, Total	ND	0.200	0.013	U
7440-43-9	Cadmium, Total	ND	0.400	0.039	U
7440-47-3	Chromium, Total	0.212	0.400	0.038	J
7440-50-8	Copper, Total	ND	0.400	0.103	U
7439-92-1	Lead, Total	ND	2.00	0.107	U
7439-96-5	Manganese, Total	ND	0.400	0.064	U
7440-02-0	Nickel, Total	0.100	1.00	0.097	J
7782-49-2	Selenium, Total	0.144	0.800	0.103	J
7440-22-4	Silver, Total	ND	0.400	0.113	U
7440-66-6	Zinc, Total	0.156	2.00	0.117	J





# Form 4a

## Interference Check Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : TRACE5

Lab Number : L2223093  
 Project Number : 15514  
 Concentration Units : mg/L

Analyte	True		Initial Found				Final Found			
	Lab ID :		R1568724-15							
	Analysis Date :		05/26/22 09:23							
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
	A	AB	A	%R	AB	%R	A	%R	AB	%R
Arsenic			-0.000200							
Barium			0.00380							
Beryllium			0.00							
Cadmium			-0.00340							
Chromium			-0.000100							
Copper			0.00250							
Lead			0.00820							
Manganese			0.00410							
Nickel			-0.00430							
Selenium			0.00150							
Silver			-0.000400							
Zinc			0.00150							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-19  
 Client ID : SB-DUP-2  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1643086.pdf  
 Sample Amount : 1.331g  
 Digestion Method : EPA 3050B

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 11:00  
 Date Received : 05/03/22  
 Date Analyzed : 05/26/22 18:53  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE5  
 %Solids : 89  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	ND	0.422	0.088	U
7440-39-3	Barium, Total	219	0.422	0.074	
7440-41-7	Beryllium, Total	0.558	0.211	0.014	
7440-43-9	Cadmium, Total	ND	0.422	0.041	U
7440-47-3	Chromium, Total	32.2	0.422	0.041	
7440-50-8	Copper, Total	16.1	0.422	0.109	
7439-92-1	Lead, Total	6.18	2.11	0.113	
7439-96-5	Manganese, Total	86.2	0.422	0.067	
7440-02-0	Nickel, Total	31.2	1.06	0.102	
7782-49-2	Selenium, Total	ND	0.845	0.109	U
7440-22-4	Silver, Total	ND	0.422	0.120	U
7440-66-6	Zinc, Total	29.4	2.11	0.124	



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-25  
 Client ID : SB-3 (0-2)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1644470.pdf  
 Sample Amount : 1.277g  
 Digestion Method : EPA 3050B

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 12:40  
 Date Received : 05/03/22  
 Date Analyzed : 05/31/22 15:15  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE4  
 %Solids : 94  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	ND	0.416	0.087	U
7440-39-3	Barium, Total	71.1	0.416	0.073	
7440-41-7	Beryllium, Total	0.216	0.208	0.014	
7440-43-9	Cadmium, Total	0.550	0.416	0.041	
7440-47-3	Chromium, Total	13.0	0.416	0.040	
7440-50-8	Copper, Total	12.5	0.416	0.107	
7439-92-1	Lead, Total	5.89	2.08	0.112	
7439-96-5	Manganese, Total	102	0.416	0.066	
7440-02-0	Nickel, Total	21.2	1.04	0.101	
7782-49-2	Selenium, Total	ND	0.833	0.107	U
7440-22-4	Silver, Total	ND	0.416	0.118	U
7440-66-6	Zinc, Total	14.2	2.08	0.122	



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-27  
 Client ID : SB-5 (0-2)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1644470.pdf  
 Sample Amount : 1.276g  
 Digestion Method : EPA 3050B

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 12:30  
 Date Received : 05/03/22  
 Date Analyzed : 05/31/22 11:22  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE4  
 %Solids : 89  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	0.610	0.442	0.092	
7440-39-3	Barium, Total	27.8	0.442	0.077	
7440-41-7	Beryllium, Total	0.230	0.221	0.015	
7440-43-9	Cadmium, Total	0.336	0.442	0.043	J
7440-47-3	Chromium, Total	14.9	0.442	0.042	
7440-50-8	Copper, Total	7.10	0.442	0.114	
7439-92-1	Lead, Total	7.75	2.21	0.118	
7439-96-5	Manganese, Total	225	0.442	0.070	
7440-02-0	Nickel, Total	8.17	1.10	0.107	
7782-49-2	Selenium, Total	ND	0.884	0.114	U
7440-22-4	Silver, Total	ND	0.442	0.125	U
7440-66-6	Zinc, Total	17.2	2.21	0.129	



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223458-05  
 Client ID : SB-DUP-1  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1640303.pdf  
 Sample Amount : 1.276g  
 Digestion Method : EPA 3050B

Lab Number : L2223458  
 Project Number : 15514  
 Date Collected : 05/03/22 12:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/19/22 16:57  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE4  
 %Solids : 93  
 Date Digested : 05/19/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	0.898	0.420	0.087	
7440-39-3	Barium, Total	18.5	0.420	0.073	
7440-41-7	Beryllium, Total	0.113	0.210	0.014	J
7440-43-9	Cadmium, Total	0.193	0.420	0.041	J
7440-47-3	Chromium, Total	6.74	0.420	0.040	
7440-50-8	Copper, Total	8.51	0.420	0.108	
7439-92-1	Lead, Total	2.09	2.10	0.112	J
7439-96-5	Manganese, Total	52.5	0.420	0.067	
7440-02-0	Nickel, Total	7.23	1.05	0.102	
7782-49-2	Selenium, Total	ND	0.839	0.108	U
7440-22-4	Silver, Total	ND	0.420	0.119	U
7440-66-6	Zinc, Total	13.9	2.10	0.123	





## Form 5a Matrix Spike

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-7 (0-2)  
 Lab Sample ID : L2223093-01  
 Matrix Spike : WG1639550-3  
 Matrix Spike Dup :

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 MS Analysis Date : 05/26/22 12:17  
 MSD Analysis Date :

Parameter	Sample Conc. (mg/kg)	Matrix Spike Sample		%R	Matrix Spike Duplicate		%R	RPD	Recovery Limits	RPD Limit
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		Spike Added (mg/kg)	Spike Conc. (mg/kg)				
Arsenic, Total	0.530	9.85	8.75	83					75-125	20
Barium, Total	19.0	164	150	80					75-125	20
Beryllium, Total	0.094J	4.1	3.06	74 Q					75-125	20
Cadmium, Total	ND	4.35	3.14	72 Q					75-125	20
Chromium, Total	11.5	16.4	23.6	74 Q					75-125	20
Copper, Total	10.8	20.5	27.8	83					75-125	20
Lead, Total	2.18	43.5	34.5	74 Q					75-125	20
Manganese, Total	112	41	154	102					75-125	20
Nickel, Total	8.20	41	38.1	73 Q					75-125	20
Selenium, Total	0.152J	9.85	8.17	83					75-125	20
Silver, Total	ND	24.6	19.1	78					75-125	20
Zinc, Total	11.4	41	41.6	74 Q					75-125	20



## Form 5a Matrix Spike

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-4 (0-2)  
 Lab Sample ID : L2223093-26  
 Matrix Spike : WG1639565-3  
 Matrix Spike Dup : WG1639565-4

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 MS Analysis Date : 05/31/22 10:00  
 MSD Analysis Date : 05/31/22 10:06

Parameter	Sample Conc. (mg/kg)	Matrix Spike Sample			%R	Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit	
		Spike Added (mg/kg)	Spike Conc. (mg/kg)			Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R				
Arsenic, Total	ND	9.81	7.01	71	Q	9.7	6.48	67	Q	8	75-125	20
Barium, Total	68.0	163	172	64	Q	162	171	64	Q	1	75-125	20
Beryllium, Total	0.178J	4.09	2.68	66	Q	4.04	2.55	63	Q	5	75-125	20
Cadmium, Total	0.724	4.33	3.45	63	Q	4.28	3.21	58	Q	7	75-125	20
Chromium, Total	15.7	16.3	25.0	57	Q	16.2	24.0	51	Q	4	75-125	20
Copper, Total	34.6	20.4	45.3	52	Q	20.2	48.2	67	Q	6	75-125	20
Lead, Total	4.22	43.3	29.7	59	Q	42.8	27.2	54	Q	9	75-125	20
Manganese, Total	124	40.9	151	66	Q	40.4	151	67	Q	0	75-125	20
Nickel, Total	16.9	40.9	39.9	56	Q	40.4	38.1	52	Q	5	75-125	20
Selenium, Total	ND	9.81	5.57	57	Q	9.7	5.02	52	Q	10	75-125	20
Silver, Total	ND	24.5	16.7	68	Q	24.2	15.5	64	Q	7	75-125	20
Zinc, Total	30.2	40.9	54.4	59	Q	40.4	50.7	51	Q	7	75-125	20



## Form 5a Matrix Spike

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-5 (0-2)  
 Lab Sample ID : L2223093-27  
 Matrix Spike : WG1639565-9  
 Matrix Spike Dup : WG1639565-10

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 MS Analysis Date : 05/31/22 11:26  
 MSD Analysis Date : 05/31/22 11:31

Parameter	Sample Conc. (mg/kg)	Matrix Spike Sample			%R	Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit	
		Spike Added (mg/kg)	Spike Conc. (mg/kg)			Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R				
Arsenic, Total	0.610	10.4	7.93	70	Q	10.8	8.21	71	Q	3	75-125	20
Barium, Total	27.8	173	140	65	Q	179	148	67	Q	6	75-125	20
Beryllium, Total	0.230	4.33	3.01	64	Q	4.48	3.15	65	Q	5	75-125	20
Cadmium, Total	0.336J	4.59	3.22	70	Q	4.75	3.35	70	Q	4	75-125	20
Chromium, Total	14.9	17.3	25.3	60	Q	17.9	26.9	67	Q	6	75-125	20
Copper, Total	7.10	21.6	21.6	67	Q	22.4	22.2	67	Q	3	75-125	20
Lead, Total	7.75	45.9	35.4	60	Q	47.5	36.3	60	Q	3	75-125	20
Manganese, Total	225	43.3	256	72	Q	44.8	252	60	Q	2	75-125	20
Nickel, Total	8.17	43.3	34.0	60	Q	44.8	36.1	62	Q	6	75-125	20
Selenium, Total	ND	10.4	6.50	62	Q	10.8	6.63	62	Q	2	75-125	20
Silver, Total	ND	26	20.0	77		26.9	17.8	66	Q	12	75-125	20
Zinc, Total	17.2	43.3	44.7	64	Q	44.8	46.9	66	Q	5	75-125	20



## Form 5b Post Digest Spike Recovery

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-7 (0-2)  
**Lab Sample ID** : L2223093-01  
**Post Spike** : WG1639550-5

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**PS Analysis Date** : 05/26/22 12:30

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Beryllium, Total	0.094J	4.1	2.91	71	75-125
Cadmium, Total	ND	4.35	2.74	63	75-125
Chromium, Total	11.5	16.4	22.5	67	75-125
Lead, Total	2.18	43.5	30.4	65	75-125
Nickel, Total	8.20	41	34.1	63	75-125
Zinc, Total	11.4	41	37.6	64	75-125



## Form 5b

### Post Digest Spike Recovery

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Client Sample ID : SB-4 (0-2)  
Lab Sample ID : L2223093-26  
Post Spike : WG1639565-5

Lab Number : L2223093  
Project Number : 15514  
Matrix : SOIL  
PS Analysis Date : 05/31/22 12:25

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Silver, Total	ND	4.14	2.59	63	75-125





## Form 5b Post Digest Spike Recovery

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-4 (0-2)  
**Lab Sample ID** : L2223093-26  
**Post Spike** : WG1639565-5

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**PS Analysis Date** : 05/31/22 10:21

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Arsenic, Total	ND	9.93	7.16	72	75-125
Barium, Total	68.0	166	179	67	75-125
Beryllium, Total	0.178J	4.14	2.75	66	75-125
Cadmium, Total	0.724	4.39	3.51	64	75-125
Chromium, Total	15.7	16.6	25.0	56	75-125
Copper, Total	34.6	20.7	47.9	64	75-125
Lead, Total	4.22	43.9	29.9	58	75-125
Manganese, Total	124	41.4	146	53	75-125
Nickel, Total	16.9	41.4	41.4	59	75-125
Selenium, Total	ND	9.93	5.69	57	75-125
Zinc, Total	30.2	41.4	55.3	61	75-125



## Form 5b Post Digest Spike Recovery

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-5 (0-2)  
**Lab Sample ID** : L2223093-27  
**Post Spike** : WG1639565-11

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**PS Analysis Date** : 05/31/22 11:45

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Arsenic, Total	0.610	10.6	7.90	69	75-125
Barium, Total	27.8	177	140	63	75-125
Beryllium, Total	0.230	4.42	3.00	63	75-125
Cadmium, Total	0.336J	4.68	3.21	68	75-125
Chromium, Total	14.9	17.7	24.6	55	75-125
Copper, Total	7.10	22.1	21.1	63	75-125
Lead, Total	7.75	46.8	34.5	57	75-125
Nickel, Total	8.17	44.2	33.7	58	75-125
Selenium, Total	ND	10.6	6.73	63	75-125
Zinc, Total	17.2	44.2	43.0	58	75-125



## Form 5b Post Digest Spike Recovery

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Client Sample ID : SB-5 (0-2)  
Lab Sample ID : L2223093-27  
Post Spike : WG1639565-11

Lab Number : L2223093  
Project Number : 15514  
Matrix : SOIL  
PS Analysis Date : 05/31/22 12:30

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Silver, Total	ND	4.42	2.79	63	75-125



## Form 8 Serial Dilutions

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-7 (0-2)  
**Lab Sample ID** : L2223093-01  
**Serial Dilution ID** : WG1639550-6

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**Analysis Date** : 05/26/22 12:12  
**Analysis Date** : 05/26/22 12:39

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Barium, Total	19.0	30.7	62*	20
Chromium, Total	11.5	15.4	34*	20
Copper, Total	10.8	14.3	32*	20
Manganese, Total	112	142	27*	20



## Form 8 Serial Dilutions

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-4 (0-2)  
**Lab Sample ID** : L2223093-26  
**Serial Dilution ID** : WG1639565-6

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**Analysis Date** : 05/31/22 09:55  
**Analysis Date** : 05/31/22 10:26

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Barium, Total	68.0	91.2	34*	20
Chromium, Total	15.7	21.4	36*	20
Copper, Total	34.6	44.8	29*	20
Manganese, Total	124	170	37*	20





## Form 8 Serial Dilutions

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Client Sample ID : SB-5 (0-2)  
Lab Sample ID : L2223093-27  
Serial Dilution ID : WG1639565-12

Lab Number : L2223093  
Project Number : 15514  
Matrix : SOIL  
Analysis Date : 05/31/22 11:22  
Analysis Date : 05/31/22 11:50

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Barium, Total	27.8	36.9	33*	20
Chromium, Total	14.9	20.0	34*	20
Manganese, Total	225	303	35*	20



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-23  
 Client ID : FIELD BLANK-2  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1642081.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 13:30  
 Date Received : 05/03/22  
 Date Analyzed : 05/24/22 10:47  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/23/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00095	0.00050	0.00017	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



# Form 4a

## Interference Check Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : ICPMSQ

Lab Number : L2223093  
 Project Number : 15514  
 Concentration Units : ug/l

Analyte	True		Initial Found				Final Found			
	Lab ID :		R1567696-3							
	Analysis Date :		05/24/22 08:51							
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
	A	AB	A	%R	AB	%R	A	%R	AB	%R
Arsenic			-0.139							
Barium			0.250							
Beryllium			0.00468							
Cadmium			0.0554							
Chromium			0.333							
Copper			1.12							
Lead			0.130							
Manganese			0.753							
Nickel			0.839							
Selenium			-0.0558							
Silver			0.0118							
Zinc			4.02							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%



Alpha ICPMSQ Data

5/24/2022 3:03:34 PM



Analysis index: 4      Analysis started at: 5/24/2022 8:06:11 AM      Rack 0  
Analysis label: 0.2/20 Cal      User name: ALPHALAB\Metals-Instrument      Vial 2

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.493 %	97.613 %	0.151 ppb	8.130 ppb	12.688 ppb	0.338 ppb	16.872 ppb	123.445 ppb	101.355 %
Concentration per Run 1	93.938 %	101.759 %	0.162 ppb	15.562 ppb	14.486 ppb	-0.079 ppb	27.460 ppb	112.701 ppb	99.642 %
Concentration per Run 2	97.261 %	95.226 %	0.153 ppb	6.845 ppb	13.533 ppb	0.394 ppb	-1.606 ppb	110.477 ppb	102.769 %
Concentration per Run 3	98.281 %	95.854 %	0.139 ppb	1.982 ppb	10.043 ppb	0.700 ppb	24.764 ppb	147.157 ppb	101.654 %
Concentration RSD	2.4 %	3.7 %	7.8 %	84.6 %	18.4 %	116.0 %	95.2 %	16.7 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.132 ppb	0.125 ppb	0.134 ppb	20.535 ppb	0.128 ppb	0.168 ppb	0.112 ppb	0.455 ppb	99.590 %
Concentration per Run 1	0.212 ppb	0.128 ppb	0.098 ppb	17.753 ppb	0.125 ppb	0.143 ppb	0.107 ppb	0.365 ppb	104.429 %
Concentration per Run 2	0.088 ppb	0.110 ppb	0.155 ppb	21.585 ppb	0.128 ppb	0.201 ppb	0.128 ppb	0.502 ppb	95.588 %
Concentration per Run 3	0.098 ppb	0.136 ppb	0.149 ppb	22.268 ppb	0.130 ppb	0.161 ppb	0.102 ppb	0.498 ppb	98.753 %
Concentration RSD	52.0 %	10.5 %	23.5 %	11.9 %	1.9 %	17.5 %	12.5 %	17.1 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)
Concentration average	0.161 ppb	-0.015 ppb	0.221 ppb	99.703 %	0.131 ppb	0.125 ppb	100.425 %	0.220 ppb	0.166 ppb
Concentration per Run 1	0.231 ppb	0.139 ppb	0.242 ppb	102.753 %	0.139 ppb	0.123 ppb	105.614 %	0.303 ppb	0.173 ppb
Concentration per Run 2	0.171 ppb	-0.114 ppb	0.216 ppb	95.781 %	0.136 ppb	0.109 ppb	95.049 %	0.150 ppb	0.198 ppb
Concentration per Run 3	0.082 ppb	-0.072 ppb	0.205 ppb	100.576 %	0.119 ppb	0.143 ppb	100.613 %	0.207 ppb	0.126 ppb
Concentration RSD	46.4 %	882.7 %	8.6 %	3.6 %	8.2 %	13.6 %	5.3 %	35.1 %	21.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.163 ppb	99.760 %	100.017 %	0.112 ppb	0.129 ppb	99.325 %
Concentration per Run 1	0.221 ppb	104.842 %	106.385 %	0.107 ppb	0.124 ppb	103.634 %
Concentration per Run 2	0.146 ppb	96.305 %	94.344 %	0.106 ppb	0.133 ppb	96.713 %
Concentration per Run 3	0.121 ppb	98.133 %	99.321 %	0.122 ppb	0.131 ppb	97.629 %
Concentration RSD	32.0 %	4.5 %	6.0 %	8.1 %	3.7 %	3.8 %



Analysis index: 12	Analysis started at: 5/24/2022 8:46:33 AM	Rack 4
Analysis label: LLCCV	User name: ALPHALABMetals-Instrument	Vial 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.999 %	93.718 %	0.372 ppb	87.146 ppb	81.086 ppb	12.442 ppb	103.352 ppb	187.609 ppb	97.357 %
Concentration per Run 1	91.928 %	95.603 %	0.355 ppb	82.334 ppb	71.309 ppb	12.133 ppb	118.154 ppb	187.906 ppb	95.843 %
Concentration per Run 2	92.171 %	95.352 %	0.394 ppb	84.766 ppb	81.375 ppb	12.301 ppb	100.799 ppb	186.641 ppb	96.754 %
Concentration per Run 3	94.899 %	90.201 %	0.367 ppb	94.338 ppb	90.573 ppb	12.893 ppb	91.105 ppb	188.280 ppb	99.474 %
Recovery Percentage 1			74.479 %	87.146 %	115.837 %	124.421 %	103.352 %	187.609 %	
Concentration RSD	1.8 %	3.3 %	5.4 %	7.3 %	11.9 %	3.2 %	13.3 %	0.5 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	58Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.397 ppb	0.632 ppb	1.241 ppb	0.627 ppb	0.625 ppb	2.300 ppb	1.384 ppb	12.180 ppb	100.040 %
Concentration per Run 1	5.408 ppb	0.720 ppb	1.243 ppb	0.625 ppb	0.625 ppb	2.274 ppb	1.385 ppb	12.151 ppb	97.132 %
Concentration per Run 2	5.774 ppb	0.565 ppb	1.269 ppb	0.618 ppb	0.618 ppb	2.341 ppb	1.353 ppb	12.328 ppb	100.254 %
Concentration per Run 3	5.010 ppb	0.610 ppb	1.210 ppb	0.639 ppb	0.639 ppb	2.284 ppb	1.415 ppb	12.060 ppb	102.735 %
Recovery Percentage 1	107.950 %	63.170 %	124.064 %	125.490 %	125.490 %	114.995 %	138.416 %	121.798 %	
Concentration RSD	7.1 %	12.7 %	2.4 %	1.7 %	1.7 %	1.6 %	2.2 %	1.1 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)
Concentration average	0.623 ppb	5.789 ppb	0.638 ppb	99.208 %	0.358 ppb	0.242 ppb	102.192 %	31.716 ppb	2.211 ppb
Concentration per Run 1	0.653 ppb	6.515 ppb	0.642 ppb	98.172 %	0.374 ppb	0.295 ppb	101.214 %	30.587 ppb	2.161 ppb
Concentration per Run 2	0.597 ppb	5.841 ppb	0.625 ppb	99.193 %	0.357 ppb	0.242 ppb	104.379 %	31.863 ppb	2.258 ppb
Concentration per Run 3	0.618 ppb	5.011 ppb	0.646 ppb	100.258 %	0.350 ppb	0.189 ppb	100.982 %	32.698 ppb	2.213 ppb
Recovery Percentage 1	124.584 %	115.778 %	127.609 %	89.518 %	89.518 %	120.944 %	1,057.201 %	1,057.201 %	55.271 %
Concentration RSD	4.6 %	13.0 %	1.7 %	1.1 %	3.8 %	21.8 %	1.9 %	3.4 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.630 ppb	103.413 %	102.617 %	0.605 ppb	105.182 %	
Concentration per Run 1	0.583 ppb	102.445 %	101.286 %	0.591 ppb	109.131 %	
Concentration per Run 2	0.623 ppb	104.362 %	104.464 %	0.629 ppb	103.205 %	
Concentration per Run 3	0.683 ppb	103.431 %	102.102 %	0.595 ppb	103.211 %	
Recovery Percentage 1	125.988 %		156.689 %	121.030 %		
Concentration RSD	8.0 %	0.9 %	1.6 %	3.5 %	3.3 %	



**Attachment G**  
**Mercury QC Summary Forms – Excursions**

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
6	I2223093-01 T	2.500	2.500	2.500	-0.4948	-1.4703	-0.588	-	20:06	DR,NIC2
7	WG1639551-3 T	2.500	2.500	2.500	0.8417	2.7914	1.117	-	20:10	DR,NIC2
8	WG1639551-4 T	2.500	2.500	2.500	-0.0276	0.0195	0.008	-	20:13	DR,NIC2
9	PS 093-01	2.500	2.500	2.500	8.1016	25.9411	10.376	-	20:16	DR,NIC2
10	I2223093-02 T	2.500	2.500	2.500	-0.4498	-1.3271	-0.531	-	20:20	DR,NIC2
11	I2223093-03 T	2.500	2.500	2.500	0.0346	0.2178	0.087	-	20:23	DR,NIC2
12	Check STD(10ug/L)	2.500	2.500	2.500	8.0529	25.7858	10.314	103.1	20:26	DR,NIC2
13	Check Blank	2.500	2.500	2.500	-0.5107	-1.5210	-0.608	-	20:30	DR,NIC2
14	I2223093-04 T	2.500	2.500	2.500	0.0298	0.2025	0.081	-	20:33	DR,NIC2
15	I2223093-05 T	2.500	2.500	2.500	0.4907	1.6722	0.669	-	20:36	DR,NIC2
16	I2223093-06 T	2.500	2.500	2.500	1.0117	3.3335	1.333	-	20:40	DR,NIC2
17	I2223093-07 T	2.500	2.500	2.500	-0.0513	-0.0561	-0.022	-	20:43	DR,NIC2
18	I2223093-08 T	2.500	2.500	2.500	7.8087	25.0071	10.003	-	20:46	DR,NIC2
19	I2223093-09 T	2.500	2.500	2.500	0.3136	1.1074	0.443	-	20:49	DR,NIC2
20	I2223093-10 T	2.500	2.500	2.500	0.1368	0.5437	0.217	-	20:53	DR,NIC2
21	I2223093-11 T	2.500	2.500	2.500	0.1040	0.4391	0.176	-	20:56	DR,NIC2
22	I2223093-12 T	2.500	2.500	2.500	0.0795	0.3610	0.144	-	20:59	DR,NIC2
23	I2223093-13 T	2.500	2.500	2.500	0.2205	0.8106	0.324	-	21:03	DR,NIC2
24	Check STD(10ug/L)	2.500	2.500	2.500	8.2838	26.5221	10.609	106.1	21:06	DR,NIC2
25	Check Blank	2.500	2.500	2.500	-0.5013	-1.4910	-0.596	-	21:09	DR,NIC2
26	I2223093-14 T	2.500	2.500	2.500	0.1442	0.5673	0.227	-	21:13	DR,NIC2
27	I2223093-16 T	2.500	2.500	2.500	2.5956	8.3841	3.354	-	21:16	DR,NIC2
28	I2223093-17 T	2.500	2.500	2.500	-0.0482	-0.0462	-0.018	-	21:19	DR,NIC2
29	I2223093-18 T	2.500	2.500	2.500	1.3667	4.4655	1.786	-	21:23	DR,NIC2
30	I2223093-19 T	2.500	2.500	2.500	0.2162	0.7969	0.319	-	21:26	DR,NIC2
31	I2223093-20 T	2.500	2.500	2.500	0.1795	0.6798	0.272	-	21:29	DR,NIC2
32	I2223093-21 T	2.500	2.500	2.500	0.1841	0.6945	0.278	-	21:32	DR,NIC2
33	WG1638687-1 T	2.500	2.500	2.500	-0.1377	-0.3297	-0.132	-	21:49	DR,NIC2
34	WG1638687-2 T 5x	2.500	2.500	0.500	9.9418	31.8090	63.618	-	21:53	DR,NIC2
35	L2222891-09 T	2.500	2.500	2.500	3.9692	12.7641	5.106	-	21:56	DR,NIC2
36	Check STD(10ug/L)	2.500	2.500	2.500	7.8926	25.2747	10.110	101.1	21:59	DR,NIC2
37	Check Blank	2.500	2.500	2.500	-0.5052	-1.5041	-0.602	-	22:03	DR,NIC2

# Form 1

## METALS

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Lab ID : L2223458-05  
Client ID : SB-DUP-1  
Sample Location : 60 MCLEAN AVENUE  
Sample Matrix : SOIL  
Analytical Method : 1,7471B  
Lab File ID : WG1640359.pdf  
Sample Amount : 0.398g  
Digestion Method : EPA 7471B

Lab Number : L2223458  
Project Number : 15514  
Date Collected : 05/03/22 12:00  
Date Received : 05/04/22  
Date Analyzed : 05/19/22 14:38  
Dilution Factor : 1  
Analyst : AW  
Instrument ID : NIC1  
%Solids : 93  
Date Digested : 05/19/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.067	0.044	U



# Form 1

## METALS

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Lab ID : L2223093-25  
Client ID : SB-3 (0-2)  
Sample Location : 60 MCLEAN AVENUE  
Sample Matrix : SOIL  
Analytical Method : 1,7471B  
Lab File ID : WG1639760.pdf  
Sample Amount : 0.329g  
Digestion Method : EPA 7471B

Lab Number : L2223093  
Project Number : 15514  
Date Collected : 05/03/22 12:40  
Date Received : 05/03/22  
Date Analyzed : 05/18/22 19:01  
Dilution Factor : 1  
Analyst : DMB  
Instrument ID : NIC1  
%Solids : 94  
Date Digested : 05/18/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	2.00	0.081	0.053	



## Form 5a Matrix Spike

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-4 (0-2)  
**Lab Sample ID** : L2223093-26  
**Matrix Spike** : WG1639571-3  
**Matrix Spike Dup** : WG1639571-4

**Lab Number** : L2223093  
**Project Number** : 15514  
**Matrix** : SOIL  
**MS Analysis Date** : 05/18/22 18:21  
**MSD Analysis Date** : 05/18/22 18:24

Parameter	Sample Conc. (mg/kg)	Matrix Spike Sample		%R	Matrix Spike Duplicate		%R	RPD	Recovery Limits	RPD Limit
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		Spike Added (mg/kg)	Spike Conc. (mg/kg)				
Mercury, Total	0.547	0.166	0.680	80	0.162	0.779	143 Q	14	80-120	20





**Attachment H**  
**pfas QC Summary Forms – Excursions**

# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60470  
 Sample No : WG1637252-1  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/11/22 14:28  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	0.495	0.500	99.1	50-150
Perfluoropentanoic Acid (PFPeA)	0.522	0.500	104.4	50-150
Perfluorobutanesulfonic Acid (PFBS)	0.454	0.440	102.3	50-150
Perfluorohexanoic Acid (PFHxA)	0.518	0.500	103.6	50-150
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	0.468	0.470	99.9	50-150
Perfluoropentanesulfonic Acid (PFPeS)	0.470	0.470	99.9	50-150
Perfluoroheptanoic Acid (PFHpA)	0.503	0.500	100.7	50-150
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	0.065	0.095	68.5	50-150
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	0.406	0.405	100.1	50-150
Perfluorohexanesulfonic Acid (PFHxS)	0.471	0.457	-	50-150
Perfluorooctanoic Acid-Branched (br-PFOA)			-	50-150
Perfluorooctanoic Acid-Linear (L-PFOA)	0.509	0.500	101.8	50-150
Perfluorooctanoic Acid (PFOA)	0.509	0.500	-	50-150
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.452	0.480	95.1	50-150
Perfluoroheptanesulfonic Acid (PFHpS)	0.479	0.480	100.6	50-150
Perfluorononanoic Acid (PFNA)	0.528	0.500	105.6	50-150
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	0.083	0.106	79	50-150
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	0.408	0.394	103.4	50-150
Perfluorooctanesulfonic Acid (PFOS)	0.491	0.464	-	50-150
Perfluorodecanoic Acid (PFDA)	0.496	0.500	99.1	50-150
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.414	0.480	86.4	50-150
Perfluorononanesulfonic Acid (PFNS)	0.530	0.480	110.2	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.249	0.500	-	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	0.015	0.120	12.5*	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	0.234	0.380	61.6	50-150
Perfluoroundecanoic Acid (PFUnA)	0.455	0.500	91.1	50-150
Perfluorodecanesulfonic Acid (PFDS)	0.530	0.480	109.8	50-150
Perfluorooctanesulfonamide (FOSA)	0.531	0.500	106.1	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.453	0.500	-	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	0.017	0.113	15*	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	0.436	0.388	112.5	50-150
Perfluorododecanoic Acid (PFDoA)	0.515	0.500	102.9	50-150
Perfluorotridecanoic Acid (PFTTrDA)	0.487	0.500	97.3	50-150
Perfluorotetradecanoic Acid (PFTA)	0.573	0.500	114.7	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	4.074	5.000	81.5	50-150
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	0.509	0.473	107.8	50-150
Perfluorohexadecanoic Acid (PFHxDA)	0.644	0.500	128.8	50-150
Perfluorooctadecanoic Acid (PFODA)	0.383	0.500	76.6	50-150
Perfluorododecane Sulfonic Acid (PFDoDS)	0.505	0.484	101.1	50-150
1H,1H,2H,2H-Perfluorododecanesulfonic Acid (10:2FTS)	0.539	0.483	111.5	50-150
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	0.453	0.467	97.2	50-150
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	0.462	0.472	97.9	50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.416	10.000	94.2	50-150

\* Value outside of QC limits.



# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60470  
 Sample No : WG1637252-1  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/11/22 14:28  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	9.603	10.000	96	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	8.121	9.320	87.1	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	5.544	9.380	59.1	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	9.404	10.000	94	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	9.460	10.000	94.6	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	9.241	9.480	97.5	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.296	10.000	93	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	5.969	9.510	62.8	50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	9.083	10.000	90.8	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	8.620	9.590	89.9	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.645	10.000	96.4	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	5.639	9.600	58.7	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	10.442	10.000	104.4	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	10.291	10.000	102.9	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	9.841	10.000	98.4	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	9.096	10.000	91	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	10.793	10.000	107.9	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	11.114	10.000	111.1	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	259.850	200.000	129.9	50-150
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	13.812	10.000	138.1	50-150
1H,1H,2H,2H-Perfluorododecane Sulfonate (M2D4-10:2FTS)	13.238	19.600	67.5	50-150
M4PFOS	12.726		127.3	
M2PFDA	11.411		114.1	
M2PFOA	11.529		115.3	
M3PFBA	11.599		116	

\* Value outside of QC limits.



# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60496  
 Sample No : WG1637252-3  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/11/22 21:43  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	0.504	0.500	100.8	50-150
Perfluoropentanoic Acid (PFPeA)	0.510	0.500	102	50-150
Perfluorobutanesulfonic Acid (PFBS)	0.469	0.440	105.7	50-150
Perfluorohexanoic Acid (PFHxA)	0.512	0.500	102.3	50-150
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	0.354	0.470	75.5	50-150
Perfluoropentanesulfonic Acid (PFPeS)	0.421	0.470	89.5	50-150
Perfluoroheptanoic Acid (PFHpA)	0.518	0.500	103.6	50-150
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	0.070	0.095	74.4	50-150
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	0.403	0.405	99.3	50-150
Perfluorohexanesulfonic Acid (PFHxS)	0.473	0.457	-	50-150
Perfluorooctanoic Acid-Branched (br-PFOA)			-	50-150
Perfluorooctanoic Acid-Linear (L-PFOA)	0.541	0.500	108.1	50-150
Perfluorooctanoic Acid (PFOA)	0.541	0.500	-	50-150
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.457	0.480	96.1	50-150
Perfluoroheptanesulfonic Acid (PFHpS)	0.465	0.480	97.7	50-150
Perfluorononanoic Acid (PFNA)	0.521	0.500	104.2	50-150
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	0.106	0.106	100	50-150
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	0.411	0.394	104.2	50-150
Perfluorooctanesulfonic Acid (PFOS)	0.517	0.464	-	50-150
Perfluorodecanoic Acid (PFDA)	0.531	0.500	106.2	50-150
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.403	0.480	83.9	50-150
Perfluorononanesulfonic Acid (PFNS)	0.524	0.480	109	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.474	0.500	-	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	0.057	0.120	47.9*	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	0.417	0.380	109.7	50-150
Perfluoroundecanoic Acid (PFUnA)	0.460	0.500	92	50-150
Perfluorodecanesulfonic Acid (PFDS)	0.567	0.480	117.6	50-150
Perfluorooctanesulfonamide (FOSA)	0.462	0.500	92.4	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.385	0.500	-	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	0.068	0.113	60.6	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	0.317	0.388	81.8	50-150
Perfluorododecanoic Acid (PFDoA)	0.585	0.500	117	50-150
Perfluorotridecanoic Acid (PFTTrDA)	0.586	0.500	117.3	50-150
Perfluorotetradecanoic Acid (PFTA)	0.645	0.500	129	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	4.988	5.000	99.8	50-150
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	0.500	0.473	105.8	50-150
Perfluorohexadecanoic Acid (PFHxDA)	0.578	0.500	115.6	50-150
Perfluorooctadecanoic Acid (PFODA)	0.328	0.500	65.6	50-150
Perfluorododecane Sulfonic Acid (PFDoDS)	0.411	0.484	82.1	50-150
1H,1H,2H,2H-Perfluorododecanesulfonic Acid (10:2FTS)	0.442	0.483	91.5	50-150
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	0.464	0.467	99.5	50-150
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	0.488	0.472	103.5	50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.342	10.000	93.4	50-150

\* Value outside of QC limits.



# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60496  
 Sample No : WG1637252-3  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/11/22 21:43  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	9.726	10.000	97.3	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	7.663	9.320	82.2	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	4.693	9.380	50	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	9.349	10.000	93.5	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	9.401	10.000	94	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	8.907	9.480	94	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.262	10.000	92.6	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	5.138	9.510	54	50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	8.582	10.000	85.8	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	8.340	9.590	87	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.594	10.000	95.9	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	5.477	9.600	57	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	10.203	10.000	102	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	9.950	10.000	99.5	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	9.215	10.000	92.2	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	10.249	10.000	102.5	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	10.291	10.000	102.9	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	10.227	10.000	102.3	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	268.019	200.000	134	50-150
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	15.241	10.000	152.4*	50-150
1H,1H,2H,2H-Perfluorododecane Sulfonate (M2D4-10:2FTS)	12.651	19.600	64.5	50-150
M4PFOS	13.958		139.6	
M2PFDA	11.681		116.8	
M2PFOA	11.604		116	
M3PFBA	11.141		111.4	

\* Value outside of QC limits.





# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60524  
 Sample No : WG1637252-5  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/12/22 05:27  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	0.513	0.500	102.5	50-150
Perfluoropentanoic Acid (PFPeA)	0.528	0.500	105.6	50-150
Perfluorobutanesulfonic Acid (PFBS)	0.456	0.440	102.7	50-150
Perfluorohexanoic Acid (PFHxA)	0.528	0.500	105.6	50-150
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	0.523	0.470	111.6	50-150
Perfluoropentanesulfonic Acid (PFPeS)	0.381	0.470	81	50-150
Perfluoroheptanoic Acid (PFHpA)	0.512	0.500	102.3	50-150
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	0.093	0.095	98.5	50-150
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	0.384	0.405	94.8	50-150
Perfluorohexanesulfonic Acid (PFHxS)	0.477	0.457	-	50-150
Perfluorooctanoic Acid-Branched (br-PFOA)			-	50-150
Perfluorooctanoic Acid-Linear (L-PFOA)	0.545	0.500	109	50-150
Perfluorooctanoic Acid (PFOA)	0.545	0.500	-	50-150
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.380	0.480	79.8	50-150
Perfluoroheptanesulfonic Acid (PFHpS)	0.548	0.480	115	50-150
Perfluorononanoic Acid (PFNA)	0.541	0.500	108.2	50-150
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	0.081	0.106	77	50-150
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	0.409	0.394	103.6	50-150
Perfluorooctanesulfonic Acid (PFOS)	0.490	0.464	-	50-150
Perfluorodecanoic Acid (PFDA)	0.562	0.500	112.3	50-150
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.380	0.480	79.2	50-150
Perfluorononanesulfonic Acid (PFNS)	0.467	0.480	97	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.336	0.500	-	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	0.047	0.120	39.6*	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	0.289	0.380	76	50-150
Perfluoroundecanoic Acid (PFUnA)	0.420	0.500	84	50-150
Perfluorodecanesulfonic Acid (PFDS)	0.487	0.480	101	50-150
Perfluorooctanesulfonamide (FOSA)	0.527	0.500	105.4	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.357	0.500	-	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	0.016	0.113	14*	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	0.341	0.388	88	50-150
Perfluorododecanoic Acid (PFDoA)	0.518	0.500	103.6	50-150
Perfluorotridecanoic Acid (PFTTrDA)	0.671	0.500	134.3	50-150
Perfluorotetradecanoic Acid (PFTA)	0.567	0.500	113.3	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	4.628	5.000	92.6	50-150
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	0.506	0.473	107.1	50-150
Perfluorohexadecanoic Acid (PFHxDA)	0.535	0.500	107.1	50-150
Perfluorooctadecanoic Acid (PFODA)	0.394	0.500	78.8	50-150
Perfluorododecane Sulfonic Acid (PFDoDS)	0.535	0.484	107	50-150
1H,1H,2H,2H-Perfluorododecanesulfonic Acid (10:2FTS)	0.775	0.483	160.4*	50-150
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	0.465	0.467	99.7	50-150
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	0.495	0.472	104.9	50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.356	10.000	93.6	50-150

\* Value outside of QC limits.



# Calibration Verification Summary

## Form 7

### Semivolatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : LCMS02  
 Lab File ID : I60524  
 Sample No : WG1637252-5  
 Channel :

Lab Number : L2223093  
 Project Number : 15514  
 Calibration Date : 05/12/22 05:27  
 Init. Calib. Date(s) : 04/13/22 04/13/22  
 Init. Calib. Times : 16:33 19:32

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	9.461	10.000	94.6	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	7.918	9.320	85	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	5.264	9.380	56.1	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	9.448	10.000	94.5	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	9.603	10.000	96	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	9.200	9.480	97	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.212	10.000	92.1	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	6.003	9.510	63.1	50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	8.301	10.000	83	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	8.659	9.590	90.3	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	8.784	10.000	87.8	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	6.200	9.600	64.6	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	9.600	10.000	96	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	10.555	10.000	105.5	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	10.066	10.000	100.7	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	9.052	10.000	90.5	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	10.873	10.000	108.7	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	10.310	10.000	103.1	50-150
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	233.796	200.000	116.9	50-150
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	15.635	10.000	156.3*	50-150
1H,1H,2H,2H-Perfluorododecane Sulfonate (M2D4-10:2FTS)	14.133	19.600	72.1	50-150
M4PFOS	14.096		141	
M2PFDA	11.877		118.8	
M2PFOA	11.740		117.4	
M3PFBA	12.215		122.2	

\* Value outside of QC limits.



Alpha Analytical Inc.

Dataset: C:\MassLynx\Data\2022\220413\_537ISO\_ICAL.PRO\Data\WG1626786\_ICAL.qld

Last Altered: Wednesday, April 13, 2022 20:50:50 Eastern Daylight Time

Printed: Wednesday, April 13, 2022 20:53:35 Eastern Daylight Time

Compound name: L-NMeFOSAA

	Name	ID	Acq.Date	Acq.Time	RT	IS Area	Area	Conc (ng...	%Rec	RRF	1° S/N	2° S/N	(b/a)
1	I58708	IA537STD-.5	13-Apr-22	19:32:11	10.9...	2785.578	141.346	0.406	106.8	1.335	5	6	0.76
2	I58709	IA537STD-1.0	13-Apr-22	16:33:12	10.8...	2577.158	150.763	0.468	61.6	0.770	43	12	1.22
3	I58710	IA537STD-2.0	13-Apr-22	16:49:47	10.9...	2567.593	379.750	1.183	77.8	0.973	9	12	0.88
4	I58711	IA537STD-5.0	13-Apr-22	17:06:20	10.8...	2806.508	1189.424	3.394	89.3	1.115	31	29	1.01
5	I58712	IA537STD-10	13-Apr-22	17:22:56	10.9...	2646.290	2287.070	6.931	91.2	1.137	298	73	0.86
6	I58713	IA537STD-25	13-Apr-22	17:39:29	10.8...	2550.829	5630.429	17.781	93.6	1.162	274	73	1.00
7	I58714	IA537STD-50	13-Apr-22	17:56:03	10.9...	2540.939	11766.226	37.616	99.0	1.219	1015	427	0.96
8	I58715	IA537STD-100	13-Apr-22	18:12:37	10.9...	2364.550	23248.422	81.371	107.1	1.294	393	320	0.93
9	I58716	IA537STD-250	13-Apr-22	18:29:11	10.8...	2511.711	54410.430	187.894	98.9	1.140	931	2677	0.91

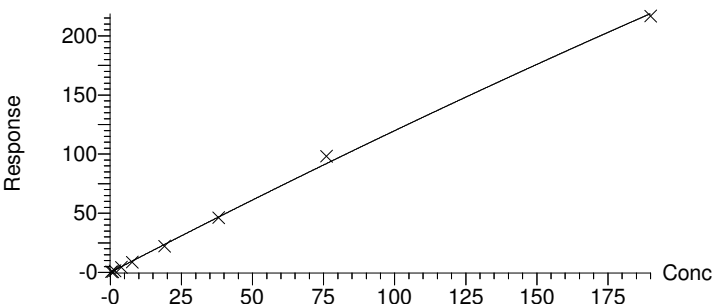
Compound name: L-NMeFOSAA

Coefficient of Determination: R^2 = 0.997524

Calibration curve:  $-0.000519832 \cdot x^2 + 1.25059 \cdot x$

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Force, Weighting: 1/x, Axis trans: None



Alpha Analytical Inc.

Dataset: C:\MassLynx\Data\2022\220413\_537ISO\_ICAL.PRO\Data\WG1626786\_ICAL.qld

Last Altered: Wednesday, April 13, 2022 20:50:50 Eastern Daylight Time

Printed: Wednesday, April 13, 2022 20:53:35 Eastern Daylight Time

## Compound name: NMeFOSAA

	Name	ID	Acq.Date	Acq.Time	RT	IS Area	Area	Conc (ng...	%Rec	RRF	1° S/N	2° S/N	(b/a)
1	I58708	IA537STD-.5	13-Apr-22	19:32:11		2785.578	155.797	0.521					
2	I58709	IA537STD-1.0	13-Apr-22	16:33:12		2577.158	162.242	0.567					
3	I58710	IA537STD-2.0	13-Apr-22	16:49:47		2567.593	424.078	1.567					
4	I58711	IA537STD-5.0	13-Apr-22	17:06:20		2806.508	1322.706	4.448					
5	I58712	IA537STD-10	13-Apr-22	17:22:56		2646.290	2542.878	9.073					
6	I58713	IA537STD-25	13-Apr-22	17:39:29		2550.829	6281.672	23.406					
7	I58714	IA537STD-50	13-Apr-22	17:56:03		2540.939	13134.607	49.354					
8	I58715	IA537STD-100	13-Apr-22	18:12:37		2364.550	26213.397	108.015					
9	I58716	IA537STD-250	13-Apr-22	18:29:11		2511.711	61794.742	247.103					

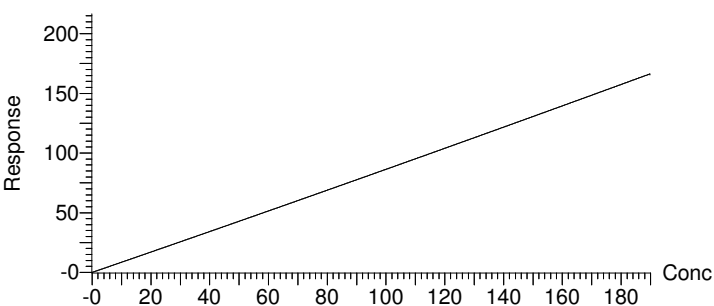
Compound name: NMeFOSAA

Coefficient of Determination: 0.000000

Calibration curve:  $0.850013 * x$ 

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Force, Weighting: 1/x, Axis trans: None



Alpha Analytical Inc.

Dataset: C:\MassLynx\Data\2022\220413\_537ISO\_ICAL.PRO\Data\WG1626786\_ICAL.qld

Last Altered: Wednesday, April 13, 2022 20:50:50 Eastern Daylight Time

Printed: Wednesday, April 13, 2022 20:53:35 Eastern Daylight Time

Compound name: br-NEtFOSAA

	Name	ID	Acq.Date	Acq.Time	RT	IS Area	Area	Conc (ng...	%Rec	RRF	1° S/N	2° S/N	(b/a)
1	I58708	IA537STD-.5	13-Apr-22	19:32:11	10.9...	2132.584	2.591	0.035	31.0	0.108	65	0	3.55
2	I58709	IA537STD-1.0	13-Apr-22	16:33:12	11.034	2155.549	1.533	0.020	9.1	0.032	0	1	0.24
3	I58710	IA537STD-2.0	13-Apr-22	16:49:47	11.047	2148.323	15.770	0.211	46.9	0.163	6	9	0.22
4	I58711	IA537STD-5.0	13-Apr-22	17:06:20	11.047	2352.798	52.222	0.638	56.7	0.197	18	4	0.37
5	I58712	IA537STD-10	13-Apr-22	17:22:56	11.045	2160.968	167.117	2.226	99.0	0.344	17	35	0.28
6	I58713	IA537STD-25	13-Apr-22	17:39:29	11.038	2047.219	418.397	5.899	104.9	0.363	25	58	0.38
7	I58714	IA537STD-50	13-Apr-22	17:56:03	11.038	2234.842	861.283	11.166	99.3	0.343	12	38	0.39
8	I58715	IA537STD-100	13-Apr-22	18:12:37	11.043	2053.126	1681.369	23.945	106.4	0.364	64	74	0.33
9	I58716	IA537STD-250	13-Apr-22	18:29:11	11.038	2137.363	3974.725	55.646	98.9	0.331	71	182	0.39

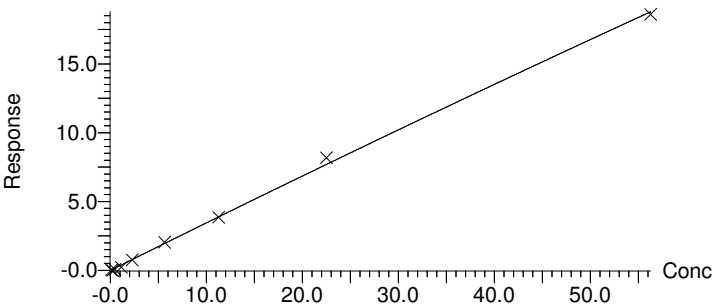
Compound name: br-NEtFOSAA

Coefficient of Determination: R^2 = 0.992638

Calibration curve: -0.000246377 \* x^2 + 0.347901 \* x

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Force, Weighting: 1/x, Axis trans: None





# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S8 ( )	S9 ( )	S10 ( )	S11 ( )	S12 ( )	S13 ( )	S14 ( )
SB-10B (0-3) (L2223093-09)	56	88	92	93	67	68	106
SB-19 (7-9) (L2223093-14)	NA	NA	NA	NA	NA	NA	NA
SB-19 (7-9) (L2223093-14)	49	75	79	79	45	17*	85
SB-DUP-2 (L2223093-19)	NA	NA	NA	NA	NA	NA	NA
SB-DUP-2 (L2223093-19)	50	78	85	87	55	38	101
SB-3 (0-2) (L2223093-25)	64	94	100	100	65	76	111
SB-5 (0-2) (L2223093-27)	62	87	88	96	66	22*	111
SB-5 (0-2) (L2223093-27)	NA	NA	NA	NA	NA	NA	NA
WG1636990-1BLANK	NA	NA	NA	NA	NA	NA	NA
WG1636990-1BLANK	58	87	88	89	56	72	105
WG1636990-2LCS	59	89	88	95	63	85	109
WG1636990-2LCS	NA	NA	NA	NA	NA	NA	NA
SB-5 (0-2)MS	63	87	93	93	74	16*	105
SB-5 (0-2)MSD	62	82	92	88	64	20*	101
SB-2 (18-20)MS	NA	NA	NA	NA	NA	NA	NA
SB-2 (18-20)MS	64	20*	95	30*	72	8*	47*
SB-2 (18-20)MSD	68	17*	95	25*	75	5*	40*
SB-2 (18-20)MSD	NA	NA	NA	NA	NA	NA	NA

#### QC LIMITS

(20-154) S8 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]OCTANESULFONIC ACID (M2-6:2FTS)  
 (72-140) S9 = PERFLUORO[13C9]NONANOIC ACID (M9PFNA)  
 (79-136) S10 = PERFLUORO[13C8]OCTANESULFONIC ACID (M8PFOS)  
 (75-130) S11 = PERFLUORO[1,2,3,4,5,6-13C6]DECANOIC ACID (M6PFDA)  
 (19-175) S12 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]DECANESULFONIC ACID (M2-8:2FTS)  
 (31-134) S13 = N-DEUTERIOMETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D3-NMEFOSAA)  
 (31-134) S14 = PERFLUORO[1,2,3,4,5,6,7-13C7]UNDECANOIC ACID (M7-PFUDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S15 ( )	S16 ( )	S17 ( )	S18 ( )	S19 ( )	S20 ( )	S21 ( )	TOT OUT
SB-10B (0-3) (L2223093-09)	61	78	107	99	--	--	--	0
SB-19 (7-9) (L2223093-14)	85	NA	NA	NA	--	--	--	0
SB-19 (7-9) (L2223093-14)	NA	18*	88	56	--	--	--	3
SB-DUP-2 (L2223093-19)	77	NA	NA	NA	--	--	--	0
SB-DUP-2 (L2223093-19)	NA	33*	95	52	--	--	--	2
SB-3 (0-2) (L2223093-25)	18	71	117	83	--	--	--	0
SB-5 (0-2) (L2223093-27)	NA	27*	109	58	--	--	--	2
SB-5 (0-2) (L2223093-27)	83	NA	NA	NA	--	--	--	0
WG1636990-1BLANK	92	NA	NA	NA	--	--	--	0
WG1636990-1BLANK	40	68	105	62	--	--	--	0
WG1636990-2LCS	57	74	109	80	--	--	--	0
WG1636990-2LCS	94	NA	NA	NA	--	--	--	0
SB-5 (0-2)MS	NA	25*	105	56	--	--	--	2
SB-5 (0-2)MSD	NA	22*	103	49	--	--	--	2
SB-2 (18-20)MS	91	NA	NA	NA	--	--	--	0
SB-2 (18-20)MS	NA	9*	59	65	--	--	--	10
SB-2 (18-20)MSD	NA	9*	52*	59	--	--	--	11
SB-2 (18-20)MSD	90	NA	NA	NA	--	--	--	0

#### QC LIMITS

(10-117) S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)  
 (34-137) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)  
 (54-150) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)  
 (24-159) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



**Attachment I**  
**Cyanide QC Summary Forms – Excursions**

# Form 7

## Laboratory Control Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : NA  
 Lab Sample ID : WG1638806-2  
 Dup Sample ID : WG1638806-3

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 LCS Analysis Date : 05/16/22 13:18  
 LCSD Analysis Date : 05/16/22 13:19

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R			
Cyanide, Total	141.	82.0	59. Q	141.	110	76. Q	32	80-120	35



**Attachment J**  
**Total Solids QC Summary Forms – Excursions**



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-08  
 Client ID : SB-10A (0-3)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 121,2540G  
 Lab File ID : WG1637013.pdf  
 Sample Amount :  
 Digestion Method :

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/02/22 10:30  
 Date Received : 05/03/22  
 Date Analyzed : 05/11/22 09:38  
 Dilution Factor : 1  
 Analyst : RI  
 Instrument ID : BALANCE#53  
 %Solids : 100  
 Date Digested :

CAS NO.	Parameter	%			Qualifier
		Results	RL	MDL	
NONE	Solids, Total	99.6	0.100	NA	



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-18  
 Client ID : SB-11 (0-4)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 121,2540G  
 Lab File ID : WG1637013.pdf  
 Sample Amount :  
 Digestion Method :

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 10:00  
 Date Received : 05/03/22  
 Date Analyzed : 05/11/22 09:38  
 Dilution Factor : 1  
 Analyst : RI  
 Instrument ID : BALANCE#53  
 %Solids : 99  
 Date Digested :

CAS NO.	Parameter	%			Qualifier
		Results	RL	MDL	
NONE	Solids, Total	98.8	0.100	NA	



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-20  
 Client ID : SB-1 (0-2)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 121,2540G  
 Lab File ID : WG1637013.pdf  
 Sample Amount :  
 Digestion Method :

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 10:35  
 Date Received : 05/03/22  
 Date Analyzed : 05/11/22 09:38  
 Dilution Factor : 1  
 Analyst : RI  
 Instrument ID : BALANCE#53  
 %Solids : 87  
 Date Digested :

CAS NO.	Parameter	%			Qualifier
		Results	RL	MDL	
NONE	Solids, Total	86.8	0.100	NA	



**Attachment K**  
**Hexavalent Chromium QC Summary Forms – Excursions**

# Form 7

## Laboratory Control Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : NA  
 Lab Sample ID : WG1634981-2  
 Dup Sample ID :

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 LCS Analysis Date : 05/12/22 21:05  
 LCSD Analysis Date :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R			
Chromium, Hexavalent	131.	92.3	70. Q					80-120	20





# Form 7

## Laboratory Control Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : NA  
 Lab Sample ID : WG1634982-2  
 Dup Sample ID :

Lab Number : L2223093  
 Project Number : 15514  
 Matrix : SOIL  
 LCS Analysis Date : 05/12/22 21:05  
 LCSD Analysis Date :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R			
Chromium, Hexavalent	131.	92.3	70. Q					80-120	20



# Form 1

## WETCHEM

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Lab ID : L2223093-19  
Client ID : SB-DUP-2  
Sample Location : 60 MCLEAN AVENUE  
Sample Matrix : SOIL  
Analytical Method : 1,7196A  
Lab File ID : WG1634982.csv  
Sample Amount : 2.475g  
Digestion Method : EPA 3060A

Lab Number : L2223093  
Project Number : 15514  
Date Collected : 05/03/22 11:00  
Date Received : 05/03/22  
Date Analyzed : 05/12/22 21:05  
Dilution Factor : 1  
Analyst : NL  
Instrument ID : SPEC 4  
%Solids : 89  
Date Digested : 05/09/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
18540-29-9	Chromium, Hexavalent	0.427	0.900	0.180	J



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223093-27  
 Client ID : SB-5 (0-2)  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,7196A  
 Lab File ID : WG1634983.csv  
 Sample Amount : 2.4734g  
 Digestion Method : EPA 3060A

Lab Number : L2223093  
 Project Number : 15514  
 Date Collected : 05/03/22 12:30  
 Date Received : 05/03/22  
 Date Analyzed : 05/07/22 11:33  
 Dilution Factor : 1  
 Analyst : NL  
 Instrument ID : GENSY10VI  
 %Solids : 89  
 Date Digested : 05/05/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
18540-29-9	Chromium, Hexavalent	ND	0.902	0.180	U



## Form 6 Lab Duplicates

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Client Sample ID : SB-5 (0-2)  
Lab Sample ID : L2223093-27  
Dup Sample ID : WG1634983-7

Lab Number : L2223093  
Project Number : 15514  
Matrix : SOIL  
Analysis Date : 05/07/22 11:33  
DUP Analysis Date : 05/07/22 11:33

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Chromium, Hexavalent	ND	0.361J	NC	20





**DATA VALIDATION**  
**FOR**  
**60 McLEAN AVENUE**  
**YONKERS, NY**  
**ORGANIC AND INORGANIC ANALYSIS DATA**

**Laboratory Sample Delivery Group (SDG) No. L2223458**

**Analyses Performed By:**  
**Alpha Analytical**  
**Westborough, Massachusetts**

**For:**  
**Impact Environmental Inc.**  
**Bohemia, NY**

**Data Validation By:**  
**ddms, inc.**  
**St. Paul, Minnesota 55102**

**August 5, 2022**

**2144-000102**  
**60 McLean Avenue\L2223458.docx**



## **EXECUTIVE SUMMARY**

Validation of the organic and inorganic analyses data prepared by Alpha Analytical Westborough, Massachusetts for five soil samples from the 60 McLean Avenue Site has been completed by de maximis Data Management Solutions, Inc. (ddms). Stage 4 validation was performed on the samples. The data were reported by the laboratory under SDG No. L2223458. The following samples were reported:

---

SB-20 (0-2)

SB-20 (7-9)

SB-14 (0-4)

SB-DUP-1

---

Although sample SB-20 (13-15) was received and identified by the laboratory as L2223458-03, the following note was included in the data package narrative.

*L2223458-03: At the client's request, the analyses of Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Total Metals, Hexavalent Chromium and Total Cyanide were not performed.*

Based on professional judgment results for non-detects should be considered to be "U," not detected, at the analyte-specific reporting limit (RL) to represent the lowest concentration at which the laboratory can detect and accurately quantitate sample concentrations based on the documentation provided. The laboratory reported results as not detected at the method detection limit (MDL). The MDL is an estimated value based on a statistical determination, not a quantitative measurement supported by the data provided and should not be used to report non-detect results. It should also be noted by the data user that the laboratory reported non-detect results, RLs, and MDLS to three significant figures. The level of accuracy portrayed at these concentrations and estimated concentrations is not supported by the data and should not be used.

Below is the Data Usability Summary Report (DUSR) associated with these samples.

<b>Data Usability Summary Report</b>	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See following sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes

<b>Data Usability Summary Report</b>	
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes See Attachments A through H

Based on the validation effort, the following data qualifiers were applied:

#### VOCs

- The result for acetone in the initial and reanalysis of SB-20 (7-9) were qualified as estimated (J+) and may be biased high, due to an unacceptable surrogate recovery.
- The result for n-butylbenzene in SB-14 (0-4) was qualified as estimated (J+) and may be biased high, due to an unacceptable laboratory control sample recovery.
- Results for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-butanone, acetone, and o-xylene in all samples in this data set were qualified as estimated (J, UJ) due to poor precision between paired field samples.
- The result for acetone in SB-20 (7-9) should be taken from the initial analysis. The concentration in the initial analysis was greater than in the reanalysis and a more conservative approach was taken for determining usability for that data point.
- Results for all compounds in SB-20 (7-9) were qualified estimated J, UJ due to low internal responses.

#### SVOCs

- Results for all target compounds in SB-DUP-1 were qualified as estimated (UJ) based on low recoveries for the associated surrogate compounds.
- Results for anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene in SB-20 (0-2) and SB-20 (7-9) were qualified as estimated (UJ) based on low recovery for the associated surrogate.

- Results for acenaphthene, hexachlorobenzene, fluoranthene, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)pyrene, chrysene, acenaphthylene, anthracene, fluorene, dibenz(a,h)anthracene, phenanthrene, pyrene, dibenzofuran, and pentachlorophenol in SB-20 (0-2), SB-20 (7-9), and SB-DUP-1 were qualified as estimated (UJ) with potential low bias, based on low recoveries in the associated batch LCS and/or LCSD.
- Results for acenaphthene, fluoranthene, naphthalene, benzo(a)anthracene, chrysene, anthracene, fluorene, phenanthrene, pyrene, dibenzofuran, and pentachlorophenol in SB-14 (0-4) were qualified as estimated (UJ) with potential low bias, based on low recoveries in the associated batch LCS and/or LCSD.

### Pesticides

- Results for all target compounds in SB-14 were qualified as estimated (UJ) due to low surrogate recoveries.
- Results for delta-BHC, lindane, alpha-BHC, beta-BHC, heptachlor, aldrin, endrin, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, and cis-chlordane in SB-20 (0-2), SB-20 (7-9), SB-14 (0-4), and SB-DUP-1 were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.

### PCBs

- Results for Aroclor 1260 and Total PCBs in SB-20 (0-2), SB-20 (7-9), SB-14 (0-4), and SB-DUP-1 were qualified as not detected (U) at the reporting limit (RL) due to associated method blank contamination.
- Results for all target Aroclors and total Aroclors in SB-20 (0-2), SB-20 (7-9), and SB-14 (0-4) were qualified as estimated (UJ) due to low surrogate recoveries.

### ICP Metals

- Results for arsenic, barium, cadmium, and zinc in all samples were qualified as estimated with potential high bias (J+), due to elevated response in the ICSA standard.
- Results for beryllium and selenium in all samples were qualified as estimated (J-, UJ), biased low, due to negative responses in the ICSA standard.
- Results for arsenic in all samples were qualified as estimated (J) due to lack of confirmation in the field duplicate pair.

- Results for barium, chromium, manganese, and nickel in all samples were qualified as estimated (J) due to elevated RPD between the field duplicate pair.
- Results for barium, beryllium, chromium, lead, manganese, selenium, and zinc in SB-20 (0-2) were qualified as estimated (J, UJ) due to low MS recoveries.
- Results for nickel and silver in SB-20 (0-2) were qualified as estimated (J-, UJ) due to low MS and PDS recoveries.
- Result for copper in SB-20 (0-2) was qualified as estimated (J) due to elevated MS recovery.
- Results for copper and manganese in all samples were qualified as estimated (J) due to elevated percent differences in the serial dilution sample.

#### CV – Mercury

- Results for mercury in all samples were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.

#### PFAS

- Results for NMeFOSAA and NEtFOSAA in SB-DUP-1 were qualified as estimated (UJ) due to low labeled analog recoveries.

#### Cyanide

- Result for cyanide in SB-DUP-1 was qualified as estimated (UJ), due to low LCS recovery and elevated relative percent difference between the LCS and LCSD.
- Results for cyanide in SB-20 (0-2), SB-20 (7-9), and SB-14 (0-4) were qualified as estimated, and biased low UJ) due to low LCS/LCSD recoveries.

#### Trivalent Chromium

- Results for trivalent chromium in all samples were qualified as estimate (J) due to elevated RPD in the field duplicate pair and, for SB-20 (0-2), low MS recovery in the total chromium analysis.

All other results were determined to be valid as reported by the laboratory.

This report should be considered part of the data package for all future distributions of the data.

## **INTRODUCTION**

Analyses for the requested parameters were performed by the laboratory according to the following analytical methods:

Volatile Organic Compounds (VOCs)	SW846 Method 8260C
Semivolatile Organic Compounds (SVOCs)	SW846 Method 8270D SW846 Method 8270DSIM
Organochlorine Pesticides	SW846 Method 8081B
Polychlorinated Biphenyls	SW846 Method 8082A
Total Metals	SW846 Method 6010C SW846 Method 6020B SW846 Method 7471B
Polyfluorinated Alkyl Substances (PFAS)	EPA Method 537 (M)
Total Cyanide	SW846 9012B
Hexavalent Chromium	SW846 7196A
Total Solids	SM2540G

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

ddms' validation was performed in conformance with the USEPA "National Functional Guidelines (NFG for Organic Data Review" (1999), the USEPA "National Functional Guidelines for Inorganic Data Review" (2004), ddms' Standard Operating Procedures (SOPs) for the methods followed, the requirements of the analytical methods followed, and the specifications of the project-specific Quality Assurance Project Plan (QAPP). Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the CLP. This requires that the data package be presented in accordance with the CLP requirements, so that sufficient supporting documentation is available to facilitate the validation effort. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added



by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the NFG:

**U** The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

**J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**J+** The result is an estimated quantity, but the result may be biased high.

**J-** The result is an estimated quantity, but the result may be biased low.

**NJ** The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

**UJ** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

## **I. Holding Times, Preservation and Sample Integrity**

Copies of the applicable chain of custody (COC) records were included in the data package, documenting sample collection dates of May 3 and 4, 2022. The samples were received at the laboratory on May 4, 2022.

The temperatures of the coolers upon receipt at the laboratory (2.9°C to 5.4°C) were acceptable (QC <6°C). All samples were prepared and analyzed within method holding times.

## **II. Documentation**

The following documentation issues were observed during the validation effort:

- Sample SB-DUP-1 was collected as a field duplicate of SB-19 (7-9). The COC indicated that SB-DUP-1 was collected on May 3, 2022, while SB-19 (7-9) was collected on May 2, 2022. The client was contacted and replied that SB-DUP-1 was mis-labelled as being collected on May 3, 2022, and was actually collected on May 2, 2022. It was mislaid in the field and was submitted on May 4, 2022.
- Sample SB-DUP-1 was included on the COC for SDG L2223093. It was not received by the laboratory in SDG L2223093, but it was included with SDG L2223458 samples as well as on the COC for SDG L2223458. Discussion of any data quality excursions impacting SB-DUP-1 have been included in this data review report.
- Raw data for the 1.0 ng/mL standard of the PFAS initial calibration run on April 27, 2022, on instrument LCMS01 were not included in the data package. Instead, two sets of raw data for the 0.50 ng/mL standard were provided. On request, the laboratory provided the raw data for the 1.0 ng/mL standard, which were reviewed and verified by the validator. At the discretion of the data user, the laboratory should be requested to revise the data package to include this documentation so that complete and accurate documentation is available for future reference.
- The internal standard used to calculate concentrations of PFTrDA in the calibration standards and laboratory QC samples could not be determined from the information in the data package as received. On request, the laboratory explained that the area used for this calculation is the average of the areas of internal standards M2PFTeDA and MPFDOA. This was confirmed by the validator. At the discretion of the data user, the laboratory should be requested to provide this information in the data package so that complete information is available for future reference.

The remainder of this report discusses the review effort for each of the parameters. The tables below document the quality control (QC) elements reviewed for each analysis parameter. Where a quality indicator was deemed acceptable after thorough review, no

further discussion is included in this report. Detailed findings are included for each quality element that impacted the usability of the reported results. Additional information or explanation is included as needed, to provide support for decisions made, based on the validator's best professional judgment.

Where a result was qualified J+ or J- and J, the J qualifier takes precedence. Where a result was qualified biased high and low for differing data quality excursions, the final qualifier is J with an indeterminate bias.

### III. VOCs

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	N
MS/MSD	N/A
Internal Standard Responses	N
Compound Identification	Y
Tentatively Identified Compounds (TICs)	N/A

#### A. Calibration

Data for one Initial Calibration (IC) were provided, performed on instrument V111 on April 21, 2022. All of the IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable except for 1,4-dioxane (0.001). A review of other laboratory quality control data supports the laboratory's ability to detect and accurately quantify the compounds. No data were qualified on this basis.

An initial calibration verification (ICV) standard was analyzed after the IC; all percent differences (%Ds) were acceptable in the ICV standard.

Data for two continuing calibration standards were reported. All %Ds were acceptable except as summarized below. In every case, the excursion represented an increase in sensitivity and the analyte was not detected; therefore, no data required qualification.

Parameter	%D	Samples Affected	Qualifier Applied
<i>Batch 1637730</i>			
Vinyl chloride	25.9	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4)	none

Parameter	%D	Samples Affected	Qualifier Applied
		SB-DUP-1	
<i>Batch 1639494</i>			
Vinyl chloride	31.6	SB-20 (7-9) Reanalysis	none
n-Propylbenzene	24.5		
sec-Butylbenzene	23.5		
n-Butylbenzene	29.5		

## B. Surrogates

Surrogate recoveries (70-130%R) were acceptable except for 1,2-dichloroethane-d<sub>4</sub> in both analyses of SB-20 (7-9) (164% and 169%). The results for acetone in the initial and reanalysis of SB-20 (7-9) were qualified as estimated (J+) and may be biased high.

## C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

One LCS/LCSD pair was analyzed with the samples in this data set. Results were within acceptance limits with the exceptions summarized below.

Compound	LCS %R	LCSD %R	Samples Affected	Qualifier Applied
<i>Batch 1639494-3/4</i>				
n-Butylbenzene	a	136	SB-14 (0-4)	J+
Vinyl chloride	132	140		none
sec-Butylbenzene	a	131		

a = acceptable

The result for n-butylbenzene in SB-14 (0-4) was qualified as estimated (J+) and may be biased high on this basis.

## D. Field Duplicates

Based on documentation from the client, SB-DUP-1 was submitted as a field duplicate of SB-19 (7-9) [SDG L2223039].

Compound	SB-19 (7-9)	SB-19 (7-9) RL	SB-DUP-1	SB-DUP-1 RL
1,2,4-Trimethylbenzene	ND	2.2	0.4 J	2.3
1,3,5-Trimethylbenzene	ND	2.2	0.45 J	2.3
2-Butanone	ND	11	4.4 J	11
Acetone	ND	11	31	11
o-Xylene	ND	1.1	0.53 J	1.1

Results for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-butanone, acetone, and o-xylene in all samples in this data set were qualified as estimated (J, UJ) on this basis.

## E. Internal Standard Responses

Internal standard responses were acceptable except for SB-20 (7-9) [fluorobenzene (13%), chlorobenzene-d<sub>5</sub> (15%), and 1,4-dichlorobenzene-d<sub>4</sub> (14%)]. The sample was reanalyzed with similar results [fluorobenzene (10%), chlorobenzene-d<sub>5</sub> (12%), and 1,4-dichlorobenzene-d<sub>4</sub> (12%)]. Results for all compounds in SB-20 (7-9) were qualified estimated (J, UJ) on this basis. Acetone was the only analyte detected in either analysis and was reported at 42 µg/kg in the initial analysis and at 9.7 µg/kg in the reanalysis. Since acetone was reported at a higher concentration in the initial analysis and taking a more conservative approach, results from the initial analysis were identified as being reportable.

## IV. SVOCs (8270D Full scan)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	Y
MS/MSD	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

### A. Calibration

Two initial calibrations were provided in support of the samples results, one performed on 1/22/22, on instrument GCMS5, and one on 3/31/22, on instrument SV109. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after each IC; all percent differences (%Ds) were acceptable (≤20%) in the ICV standards, for the target compounds reported for the associated samples.

### B. Blanks

A laboratory blank was prepared and analyzed for each of the two extraction batches. None of the target compounds reported in the field samples were detected in either of the laboratory method blanks.

### C. Surrogates

Six surrogate compounds were added before extraction to all QC and field samples. Recoveries for the surrogates were acceptable (70-130%) with the exceptions detailed below:

Sample	2FP	PHL	NBZ	FBP	TBP	TPHd14	Qualifier Applied
SB-20 (0-2)	a	a	a	a	a	53	J-, UJ
SB-20 (7-9)	a	a	a	a	a	53	
SB-DUP-1	62	68	65	56	53	47	

Results for all target compounds in SB-DUP-1 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.

Results for anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene in SB-20 (0-2) and SB-20 (7-9) were qualified as estimated (J-, UJ) based on low recovery for the associated surrogate.

### D. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

One LCS/LCSD pair was prepared and analyzed with the field samples. Recoveries for spiked compounds assessed (data validation limits 70-130% R) and agreement between paired results (<20 RPD) were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1635905-2/3</i>					
Acenaphthene	65	a	a	SB-20 (0-2) SB-20 (7-9) SB-DUP-1	UJ
Hexachlorobenzene	61	68	a		
Fluoranthene	67	a	a		
Naphthalene	66	a	a		
Benzo(a)anthracene	63	69	a		
Benzo(a)pyrene	58	63	a		
Benzo(b)fluoranthene	58	63	a		
Benzo(k)fluoranthene	60	65	a		
Chrysene	61	67	a		
Acenaphthylene	68	a	a		
Anthracene	64	a	a		
Benzo(ghi)perylene	66	a	a		
Fluorene	67	a	a		
Phenanthrene	67	a	a		
Dibenz(a,h)anthracene	64	a	a		



Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Pyrene	66	a	a		
Dibenzofuran	67	a	a		
Pentachlorophenol	61	68	a		
Batch 1639958-2/3					
Acenaphthene	62	66	a	SB-14 (0-4)	UJ
Fluoranthene	68	a	a		
Naphthalene	67	a	a		
Benzo(a)anthracene	69	a	a		
Chrysene	66	69	a		
Anthracene	65	68	a		
Fluorene	65	69	a		
Phenanthrene	63	67	a		
Pyrene	66	a	a		
Dibenzofuran	67	a	a		
Pentachlorophenol	45	48	a		

Results for acenaphthene, hexachlorobenzene, fluoranthene, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)pyrene, chrysene, acenaphthylene, anthracene, fluorene, dibenz(a,h)anthracene, phenanthrene, pyrene, dibenzofuran, and pentachlorophenol in SB-20 (0-2), SB-20 (7-9), and SB-DUP-1 were qualified as estimated (UJ) with potential low bias, based on low recoveries in the associated batch LCS and/or LCSD.

Results for acenaphthene, fluoranthene, naphthalene, benzo(a)anthracene, chrysene, anthracene, fluorene, phenanthrene, pyrene, dibenzofuran, and pentachlorophenol in SB-14 (0-4) were qualified as estimated (UJ) with potential low bias, based on low recoveries in the associated batch LCS and/or LCSD.

### E. Field Duplicates

Sample SB-DUP-1 (included in this SDG) was submitted as a field duplicate of sample SB-19 (7-9), which was included in SDG L2223093. None of the reported target analytes were detected in either sample of the field duplicate pair.

## VI. Pesticides

Review Element	Acceptable?
Calibration - IC, ICV, CCV	Y
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	NA

Review Element	Acceptable?
Compound Identification	Y
Compound Quantitation	Y

NA = not analyzed

### A. Surrogate Recovery

Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1	TCX %R Column 2	DCB %R Column 1	DCB %R Column 2	Qualifier
SB-14 (0-4)	63	64	a	64	UJ

a = acceptable

Results for all target compounds in SB-14 were qualified as estimated (UJ) due to low surrogate recoveries.

### B. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

An LCS/LCSD pair was prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch WG1635921-2/3</i>					
delta-BHC	66	62	a	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4) SB-DUP-1	UJ
Lindane	67	64	a		
alpha-BHC	a	66	a		
beta-BHC	62	59	a		
Heptachlor	53	49	a		
Aldrin	64	60	a		
Endrin	a	64	a		
4,4'-DDT	a	68	a		
Endosulfan I	61	57	a		
Endosulfan II	a	65	a		
Endosulfan sulfate	54	51	a		
cis-Chlordane	a	62	a		

a = acceptable

Results for delta-BHC, lindane, alpha-BHC, beta-BHC, heptachlor, aldrin, endrin, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, and cis-chlordane in SB-20 (0-2),

SB-20 (7-9), SB-14 (0-4), and SB-DUP-1 were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.

## VII. PCBs

Review Element	Acceptable?
Calibration - IC, ICV, CCV	Y
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	NA
Compound Identification	Y
Compound Quantitation	Y

NA = not analyzed

### A. Blanks

One method blank was prepared and analyzed with the site samples. Aroclor 1260 was reported in the method blank at 9.7 J µg/kg. Results for Aroclor 1260 and Total PCBs in SB-20 (0-2), SB-20 (7-9), SB-14 (0-4), and SB-DUP-1 were qualified as not detected (U) at the RL due to associated method blank contamination.

### B. Surrogate Recovery

TCX and DCB were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1	TCX %R Column 2	DCB %R Column 1	DCB %R Column 2	Qualifier
SB-20 (0-2)	51	52	50	52	UJ
SB-20 (7-9)	55	57	60	60	
SB-14 (0-4)	38	40	35	34	
SB-DUP-1	68	a	a	a	none

a = acceptable

Results for all target Aroclors in SB-20 (0-2), SB-20 (7-9), and SB-14 (0-4) were qualified as estimated (UJ) due to low surrogate recoveries. Total Aroclor results for these samples were also qualified as estimated. Since three of four surrogate recoveries for SB-DUP-1 were acceptable and no target Aroclors were detected in the sample, qualification of sample results due to the single low surrogate recovery was not necessary.

### C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

An LCS/LCSD pair was prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch WG1635800-2/3</i>					
Aroclor 1016	a / a	69 / a	a / a	SB-20 (0-2)	None
Aroclor 1260	66 / a	67 / a	a / a	SB-20 (7-9)	
				SB-14 (0-4)	
				SB-DUP-1	

Based on professional judgment, since all LCS/LCSD recoveries on the second column were acceptable and no target Aroclors were reported in the site samples after qualifications based on method blank contamination, no action was taken based on the slightly low recoveries on the initial column.

## VIII. ICP Metals

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory Blanks	Y
Interference Check Samples	N
Laboratory Control Samples	Y
Laboratory and Field Duplicates	N
Matrix Spike	N
Post Digestion Spikes	N
Serial Dilution Analysis	N
Compound Quantitation	Y

### A. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. One preparation blank for total metals was prepared and analyzed with the samples. Raw data was evaluated for negative blank concentrations, without any findings. Multiple analytes were detected above the MDL in the following blanks:

Blank ID	Analyte	Concentration (mg/kg)	Associated Samples	Qualifier
MB(WG1640166-1BLANK)	Chromium	0.296	SB-20 (0-2)	none
	Manganese	0.064	SB-20 (7-9)	
	Nickel	0.168	SB-14 (0-4) SB-DUP-1	

Blank ID	Analyte	Concentration (mg/kg)	Associated Samples	Qualifier
CCB (R1566085-27) @ 16:43	Beryllium	0.016	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4) SB-DUP-1	none

The method blank and continuing calibration blank were detected at less than actionable contamination levels; therefore, field sample results did not warrant qualification.

### B. Interference Check Samples (ICSA/ICSAB)

The interference check samples associated with these samples were acceptable for all analytes in the ICSA standard except as summarized below. All ICSAB recoveries were within acceptance criteria (85-115%).

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
ICSA (R1566085-21) 5/19/22 @ 14:03	Arsenic	0.00420	SB-20 (0-2)	J+
	Barium	0.00390	SB-20 (7-9)	J+
	Cadmium	0.00140	SB-14 (0-4)	J+
	Zinc	0.00310	SB-DUP-1	J+
	Beryllium	-0.00040	SB-20 (0-2)	J-, UJ
	Selenium	-0.00870	SB-20 (7-9) SB-14 (0-4) SB-DUP-1	UJ

The ICSA was detected at a concentration greater than the MDL for arsenic (MDL - 0.00208 mg/L), barium (MDL - 0.00174 mg/L), cadmium (MDL - 0.000980 mg/L), and zinc (MDL - 0.00293 mg/L), exhibiting an elevated response with potential for high bias in detected samples. The results for arsenic, barium, cadmium, and zinc in all samples were qualified as estimated (J+), due to elevated response in the ICSA standard. The results for beryllium and selenium in all samples were qualified as estimated (J-, UJ), biased low, due to negative responses in the ICSA standard.

### C. Field and Laboratory Duplicates

A laboratory duplicate was performed on SB-20 (0-2) in compliance with the analytical method, and all analyte concentrations were within the acceptance limit (<50 RPD). SB-DUP-1 was collected as a field duplicate of SB-3 (0-2). This duplicate pair is split between two SDGs: L2223093 and L2223458. It will be identified in both validation reports, and only the samples included in SDG L2223458 will be discussed below. The field duplicate pair was within acceptance limits with exceptions noted in the table below:

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
<i>Field Duplicate Pair: SB-3 (0-2) : SB-DUP-1</i>				
Arsenic	ND	0.898	N/C	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4) SB-DUP-1
Barium	71.1	18.5	117	
Chromium	13.0	6.74	63.4	
Manganese	102	52.5	64	
Nickel	21.2	7.23	98.3	

N/C – Not Calculated

ND – not detected

Results for arsenic in all samples were qualified as estimated (J) due to lack of confirmation in the field duplicate pair. Results for barium, chromium, manganese, and nickel in all samples were qualified as estimated (J) due to elevated RPD between the field duplicate pair.

#### D. Matrix Spike (MS) and Post Digestion Spike (PDS)

SB-20 (0-2) was prepared as an MS and analyzed with the site samples. A PDS was prepared and analyzed, on the same sample, with the site samples. %Rs and RPDs were acceptable (validation QC 75-125%R, RPDs  $\leq$ 20 RPD), with the exceptions noted below.

Analyte	MS %R	PDS
Barium	69	a
Beryllium	72	a
Chromium	67	a
Copper	139	a
Lead	68	a
Manganese	69	a
Nickel	64	73
Selenium	66	a
Silver	74	70
Zinc	71	a

a = acceptable

The results for barium, beryllium, chromium, lead, manganese, selenium, and zinc in SB-20 (0-2) were qualified as estimated (J, UJ) due to low MS recoveries and acceptable PDS recoveries. The results for nickel and silver in SB-20 (0-2) were qualified as estimated (J-, UJ) due to low MS and PDS recoveries. The result for copper in SB-20 (0-2) was qualified as estimated (J) due to elevated MS recovery and acceptable PDS recovery. The user is cautioned that matrix effects seen in the qualified sample may also be applicable to other site samples.

#### E. Serial Dilution

A 5-fold serial dilution was performed on SB-20 (0-2). Most percent differences (%Ds) were acceptable (<20%), with exception of copper (29%D) and manganese (49%D). The



results for copper and manganese in all samples were qualified as estimated (J) due to elevated percent differences in the serial dilution sample.

## F. Analyte Quantitation

All samples were analyzed as prepared without secondary analytical dilutions. Calculations were verified from the raw data and preparation sheets provided in the data package. All sample concentrations, RLs, and MDLs were appropriately reported.

## IX. Mercury – CVAA

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Field Duplicates	N
Matrix Spike	Y
Post Digestion Spikes	Y
Serial Dilution Analysis	Y
Compound Quantitation	Y

N/A - Not Applicable

### A. Field Duplicates

SB-DUP-1 was collected as a field duplicate of SB-3 (0-2). This duplicate pair is split between two SDGs: L2223093 and L2223458. It will be identified in both validation reports, but only the samples included in SDG L2223458 will be discussed below. The field duplicate pair was within acceptance limits with exceptions noted in the table below:

Analyte	Original conc. (mg/kg)	Duplicate conc. (mg/kg)	RPD	Associated Sample
<i>Field Duplicate Pair: SB-3 (0-2) : SB-DUP-1</i>				
Mercury	2.0	ND	N/C	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4) SB-DUP-1

N/C – Not Calculated

The mercury results in all samples were qualified as estimated (J, UJ) due to lack of confirmation in the field duplicate pair.

### B. Compound Quantitation

All samples were analyzed as prepared without secondary analytical dilutions. Calculations were verified from the raw data and preparation sheets provided in the data package. All sample concentrations, RLs, and MDLs were appropriately reported.

## X. PFAS

Review Element	Acceptable?
Calibration - IC, ICV, CC	Y
Laboratory and Field Blanks	Y
Labeled Analogs	N
LCS/LCSD	Y
Field Duplicates	Y
MS/MSD	NA
Internal Standard Responses	Y
Compound Identification	Y

NA = not analyzed

### A. Labeled Analogs

Eighteen labeled analogs (also referred to as extraction standards) were used. Percent recoveries (%Rs) of the labeled analogs were assessed against validation criteria of 40-140%R. Exceedances that impacted sample results are detailed below:

Sample	Labeled Analog	%R	Native Compound	Qualifier Applied
SB-DUP-1	d3-NMEFOSAA	24	NMeFOSAA	UJ
	D5-NETFOSAA	34	NEtFOSA	

Results for NMeFOSAA and NEtFOSAA in SB-DUP-1 were qualified as estimated (UJ) due to low labeled analog recoveries.

### B. Field Duplicate

Sample SB-DUP-1 was submitted as a field duplicate of SB-19 (7-9). Results for SB-19 (7-9) were reported in SDG L2223093. No target analytes were detected in either of these samples.

## XI. Cyanide

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory Blanks	Y
Laboratory Control Samples	N
Field Duplicate	Y
Matrix Spike	Y
Compound Quantitation	Y

## A. Laboratory Control Samples

Two LCS/LCSD pairs were prepared and analyzed with the site samples. Recoveries and precision were acceptable (80-120% R and <20% RPD), with the following exceptions:

Analyte	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch WG1639289-2/3</i>					
Cyanide	42	a	67	SB-DUP-1	UJ
<i>Batch WG1639561-2/3</i>					
Cyanide	76	77	a	SB-20 (0-2) SB-20 (7-9) SB-14 (0-4)	UJ

The result for cyanide in SB-DUP-1 was qualified as estimated (UJ), due to low LCS recovery and elevated relative percent difference between the LCS and LCSD. The results for cyanide in SB-20 (0-2), SB-20 (7-9), and SB-14 (0-4) were qualified as estimated and biased low due to low LCS/LCSD recoveries.

## B. Field Duplicate

SB-DUP-1 was collected as a field duplicate of SB-3 (0-2). This duplicate pair is split between two SDGs: L2223093 and L2223458. It is identified in both validation reports, to ensure all associated samples are assessed. The field duplicate pair was within acceptance limit (<30%).

## XII. Hexavalent Chromium

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory Blanks	Y
Laboratory Control Samples	Y
Laboratory and Field Duplicates	Y
Matrix Spike and Post-Spike	Y
Compound Quantitation	Y

The hexavalent chromium results in all site samples were acceptable as reported. No qualification of data was warranted.

## XIII. Total Solids

Review Element	Acceptable?
Field Duplicate	Y
Compound Quantitation	Y

The total solid results in all site samples were acceptable as reported. No qualification of data was warranted.

#### **XIV. Trivalent Chromium**

<b>Review Element</b>	<b>Acceptable?</b>
Compound Quantitation	Y

All results were correctly calculated from the total chromium and hexavalent chromium results. Since trivalent chromium results are based on total chromium and hexavalent chromium analyses, any qualifiers applied to either total chromium or hexavalent chromium results are also applied to trivalent chromium results.

**Attachment A**  
**Volatiles QC Summary Forms - Excursions**

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA111\2022\220510N\  
 Data File : V11220510N01.D  
 Acq On : 10 May 2022 07:55 pm  
 Operator : VOA111:AJK  
 Sample : WG1637730-2  
 Misc : WG1637730,ICAL18962  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 20:15:41 2022  
 Quant Method : I:\VOLATILES\VOA111\2022\220510N\V111\_220419N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 21 15:53:10 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	93	0.00
2 TP	Dichlorodifluoromethane	0.234	0.185	20.9#	72	0.00
3 TP	Chloromethane	0.249	0.253	-1.6	96	0.00
4 TC	Vinyl chloride	0.247	0.311	-25.9#	115	0.00
5 TP	Bromomethane	0.149	0.215	-44.3#	144	0.00
6 TP	Chloroethane	0.142	0.165	-16.2	110	0.00
7 TP	Trichlorofluoromethane	0.308	0.329	-6.8	98	0.00
8 TP	Ethyl ether	0.104	0.112	-7.7	99	0.00
10 TP	1,1-Dichloroethene	0.181	0.182	-0.6	93	0.00
11 TP	Carbon disulfide	0.561	0.558	0.5	95	-0.01
12 TP	Freon-113	0.187	0.187	0.0	91	-0.01
14 TP	Acrolein	0.034	0.032	5.9	91	0.00
15 TP	Methylene chloride	0.243	0.239	1.6	99	-0.01
17 TP	Acetone	* 40.000	37.936	5.2	86	0.00
18 TP	trans-1,2-Dichloroethene	0.212	0.217	-2.4	96	0.00
19 TP	Methyl acetate	0.145	0.136	6.2	96	0.00
20 TP	Methyl tert-butyl ether	0.578	0.590	-2.1	95	-0.01
21 TP	tert-Butyl alcohol	0.023	0.024	-4.3	94	-0.01
22 TP	Diisopropyl ether	0.764	0.818	-7.1	100	-0.01
23 TC	1,1-Dichloroethane	0.396	0.429	-8.3	100	0.00
24 TP	Halothane	0.168	0.156	7.1	90	-0.01
25 TP	Acrylonitrile	0.065	0.067	-3.1	93	-0.01
26 TP	Ethyl tert-butyl ether	0.756	0.795	-5.2	99	-0.01
27 TP	Vinyl acetate	0.580	0.606	-4.5	98	-0.01
28 TP	cis-1,2-Dichloroethene	0.243	0.253	-4.1	97	-0.01
29 TP	2,2-Dichloropropane	0.344	0.353	-2.6	97	-0.01
30 TP	Bromochloromethane	0.116	0.116	0.0	92	-0.01
31 TP	Cyclohexane	0.363	0.370	-1.9	95	0.00
32 TC	Chloroform	0.419	0.429	-2.4	100	-0.01
33 TP	Ethyl acetate	0.217	0.211	2.8	92	-0.01
34 TP	Carbon tetrachloride	0.304	0.291	4.3	89	-0.01
35 TP	Tetrahydrofuran	0.062	0.058	6.5	90	-0.01
36 S	Dibromofluoromethane	0.254	0.241	5.1	88	-0.02
37 TP	1,1,1-Trichloroethane	0.317	0.328	-3.5	93	-0.01
39 TP	2-Butanone	0.104	0.096	7.7	96	-0.01
40 TP	1,1-Dichloropropene	* 40.000	40.297	-0.7	96	-0.01
41 TP	Benzene	0.856	0.922	-7.7	100	-0.01
42 TP	tert-Amyl methyl ether	0.658	0.680	-3.3	97	-0.01
43 S	1,2-Dichloroethane-d4	0.260	0.259	0.4	93	-0.01



# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA111\2022\220511N\  
 Data File : V11220511N01.D  
 Acq On : 11 May 2022 07:09 pm  
 Operator : VOA111:LAC  
 Sample : WG1639494-2  
 Misc : WG1639494,ICAL18962  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 19:36:46 2022  
 Quant Method : I:\VOLATILES\VOA111\2022\220511N\V111\_220419N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 21 15:53:10 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	97	0.00
2 TP	Dichlorodifluoromethane	0.234	0.208	11.1	86	0.00
3 TP	Chloromethane	0.249	0.268	-7.6	107	0.00
4 TC	Vinyl chloride	0.247	0.325	-31.6#	127	0.00
5 TP	Bromomethane	0.149	0.246	-65.1#	174	0.00
6 TP	Chloroethane	0.142	0.173	-21.8#	121	0.00
7 TP	Trichlorofluoromethane	0.308	0.361	-17.2	113	0.00
8 TP	Ethyl ether	0.104	0.105	-1.0	97	0.00
10 TP	1,1-Dichloroethene	0.181	0.198	-9.4	106	0.00
11 TP	Carbon disulfide	0.561	0.596	-6.2	107	-0.01
12 TP	Freon-113	0.187	0.208	-11.2	106	-0.01
14 TP	Acrolein	0.034	0.031	8.8	93	0.00
15 TP	Methylene chloride	0.243	0.233	4.1	101	-0.01
17 TP	Acetone	* 40.000	37.744	5.6	90	0.00
18 TP	trans-1,2-Dichloroethene	0.212	0.226	-6.6	105	0.00
19 TP	Methyl acetate	0.145	0.125	13.8	93	0.00
20 TP	Methyl tert-butyl ether	0.578	0.552	4.5	94	-0.01
21 TP	tert-Butyl alcohol	0.023	0.021	8.7	85	-0.01
22 TP	Diisopropyl ether	0.764	0.797	-4.3	102	-0.01
23 TC	1,1-Dichloroethane	0.396	0.435	-9.8	106	0.00
24 TP	Halothane	0.168	0.167	0.6	101	0.00
25 TP	Acrylonitrile	0.065	0.061	6.2	89	-0.01
26 TP	Ethyl tert-butyl ether	0.756	0.756	0.0	98	-0.01
27 TP	Vinyl acetate	0.580	0.571	1.6	96	-0.01
28 TP	cis-1,2-Dichloroethene	0.243	0.252	-3.7	101	-0.01
29 TP	2,2-Dichloropropane	0.344	0.374	-8.7	107	-0.01
30 TP	Bromochloromethane	0.116	0.111	4.3	92	0.00
31 TP	Cyclohexane	0.363	0.408	-12.4	110	0.00
32 TC	Chloroform	0.419	0.426	-1.7	104	-0.01
33 TP	Ethyl acetate	0.217	0.191	12.0	88	-0.01
34 TP	Carbon tetrachloride	0.304	0.312	-2.6	101	-0.01
35 TP	Tetrahydrofuran	0.062	0.053	14.5	86	-0.01
36 S	Dibromofluoromethane	0.254	0.238	6.3	91	-0.01
37 TP	1,1,1-Trichloroethane	0.317	0.348	-9.8	104	-0.01
39 TP	2-Butanone	0.104	0.090	13.5	93	-0.01
40 TP	1,1-Dichloropropene	* 40.000	43.458	-8.6	109	0.00
41 TP	Benzene	0.856	0.932	-8.9	106	-0.01
42 TP	tert-Amyl methyl ether	0.658	0.638	3.0	95	-0.01
43 S	1,2-Dichloroethane-d4	0.260	0.258	0.8	97	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA111\2022\220511N\  
 Data File : V11220511N01.D  
 Acq On : 11 May 2022 07:09 pm  
 Operator : VOA111:LAC  
 Sample : WG1639494-2  
 Misc : WG1639494,ICAL18962  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 19:36:46 2022  
 Quant Method : I:\VOLATILES\VOA111\2022\220511N\V111\_220419N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 21 15:53:10 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.317	0.311	1.9	96	-0.01
47 TP	Methyl cyclohexane	0.370	0.406	-9.7	108	0.00
48 TP	Trichloroethene	0.221	0.239	-8.1	104	-0.01
50 TP	Dibromomethane	0.141	0.133	5.7	92	-0.01
51 TC	1,2-Dichloropropane	0.238	0.253	-6.3	104	-0.01
53 TP	2-Chloroethyl vinyl ether	0.123	0.112	8.9	86	-0.01
54 TP	Bromodichloromethane	0.323	0.324	-0.3	97	-0.01
57 TP	1,4-Dioxane	*2000.000	1950.434	2.5	94	-0.01
58 TP	cis-1,3-Dichloropropene	0.386	0.393	-1.8	98	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
60 S	Toluene-d8	1.287	1.355	-5.3	94	0.00
61 TC	Toluene	* 40.000	43.467	-8.7	102	-0.01
62 TP	4-Methyl-2-pentanone	0.097	0.100	-3.1	86	-0.01
63 TP	Tetrachloroethene	0.291	0.316	-8.6	94	0.00
65 TP	trans-1,3-Dichloropropene	0.467	0.492	-5.4	94	-0.01
67 TP	Ethyl methacrylate	0.366	0.350	4.4	86	-0.01
68 TP	1,1,2-Trichloroethane	0.210	0.222	-5.7	95	-0.01
69 TP	Chlorodibromomethane	0.309	0.306	1.0	87	-0.01
70 TP	1,3-Dichloropropane	0.435	0.463	-6.4	95	0.00
71 TP	1,2-Dibromoethane	0.252	0.254	-0.8	88	0.00
72 TP	2-Hexanone	0.215	0.189	12.1	85	-0.01
73 TP	Chlorobenzene	0.833	0.895	-7.4	97	0.00
74 TC	Ethylbenzene	1.403	1.574	-12.2	103	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.302	0.323	-7.0	93	-0.01
76 TP	p/m Xylene	0.537	0.605	-12.7	100	-0.01
77 TP	o Xylene	0.526	0.595	-13.1	100	0.00
78 TP	Styrene	0.914	0.986	-7.9	97	-0.01
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	0.00
80 TP	Bromoform	0.367	0.358	2.5	84	0.00
82 TP	Isopropylbenzene	2.583	3.071	-18.9	103	0.00
83 S	4-Bromofluorobenzene	0.889	0.903	-1.6	87	-0.01
84 TP	Bromobenzene	0.678	0.710	-4.7	91	0.00
85 TP	n-Propylbenzene	3.067	3.819	-24.5#	108	-0.01
86 TP	1,4-Dichlorobutane	0.878	0.928	-5.7	93	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.589	0.645	-9.5	93	0.00
88 TP	4-Ethyltoluene	2.568	3.056	-19.0	103	0.00
89 TP	2-Chlorotoluene	1.845	2.164	-17.3	103	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA111\2022\220511N\  
 Data File : V11220511N01.D  
 Acq On : 11 May 2022 07:09 pm  
 Operator : VOA111:LAC  
 Sample : WG1639494-2  
 Misc : WG1639494,ICAL18962  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 19:36:46 2022  
 Quant Method : I:\VOLATILES\VOA111\2022\220511N\V111\_220419N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 21 15:53:10 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TP	1,3,5-Trimethylbenzene	2.227	2.639	-18.5	102	-0.01
91 TP	1,2,3-Trichloropropane	0.484	0.526	-8.7	94	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.211	0.222	-5.2	91	-0.01
93 TP	4-Chlorotoluene	1.957	2.284	-16.7	103	0.00
94 TP	tert-Butylbenzene	1.909	2.233	-17.0	101	0.00
97 TP	1,2,4-Trimethylbenzene	2.257	2.631	-16.6	101	0.00
98 TP	sec-Butylbenzene	2.833	3.500	-23.5#	106	0.00
99 TP	p-Isopropyltoluene	2.479	2.947	-18.9	103	-0.01
100 TP	1,3-Dichlorobenzene	1.330	1.456	-9.5	96	-0.01
101 TP	1,4-Dichlorobenzene	1.347	1.463	-8.6	96	0.00
102 TP	p-Diethylbenzene	1.487	1.765	-18.7	102	0.00
103 TP	n-Butylbenzene	2.221	2.876	-29.5#	112	0.00
104 TP	1,2-Dichlorobenzene	1.269	1.336	-5.3	93	-0.01
105 TP	1,2,4,5-Tetramethylbenzene	2.425	2.667	-10.0	96	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.104	0.089	14.4	75	0.00
107 TP	1,3,5-Trichlorobenzene	0.947	1.013	-7.0	94	0.00
108 TP	Hexachlorobutadiene	0.412	0.439	-6.6	92	0.00
109 TP	1,2,4-Trichlorobenzene	0.854	0.873	-2.2	90	0.00
110 TP	Naphthalene	1.992	1.890	5.1	85	0.00
111 TP	1,2,3-Trichlorobenzene	0.732	0.725	1.0	86	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 1

# Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2022\220511N\  
 Data File : V11220511N01.D  
 Acq On : 11 May 2022 07:09 pm  
 Operator : VOA111:LAC  
 Sample : WG1639494-2  
 Misc : WG1639494,ICAL18962  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 19:36:46 2022  
 Quant Method : I:\VOLATILES\VOA111\2022\220511N\V111\_220419N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu Apr 21 15:53:10 2022  
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2022\220511N\V11220511N01.D  
 Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Fluorobenzene	6.323	96	117972	20.000	ug/L	0.00
Standard Area 1 = 117972			Recovery	=	100.00%	
59) Chlorobenzene-d5	9.904	117	84045	20.000	ug/L	0.00
Standard Area 1 = 84045			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	12.530	152	43277	20.000	ug/L	0.00
Standard Area 1 = 43277			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.489	113	28127	18.794	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery	=	93.97%	
43) 1,2-Dichloroethane-d4	6.029	65	30439	19.836	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery	=	99.18%	
60) Toluene-d8	8.037	98	113913	21.060	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery	=	105.30%	
83) 4-Bromofluorobenzene	11.346	95	39091	20.326	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery	=	101.63%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.693	85	49032	35.456	ug/L	99
3) Chloromethane	1.908	50	63291	43.124	ug/L	97
4) Vinyl chloride	1.981	62	76741	52.754	ug/L	97
5) Bromomethane	2.333	94	58017	66.059	ug/L	99
6) Chloroethane	2.469	64	40918	49.002	ug/L	98
7) Trichlorofluoromethane	2.621	101	85203	46.845	ug/L	100
8) Ethyl ether	2.941	74	24759	40.446	ug/L	74
10) 1,1-Dichloroethene	3.145	96	46694	43.708	ug/L	90
11) Carbon disulfide	3.177	76	140549	42.462	ug/L	100
12) Freon-113	3.187	101	49071	44.556	ug/L	94
14) Acrolein	3.481	56	7233	36.379	ug/L	99
15) Methylene chloride	3.727	84	54903	38.284	ug/L	75
17) Acetone	3.769	43	15240	37.744	ug/L	95
18) trans-1,2-Dichloroethene	3.895	96	53440	42.804	ug/L	90
19) Methyl acetate	3.895	43	29607	34.698	ug/L #	85
20) Methyl tert-butyl ether	3.995	73	130345	38.247	ug/L	87
21) tert-Butyl alcohol	4.073	59	24924	185.868	ug/L	94
22) Diisopropyl ether	4.367	45	188006	41.734	ug/L #	92
23) 1,1-Dichloroethane	4.503	63	102669	44.005	ug/L	97
24) Halothane	4.550	117	39406	39.863	ug/L	99
25) Acrylonitrile	4.540	53	14499	37.790	ug/L	96

# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2223458  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1639494-3      Analysis Date : 05/11/22 19:09      File ID : V11220511N01  
 LCSD Sample ID : WG1639494-4      Analysis Date : 05/11/22 19:34      File ID : V11220511N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Methylene chloride	40	38	96	40	41	102	6	70-130	30
1,1-Dichloroethane	40	44	110	40	47	116	5	70-130	30
Chloroform	40	41	102	40	44	109	7	70-130	30
Carbon tetrachloride	40	41	103	40	44	110	7	70-130	30
Tetrachloroethene	40	43	109	40	46	115	5	70-130	30
Chlorobenzene	40	43	107	40	46	115	7	70-130	30
1,2-Dichloroethane	40	39	98	40	42	105	7	70-130	30
1,1,1-Trichloroethane	40	44	110	40	46	116	5	70-130	30
Benzene	40	44	109	40	46	115	5	70-130	30
Toluene	40	44	109	40	46	114	4	70-130	30
Ethylbenzene	40	45	112	40	48	119	6	70-130	30
Vinyl chloride	40	53	132 Q	40	56	140 Q	6	67-130	30
1,1-Dichloroethene	40	44	109	40	45	113	4	65-135	30
trans-1,2-Dichloroethene	40	43	107	40	45	113	5	70-130	30
Trichloroethene	40	43	108	40	46	114	5	70-130	30
1,2-Dichlorobenzene	40	42	105	40	45	112	6	70-130	30
1,3-Dichlorobenzene	40	44	109	40	46	115	5	70-130	30
1,4-Dichlorobenzene	40	43	109	40	46	115	5	70-130	30
Methyl tert butyl ether	40	38	96	40	41	103	7	66-130	30
p/m-Xylene	80	90	113	80	96	120	6	70-130	30
o-Xylene	80	91	113	80	96	120	6	70-130	30
cis-1,2-Dichloroethene	40	42	104	40	44	111	7	70-130	30
Acetone	40	38	94	40	38	95	1	54-140	30
2-Butanone	40	35	86	40	37	93	8	70-130	30
n-Butylbenzene	40	52	129	40	55	136 Q	5	70-130	30
sec-Butylbenzene	40	49	124	40	52	131 Q	5	70-130	30



# Form 3 Volatiles

Client	: Impact Environmental	Lab Number	: L2223458
Project Name	: 60 MCLEAN AVENUE	Project Number	: 15514
Matrix	: SOIL		
LCS Sample ID	: WG1639494-3	Analysis Date	: 05/11/22 19:09
		File ID	: V11220511N01
LCSD Sample ID	: WG1639494-4	Analysis Date	: 05/11/22 19:34
		File ID	: V11220511N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
tert-Butylbenzene	40	47	117	40	49	122	4	70-130	30
n-Propylbenzene	40	50	124	40	52	130	5	70-130	30
1,3,5-Trimethylbenzene	40	47	118	40	50	124	5	70-130	30
1,2,4-Trimethylbenzene	40	47	116	40	49	122	5	70-130	30
1,4-Dioxane	2000	2000	98	2000	2100	104	6	65-136	30





# Internal Standard Area and RT Summary

## Form 8a

### Volatiles

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : VOA111  
 Sample No : WG1637730-2

Lab Number : L2223458  
 Project Number : 15514  
 Analysis Date : 05/10/22 19:55:00  
 Lab File ID : V11220510N01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1637730-2	112439	6.32	80265	9.90	42083	12.53
Upper Limit	224878	6.82	160530	10.40	84166	13.03
Lower Limit	56220	5.82	40133	9.40	21042	12.03
Sample ID						
WG1637730-3 LCS	112439	6.32	80265	9.90	42083	12.53
WG1637730-4 LCSD	106838	6.32	77481	9.90	40654	12.53
WG1637730-5 BLANK	91902	6.32	65492	9.90	32791	12.53
SB-20 (0-2)	70447	6.32	48898	9.90	21578	12.53
SB-20 (7-9)	14489*	6.32	11635*	9.90	5931*	12.53
SB-DUP-1	69374	6.32	50039	9.90	23741	12.53
SB-14 (0-4)	72325	6.32	50381	9.90	25758	12.53

Area Upper Limit = +100% of internal standard area  
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT  
 RT Lower Limit = -0.50 minutes of internal standard RT

\* Values outside of QC limits



**Attachment B**  
**Semi-volatiles QC Summary Forms – Excursions**

# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
SB-20 (0-2) (L2223458-01)	81	88	81	74	78	53	0
SB-20 (7-9) (L2223458-02)	83	91	86	73	80	53	0
SB-14 (0-4) (L2223458-04)	102	105	94	95	85	97	0
SB-DUP-1 (L2223458-05)	62	68	65	56	53	47	0
WG1635905-1BLANK	82	85	79	78	78	72	0
WG1635905-2LCS	77	81	76	71	72	63	0
WG1635905-3LCSD	82	87	82	77	78	67	0
WG1639985-1BLANK	93	94	82	83	78	86	0
WG1639985-2LCS	71	74	66	64	71	64	0
WG1639985-3LCSD	77	77	71	67	75	66	0

#### QC LIMITS

(25-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(30-120) FBP = 2-FLUOROBIPHENYL  
(10-136) TBP = 2,4,6-TRIBROMOPHENOL  
(18-120) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223458  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635905-2      Analysis Date : 05/12/22 02:04      File ID : 635905-2  
 LCSD Sample ID : WG1635905-3      Analysis Date : 05/12/22 02:28      File ID : 635905-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Acenaphthene	1300	850	65	1300	930	71	9	31-137	50
Hexachlorobenzene	1300	800	61	1300	890	68	11	40-140	50
Fluoranthene	1300	880	67	1300	970	74	10	40-140	50
Naphthalene	1300	860	66	1300	940	72	9	40-140	50
Benzo(a)anthracene	1300	830	63	1300	900	69	9	40-140	50
Benzo(a)pyrene	1300	760	58	1300	820	63	8	40-140	50
Benzo(b)fluoranthene	1300	770	58	1300	820	63	8	40-140	50
Benzo(k)fluoranthene	1300	780	60	1300	850	65	8	40-140	50
Chrysene	1300	800	61	1300	880	67	9	40-140	50
Acenaphthylene	1300	900	68	1300	1000	76	11	40-140	50
Anthracene	1300	840	64	1300	920	70	9	40-140	50
Benzo(ghi)perylene	1300	860	66	1300	930	71	7	40-140	50
Fluorene	1300	880	67	1300	960	73	9	40-140	50
Phenanthrene	1300	870	67	1300	960	73	9	40-140	50
Dibenzo(a,h)anthracene	1300	840	64	1300	920	70	9	40-140	50
Indeno(1,2,3-cd)pyrene	1300	910	70	1300	990	76	8	40-140	50
Pyrene	1300	860	66	1300	950	73	10	35-142	50
Dibenzofuran	1300	880	67	1300	960	74	10	40-140	50
Pentachlorophenol	1300	800	61	1300	890	68	11	17-109	50
Phenol	1300	970	74	1300	1100	82	10	26-90	50
2-Methylphenol	1300	920	70	1300	1000	79	12	30-130.	50
3-Methylphenol/4-Methylphenol	1300	1000	77	1300	1100	86	11	30-130	50



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223458  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1639985-2      Analysis Date : 05/18/22 20:01      File ID : 639985-2  
 LCSD Sample ID : WG1639985-3      Analysis Date : 05/18/22 20:25      File ID : 639985-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Acenaphthene	1300	810	62	1300	870	66	6	31-137	50
Hexachlorobenzene	1300	930	71	1300	990	76	7	40-140	50
Fluoranthene	1300	880	68	1300	930	71	4	40-140	50
Naphthalene	1300	880	67	1300	940	71	6	40-140	50
Benzo(a)anthracene	1300	900	69	1300	940	72	4	40-140	50
Benzo(a)pyrene	1300	970	74	1300	1000	77	4	40-140	50
Benzo(b)fluoranthene	1300	910	70	1300	960	73	4	40-140	50
Benzo(k)fluoranthene	1300	930	72	1300	980	75	4	40-140	50
Chrysene	1300	870	66	1300	900	69	4	40-140	50
Acenaphthylene	1300	930	71	1300	990	75	5	40-140	50
Anthracene	1300	850	65	1300	890	68	5	40-140	50
Benzo(ghi)perylene	1300	950	73	1300	990	75	3	40-140	50
Fluorene	1300	850	65	1300	900	69	6	40-140	50
Phenanthrene	1300	820	63	1300	880	67	6	40-140	50
Dibenzo(a,h)anthracene	1300	990	76	1300	1000	79	4	40-140	50
Indeno(1,2,3-cd)pyrene	1300	1100	82	1300	1100	84	2	40-140	50
Pyrene	1300	860	66	1300	910	70	6	35-142	50
Dibenzofuran	1300	870	67	1300	930	71	6	40-140	50
Pentachlorophenol	1300	590	45	1300	630	48	6	17-109	50
Phenol	1300	1000	78	1300	1100	82	5	26-90	50
2-Methylphenol	1300	960	74	1300	1000	78	5	30-130.	50
3-Methylphenol/4-Methylphenol	1300	980	75	1300	1000	79	5	30-130	50



**Attachment C**  
**Pesticide QC Summary Forms – Excursions**



# Surrogate Recovery Summary

## Form 2

### Pesticides

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458  
Project Number: 15514  
Matrix: Soil

GC Column 1: CLPPesticides  
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
SB-20 (0-2) (L2223458-01)	108	107	119	101			0
SB-20 (7-9) (L2223458-02)	108	75	126	71			0
SB-14 (0-4) (L2223458-04)	63	64	72	64			0
SB-DUP-1 (L2223458-05)	106	83	111	75			0
WG1635921-1BLANK	71	77	90	79			0
WG1635921-2LCS	73	55	92	57			0
WG1635921-3LCSD	64	62	74	55			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8081



# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223458  
 Project Name : 60 MCLEAN AVENUE      Project Number : 15514  
 Matrix : SOIL  
 LCS Sample ID : WG1635921-2      Analysis Date : 05/10/22 06:00      File ID : 20220509b-36  
 LCSD Sample ID : WG1635921-3      Analysis Date : 05/10/22 06:12      File ID : 20220509b-37

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R			
Delta-BHC	32.6	21.4	66	31.6	19.6	62	6	30-150	30
Lindane	32.6	21.8	67	31.6	20.4	64	5	30-150	30
Alpha-BHC	32.6	22.8	70	31.6	21.0	66	6	30-150	30
Beta-BHC	32.6	20.2P	62	31.6	18.7	59	5	30-150	30
Heptachlor	32.6	17.4	53	31.6	15.4	49	8	30-150	30
Aldrin	32.6	20.9	64	31.6	19.0	60	6	30-150	30
Endrin	32.6	22.7	70	31.6	20.3	64	9	30-150	30
Dieldrin	32.6	25.1	77	31.6	22.6	71	8	30-150	30
4,4'-DDE	32.6	24.8	76	31.6	22.6	71	7	30-150	30
4,4'-DDD	32.6	27.4	84	31.6	24.1	76	10	30-150	30
4,4'-DDT	32.6	23.8	73	31.6	21.4	68	7	30-150	30
Endosulfan I	32.6	19.8	61	31.6	18.1	57	7	30-150	30
Endosulfan II	32.6	23.1	71	31.6	20.6	65	9	30-150	30
Endosulfan sulfate	32.6	17.7	54	31.6	16.1	51	6	30-150	30
cis-Chlordane	32.6	23.0	71	31.6	19.5	62	14	30-150	30



**Attachment D**  
**PCB QC Summary Forms – Excursions**

# Surrogate Recovery Summary

## Form 2

### PCBs

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458  
Project Number: 15514  
Matrix: Soil

GC Column 1: CLP-Pesticide  
GC Column 2: CLP-PesticideII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
SB-20 (0-2) (L2223458-01)	51	52	50	51			0
SB-20 (7-9) (L2223458-02)	55	57	60	60			0
SB-14 (0-4) (L2223458-04)	38	40	35	34			0
SB-DUP-1 (L2223458-05)	68	70	72	74			0
WG1635800-1BLANK	74	76	78	78			0
WG1635800-2LCS	69	70	71	71			0
WG1635800-3LCSD	68	69	70	71			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8082



# Results Summary

## Form 1

### Polychlorinated Biphenyls by GC

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1635800-1  
 Client ID : WG1635800-1BLANK  
 Sample Location :  
 Sample Matrix : SOIL  
 Analytical Method : 1,8082A  
 Lab File ID : 13220509a-04  
 Sample Amount : 15.63 g  
 Extraction Method : EPA 3546  
 Extract Volume : 1000 uL  
 GPC Cleanup : N  
 Sulfur Cleanup : Y

Lab Number : L2223458  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/09/22 10:18  
 Date Extracted : 05/08/22  
 Dilution Factor : 1  
 Analyst : WR  
 Instrument ID : PEST13  
 GC Column : CLP-PesticideII  
 %Solids : NA  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
11096-82-5	Aroclor 1260	9.68	32.0	5.91	J
1336-36-3	PCBs, Total	9.68	32.0	2.84	J

**Attachment E**  
**Metals QC Summary Forms – Excursions**



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : WG1640166-1  
 Client ID : WG1640166-1BLANK  
 Sample Location :  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1640303.pdf  
 Sample Amount : 1.25g  
 Digestion Method : EPA 3050B

Lab Number : L2223458  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/19/22 15:52  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE4  
 %Solids : NA  
 Date Digested : 05/19/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	ND	0.400	0.083	U
7440-39-3	Barium, Total	ND	0.400	0.070	U
7440-41-7	Beryllium, Total	ND	0.200	0.013	U
7440-43-9	Cadmium, Total	ND	0.400	0.039	U
7440-47-3	Chromium, Total	0.296	0.400	0.038	J
7440-50-8	Copper, Total	ND	0.400	0.103	U
7439-92-1	Lead, Total	ND	2.00	0.107	U
7439-96-5	Manganese, Total	0.064	0.400	0.064	J
7440-02-0	Nickel, Total	0.168	1.00	0.097	J
7782-49-2	Selenium, Total	ND	0.800	0.103	U
7440-22-4	Silver, Total	ND	0.400	0.113	U
7440-66-6	Zinc, Total	ND	2.00	0.117	U



## Form 3 Blanks

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Instrument ID : TRACE4

Lab Number : L2223458  
Project Number : 15514

Parameter	Initial Calibration Blank		Continuing Calibration Blank(s)				Preparation Blank	
	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q
Lab ID :	R1566085-25		R1566085-27		R1566085-29		R1566085-31	
Date Analyzed :	05/19/22 15:23		05/19/22 16:43		05/19/22 17:39		05/19/22 18:21	
Arsenic	0.00208	U	0.00208	U	0.00208	U	0.00208	U
Barium	0.00174	U	0.00174	U	0.00174	U	0.00174	U
Beryllium	0.000330	U	0.000400	J	0.000330	U	0.000330	U
Cadmium	0.000980	U	0.000980	U	0.000980	U	0.000980	U
Chromium	0.000960	U	0.000960	U	0.000960	U	0.000960	U
Copper	0.00258	U	0.00258	U	0.00258	U	0.00258	U
Lead	0.00268	U	0.00268	U	0.00268	U	0.00268	U
Manganese	0.00159	U	0.00159	U	0.00159	U	0.00159	U
Nickel	0.00242	U	0.00242	U	0.00242	U	0.00242	U
Selenium	0.00258	U	0.00258	U	0.00258	U	0.00258	U
Silver	0.00283	U	0.00283	U	0.00283	U	0.00283	U
Zinc	0.00293	U	0.00293	U	0.00293	U	0.00293	U



# Form 4a

## Interference Check Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Instrument ID : TRACE4

Lab Number : L2223458  
 Project Number : 15514  
 Concentration Units : mg/L

Analyte	True		Initial Found		Final Found	
	Lab ID :		R1566085-21			
	Analysis Date :		05/19/22 14:03			
	Sol.	Sol.	Sol.		Sol.	
	A	AB	A	%R	AB	%R
	A	AB	A	%R	A	%R
	AB		AB	%R	AB	%R
Arsenic			0.00420			
Barium			0.00390			
Beryllium			-0.000400			
Cadmium			0.00140			
Chromium			0.00			
Copper			0.00140			
Lead			0.00220			
Manganese			-0.00270			
Nickel			-0.00140			
Selenium			-0.00870			
Silver			-0.000300			
Zinc			0.00310			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%



## Form 5a Matrix Spike

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-20 (0-2)  
 Lab Sample ID : L2223458-01  
 Matrix Spike : WG1640166-3  
 Matrix Spike Dup :

Lab Number : L2223458  
 Project Number : 15514  
 Matrix : SOIL  
 MS Analysis Date : 05/19/22 16:15  
 MSD Analysis Date :

Parameter	Sample Conc. (mg/kg)	Matrix Spike Sample		%R		Matrix Spike Duplicate		RPD	Recovery Limits	RPD Limit
		Spike Added (mg/kg)	Spike Conc. (mg/kg)			Spike Added (mg/kg)	Spike Conc. (mg/kg)			
Arsenic, Total	1.29	10.8	9.42	75					75-125	20
Barium, Total	34.7	180	160	69	Q				75-125	20
Beryllium, Total	0.278	4.51	3.53	72	Q				75-125	20
Cadmium, Total	0.180J	4.78	3.47	72	Q				75-125	20
Chromium, Total	9.88	18	22.0	67	Q				75-125	20
Copper, Total	17.5	22.6	48.8	139	Q				75-125	20
Lead, Total	6.09	47.8	38.4	68	Q				75-125	20
Manganese, Total	40.5	45.1	71.8	69	Q				75-125	20
Nickel, Total	6.09	45.1	35.1	64	Q				75-125	20
Selenium, Total	ND	10.8	7.17	66	Q				75-125	20
Silver, Total	ND	27.1	20.0	74	Q				75-125	20
Zinc, Total	15.2	45.1	47.4	71	Q				75-125	20



## Form 5b Post Digest Spike Recovery

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-20 (0-2)  
**Lab Sample ID** : L2223458-01  
**Post Spike** : WG1640166-5

**Lab Number** : L2223458  
**Project Number** : 15514  
**Matrix** : SOIL  
**PS Analysis Date** : 05/19/22 17:30

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Silver, Total	ND	4.63	3.24	70	75-125



## Form 5b Post Digest Spike Recovery

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : SB-20 (0-2)  
 Lab Sample ID : L2223458-01  
 Post Spike : WG1640166-5

Lab Number : L2223458  
 Project Number : 15514  
 Matrix : SOIL  
 PS Analysis Date : 05/19/22 16:29

Parameter	Sample Conc. (mg/kg)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/kg)	Spike Conc. (mg/kg)		
Barium, Total	34.7	185	206	92	75-125
Beryllium, Total	0.278	4.63	4.47	90	75-125
Cadmium, Total	0.180J	4.91	3.99	81	75-125
Chromium, Total	9.88	18.5	25.2	83	75-125
Copper, Total	17.5	23.2	38.0	88	75-125
Lead, Total	6.09	49.1	43.2	76	75-125
Manganese, Total	40.5	46.3	79.1	83	75-125
Nickel, Total	6.09	46.3	40.1	73	75-125
Selenium, Total	ND	11.1	8.94	80	75-125
Zinc, Total	15.2	46.3	50.1	75	75-125





## Form 8 Serial Dilutions

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVENUE  
**Client Sample ID** : SB-20 (0-2)  
**Lab Sample ID** : L2223458-01  
**Serial Dilution ID** : WG1640166-6

**Lab Number** : L2223458  
**Project Number** : 15514  
**Matrix** : SOIL  
**Analysis Date** : 05/19/22 16:11  
**Analysis Date** : 05/19/22 16:34

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Barium, Total	34.7	41.7	20	20
Copper, Total	17.5	22.6	29*	20
Manganese, Total	40.5	49.0	21*	20



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Lab ID : L2223458-05  
 Client ID : SB-DUP-1  
 Sample Location : 60 MCLEAN AVENUE  
 Sample Matrix : SOIL  
 Analytical Method : 1,6010D  
 Lab File ID : WG1640303.pdf  
 Sample Amount : 1.276g  
 Digestion Method : EPA 3050B

Lab Number : L2223458  
 Project Number : 15514  
 Date Collected : 05/03/22 12:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/19/22 16:57  
 Dilution Factor : 1  
 Analyst : EW  
 Instrument ID : TRACE4  
 %Solids : 93  
 Date Digested : 05/19/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7440-38-2	Arsenic, Total	0.898	0.420	0.087	
7440-39-3	Barium, Total	18.5	0.420	0.073	
7440-41-7	Beryllium, Total	0.113	0.210	0.014	J
7440-43-9	Cadmium, Total	0.193	0.420	0.041	J
7440-47-3	Chromium, Total	6.74	0.420	0.040	
7440-50-8	Copper, Total	8.51	0.420	0.108	
7439-92-1	Lead, Total	2.09	2.10	0.112	J
7439-96-5	Manganese, Total	52.5	0.420	0.067	
7440-02-0	Nickel, Total	7.23	1.05	0.102	
7782-49-2	Selenium, Total	ND	0.839	0.108	U
7440-22-4	Silver, Total	ND	0.420	0.119	U
7440-66-6	Zinc, Total	13.9	2.10	0.123	



**Attachment F**  
**Mercury QC Summary Forms – Excursions**

# Form 1

## METALS

Client : Impact Environmental  
Project Name : 60 MCLEAN AVENUE  
Lab ID : L2223458-05  
Client ID : SB-DUP-1  
Sample Location : 60 MCLEAN AVENUE  
Sample Matrix : SOIL  
Analytical Method : 1,7471B  
Lab File ID : WG1640359.pdf  
Sample Amount : 0.398g  
Digestion Method : EPA 7471B

Lab Number : L2223458  
Project Number : 15514  
Date Collected : 05/03/22 12:00  
Date Received : 05/04/22  
Date Analyzed : 05/19/22 14:38  
Dilution Factor : 1  
Analyst : AW  
Instrument ID : NIC1  
%Solids : 93  
Date Digested : 05/19/22

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.067	0.044	U



**Attachment G**  
**pfas QC Summary Forms – Excursions**

# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S8 ( )	S9 ( )	S10 ( )	S11 ( )	S12 ( )	S13 ( )	S14 ( )
SB-DUP-1 (L2223458-05)	NA	NA	NA	NA	NA	NA	NA
SB-DUP-1 (L2223458-05)	83	92	93	89	98	24*	86
WG1637514-1BLANK	73	81	79	80	87	65	82
WG1637514-1BLANK	NA	NA	NA	NA	NA	NA	NA
WG1637514-2LCS	NA	NA	NA	NA	NA	NA	NA
WG1637514-2LCS	80	86	81	87	99	65	82
EP23_EL9MS	78	91	95	93	88	49	85
EP24_EL9DUP	98	98	104	95	124	91	94

#### QC LIMITS

(20-154) S8 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]OCTANESULFONIC ACID (M2-6:2FTS)  
 (72-140) S9 = PERFLUORO[13C9]NONANOIC ACID (M9PFNA)  
 (79-136) S10 = PERFLUORO[13C8]OCTANESULFONIC ACID (M8PFOS)  
 (75-130) S11 = PERFLUORO[1,2,3,4,5,6-13C6]DECANOIC ACID (M6PFDA)  
 (19-175) S12 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]DECANESULFONIC ACID (M2-8:2FTS)  
 (31-134) S13 = N-DEUTERIOMETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D3-NMEFOSAA)  
 (31-134) S14 = PERFLUORO[1,2,3,4,5,6,7-13C7]UNDECANOIC ACID (M7-PFUDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)





# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458  
Project Number: 15514  
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S15 ( )	S16 ( )	S17 ( )	S18 ( )	S19 ( )	S20 ( )	S21 ( )	TOT OUT
SB-DUP-1 (L2223458-05)	87	NA	NA	NA	--	--	--	0
SB-DUP-1 (L2223458-05)	NA	34	81	54	--	--	--	1
WG1637514-1BLANK	53	58	77	55	--	--	--	0
WG1637514-1BLANK	94	NA	NA	NA	--	--	--	0
WG1637514-2LCS	91	NA	NA	NA	--	--	--	0
WG1637514-2LCS	35	71	85	68	--	--	--	0
EP23_EL9MS	79	71	92	88	--	--	--	0
EP24_EL9DUP	77	104	98	92	--	--	--	0

#### QC LIMITS

(10-117) S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)  
 (34-137) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)  
 (54-150) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)  
 (24-159) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



**Attachment H**  
**Cyanide QC Summary Forms – Excursions**

# Form 7

## Laboratory Control Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : NA  
 Lab Sample ID : WG1639289-2  
 Dup Sample ID : WG1639289-3

Lab Number : L2223458  
 Project Number : 15514  
 Matrix : SOIL  
 LCS Analysis Date : 05/17/22 13:35  
 LCSD Analysis Date : 05/17/22 14:06

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R			
Cyanide, Total	141.	59.0	42. Q	141.	120	84.	67 Q	80-120	35



# Form 7

## Laboratory Control Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVENUE  
 Client Sample ID : NA  
 Lab Sample ID : WG1639561-2  
 Dup Sample ID : WG1639561-3

Lab Number : L2223458  
 Project Number : 15514  
 Matrix : SOIL  
 LCS Analysis Date : 05/18/22 10:38  
 LCSD Analysis Date : 05/18/22 10:39

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R			
Cyanide, Total	141.	110.	76. Q	141.	110	77. Q	10	80-120	35





**DATA VALIDATION**  
**FOR**  
**60 McLEAN AVENUE**  
**YONKERS, NY**  
**ORGANIC AND INORGANIC ANALYSIS DATA**

**Laboratory Sample Delivery Group (SDG) No. L2223459**

**Analyses Performed By:**  
**Alpha Analytical**  
**Westborough, Massachusetts**

**For:**  
**Impact Environmental Inc.**  
**Bohemia, NY**

**Data Validation By:**  
**ddms, inc.**  
**St. Paul, Minnesota 55102**

**August 9, 2022**

**2144-000102**  
**60 McLean Avenue\L2223459.docx**

## EXECUTIVE SUMMARY

Validation of the organic and inorganic analyses data prepared by Alpha Analytical Westborough, Massachusetts for seven aqueous samples, one trip blank (TB), and one field blank (FB) from the 60 McLean Avenue Site has been completed by de maximis Data Management Solutions, Inc. (ddms). Stage 4 validation was performed on the samples. The data were reported by the laboratory under SDG No. L2223459. The following samples were reported:

---

MW-7A	MW-9A	MW-4A	MW-5A	WP-11
WP-12	FIELD BLANK	TRIP BLANK	MW-DUP-1	

---

Based on professional judgment results for non-detects should be considered to be “U,” not detected, at the analyte-specific reporting limit (RL) to represent the lowest concentration at which the laboratory can detect and accurately quantitate sample concentrations based on the documentation provided. The laboratory reported results as not detected at the method detection limit (MDL). The MDL is an estimated value based on a statistical determination, not a quantitative measurement supported by the data provided and should not be used to report non-detect results. It should also be noted by the data user that the laboratory reported non-detect results, RLs, and MDLS to three significant figures. The level of accuracy portrayed at these concentrations and estimated concentrations is not supported by the data and should not be used.

Below is the Data Usability Summary Report (DUSR) associated with these samples.

<b>Data Usability Summary Report</b>	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See following sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes



Data Usability Summary Report	
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes See Attachments A through I

Based on the validation effort, the following data qualifiers were applied:

#### VOCs

- Results for dichlorodifluoromethane and vinyl acetate in MW-DUP-1 were qualified as estimated (UJ) due to an unacceptable %D between the IC and the ICV.
- Volatile organic results were qualified estimated (J-, UJ) due to loss in sensitivity from the IC as summarized in the table in Calibration section of the VOAs discussion.
- The result for acetone in MW-4A was qualified as not detected at the reporting limit (5.0 µg/L) due to field blank contamination.
- Results for acetone in all samples except MW-DUP-1 were qualified as estimated (J, UJ) due to unacceptable LCS/LCSD and RPD values.
- Results for benzene, toluene, n-butylbenzene, o-xylene, 1,4-diethylbenzene, p-isopropyltoluene, p/m-xylene, and sec-butylbenzene in all field samples in this data set were qualified estimated (J, UJ) due to failure to confirm in paired field samples.

#### SVOCs - Fullscan

- Results for all target compounds in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.
- Results for acenaphthene, 1,2,4-trichlorobenzene, hexachlorobenzene, bis(2-chloroethyl)ether, 2-chloronaphthalene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 3,3'-dichlorobenzidine, 4-chlorophenyl phenyl ether, 4-bromophenyl phenyl ether, bis(2-chloroisopropyl)ether, bis(2-chloroethoxy)methane, hexachlorobutadiene, hexachlorocyclopentadiene, hexachloroethane, isophorone, naphthalene, n-nitrosodiphenylamine, n-nitrosodi-n-propylamine, dimethyl phthalate, acenaphthylene, fluorene, phenanthrene, biphenyl, 4-chloroaniline, dibenzofuran, 2-methylnaphthalene, 1,2,4,5-tetrachlorobenzene, acetophenone, 2,4,6-trichlorophenol, 4-chloro-3-methylphenol, 2-chlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, pentachlorophenol, phenol, 2-methylphenol, 3&4-methylphenol, 2,4,5-

trichlorophenol, benzoic acid, and benzyl alcohol in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (J-, UJ) with potential low bias, based on low recoveries in the LCS and/or LCSD. The results for benzoic acid in these samples were also qualified as estimated based on imprecision between the LCS and LCSD.

- Results for bis(2-chloroethyl)ether in all field samples in this dataset were qualified as estimated (J, UJ) based on imprecision in the field duplicate pair.

#### SVOCs - SIM (PAHs, Pentachlorophenol, and 1,4-Dioxane)

- Results for benzo(a)anthracene in MW-9A, and benzo(a)anthracene and benzo(b)fluoranthene in MW-9A and FIELD BLANK, were qualified as not detected (U) at the reporting limits based on contamination at similar concentrations in the laboratory method blank.
- Results for benzo(b)fluoranthene and benzo(k)fluoranthene in MW-9A were qualified as not detected (U) at the reporting limit, based on the presence of these compounds in the associated field blank at similar concentrations.
- Results for all target analytes in MW-7A, MW-5A, MW-4A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (J-, UJ) with potential low bias, based on low recoveries for the associated surrogate compounds.
- Results for 2-chloronaphthalene, hexachloroethane, and fluorene in MW-9A were qualified as estimated (J-, UJ) with potential low bias, based on low recovery for the associated surrogate compound.
- Results for hexachlorobutadiene, acenaphthylene, and hexachloroethane were qualified as estimated (J-, UJ) with potential low bias, as detailed in the table above, based on low recoveries in the associated batch LCS and/or LCSD.
- Results for 1,4-dioxane and naphthalene in all of the field samples were qualified as estimated (J, UJ), based on imprecision in the field duplicate pair.

#### Pesticides

- Results for all target analytes in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (UJ) due to low surrogate recoveries.
- Results for delta-BHC, beta-BHC, heptachlor, aldrin, endrin, endrin aldehyde, 4,4'-DDT, endosulfan I, and cis-chlordane in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and FIELD BLANK were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.

- Results for delta-BHC, heptachlor epoxide, endrin, endrin aldehyde, endrin ketone, dieldrin, 4,4'-DDE, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, methoxychlor, and cis-chlordane in MW-DUP-1 were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.

#### PCBs

- Results for all target Aroclors in MW-9A and MW-4A were qualified as estimated (UJ) due to low surrogate recoveries on both columns.
- Results for Aroclor 1260 in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (UJ) due to low LCS/LCSD recoveries.
- Results for Aroclor 1016 in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (UJ) due to LCS/LCSD imprecision.

#### ICP-MS Metals (Total and Dissolved)

- Results for total and dissolved beryllium and total and dissolved cadmium in all reported samples were qualified as estimated (UJ) due to elevated %D in the low level calibration standard.
- Results for total and dissolved beryllium, total and dissolved chromium, and total and dissolved antimony in all samples were qualified as estimated (J-, UJ) due to low recoveries of the LLCCV standard.
- Results for total iron in MW-5A and WP-12 and dissolved iron in MW-4A, WP-12, and FIELD BLANK were qualified as estimated (J+), biased high, due to elevated LLCCV recoveries.
- Results for dissolved chromium in MW-7A and MW-4A were qualified as not detected (U) at the reporting limit due to method blank contamination.
- Results for dissolved aluminum in MW-7A, MW-4A, and MW-DUP-1, as well as dissolved manganese in MW-5A, were qualified as not detected (U) at the reporting limit or reported value, whichever was greater, due to field blank contamination.
- Results for dissolved thallium in MW-7A, MW-9A, WP-11, and WP-12 were qualified as not detected (U) due to continuing calibration blank contamination.
- Results for total thallium in FIELD BLANK and MW-DUP-1 were qualified as not detected (U) due to continuing calibration blank contamination.
- Results for total and dissolved barium in FIELD BLANK; total chromium in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and MW-DUP-1; dissolved

chromium in MW-5A and WP-12; total cobalt in MW-7A, MW-9A, MW-4A, WP-11, and MW-DUP-1; dissolved cobalt in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, and MW-DUP-1; total manganese in MW-5A, WP-11, WP-12, total copper, and total nickel in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and MW-DUP-1; dissolved copper in MW-5A and WP-12; dissolved manganese in WP-11, WP-12, and FIELD BLANK; dissolved nickel in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, and MW-DUP-1; total zinc in MW-7A, MW-9A, MW-4A, and MW-5A; and dissolved zinc in MW-4A, MW-5A, and WP-12 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard.

- Dissolved results for iron, magnesium, manganese, and potassium in MW-7A were qualified as estimated (J) due to elevated MS recovery.
- Results for dissolved iron and total aluminum in all site samples were qualified as estimated (J, UJ) due to elevated RPD in the field duplicate pair.
- Results for dissolved antimony, dissolved copper, dissolved lead, dissolved silver, and total and dissolved zinc in all site samples were five qualified as estimated (J, UJ) due to lack of confirmation in the field and/or laboratory duplicate.
- Total and dissolved results for aluminum, beryllium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, nickel, and vanadium in MW-4A; all dissolved metals in MW-5A; dissolved results for aluminum, beryllium, calcium, chromium, cobalt, copper, iron, potassium, magnesium, manganese, nickel, sodium, and vanadium in WP-11; total and dissolved results for beryllium, lead and thallium in WP12; total results for lead and thallium in MW-9A; and total beryllium results for WP-11 were qualified as estimated (J, UJ) due to internal standard (IS) percent relative intensity (%RI) drift.
- Results for total and dissolved antimony in MW-4A and total and dissolved copper and zinc in MW-5A were qualified as estimated (J) because the dissolved concentrations exceeded the total concentrations by more than ten percent difference.
- Results for total and dissolved cobalt in MW-5A, total and dissolved zinc in WP-12, and total and dissolved aluminum, antimony, iron, manganese, and sodium, in Field Blank were qualified as estimated (J, UJ), because the dissolved concentrations were greater than the non-detected total concentrations.

#### PFAS

- Results for 6:2 FTS in MW-7A and MW-4A were qualified as not detected (U) at the RL due to field blank contamination.
- Results for 6:2 FTS in MW-7A and MW-4A were qualified as estimated with potential high bias (J+) due to high labeled analog recoveries.

- Results for FOSA in MW-7A and FIELD BLANK were qualified as estimated (UJ) due to low labeled analog recoveries.
- Results for PFPeA and PFHxA in MW-4A were qualified as estimated (UJ) due to low labeled analog recoveries.
- Results for PFBA, PFPeA, PFHxA, PFHpA, PFOA, and PFNA in MW-4A were qualified as estimated (J, UJ) due to low areas of the corresponding internal standard.
- The result for PFNA in MW-9A was qualified as presumptively present and estimated (NJ) because the mass ratio was outside the established range.

#### Cyanide

- Results for cyanide in MW-7A, MW-9A, MW-5A, WP-11, FIELD BLANK, and MW-DUP-1 were less than twice the reporting limit, and qualified as estimated (J, UJ), due to low level field duplicate imprecision.

All other results were determined to be valid as reported by the laboratory.

This report should be considered part of the data package for all future distributions of the data.

## INTRODUCTION

Analyses for the requested parameters were performed by the laboratory according to the following analytical methods:

Volatile Organic Compounds (VOCs)	SW846 Method 8260C
Semivolatile Organic Compounds (SVOCs)	SW846 Method 8270D SW846 Method 8270DSIM
Organochlorine Pesticides	SW846 Method 8081B
Polychlorinated Biphenyls	SW846 Method 8082A
Total and Dissolved Metals	SW846 Method 6020B SW846 Method 7470A
Polyfluorinated Alkyl Substances (PFAS)	EPA Method 537 (M)

Results of sample analyses are reported by the laboratory as either qualified or unoneualified; various qualifier codes are used to denote specific information regarding the analytical results.

ddms' validation was performed in conformance with the ddms' Standard Operating Procedures (SOPs) for the methods followed, the USEPA "National Functional Guidelines (NGF) for Organic Data Review" (1999), the USEPA "National Functional Guidelines for Inorganic Data Review" (2004), the requirements of the analytical methods followed, and the specifications of the project-specific Quality Assurance Project Plan (QAPP). Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the CLP. This requires that the data package be presented in accordance with the CLP requirements, so that sufficient supporting documentation is available to facilitate the validation effort. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unoneualified. Unoneualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the NFG:

**U** The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.



**J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**J+** The result is an estimated quantity, but the result may be biased high.

**J-** The result is an estimated quantity, but the result may be biased low.

**NJ** The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

**UJ** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

## **I. Holding Times, Preservation and Sample Integrity**

Copies of the applicable chain of custody (COC) records were included in the data package, documenting sample collection dates of May 4, 2022. The samples were received at the laboratory on May 4, 2022.

The temperatures of the coolers upon receipt at the laboratory (2.2°C to 5.4°C) were acceptable (QC <6°C). Appropriate sample preservation was noted on sample receipt checklists and sequence logs. All samples were prepared and analyzed within method holding times.

## **II. Documentation**

The following documentation issues were observed during the validation effort:

- Samples identified as "FIELD BLANK" and "TRIP BLANK" were received but were not listed on the Chain of Custody (COC). TRIP BLANK was archived. At the client's request, FIELD BLANK sample was analyzed.
- VOCs were identified twice for analysis on one page of the COC, and analysis for SVOCs were not identified.
- The source of the reference spectra for the identification the semivolatile target compounds by SIM could not be determined. For instance, the retention time (3.022 min.) listed for 2-methylnaphthalene in the raw data for MW-7A is much earlier than the RT displayed for the reference spectrum (4.456 min.). Nor does the reference spectrum RT match the calibration standards analyzed in support of the sample analyses (3.2 min.)
- Raw data for the 1.0 ng/mL standard of the PFAS initial calibration run on April 27, 2022, on instrument LCMS01 were not included in the data package. Instead, two sets of raw data for the 0.50 ng/mL standard were provided. On request, the laboratory provided the raw data for the 1.0 ng/mL standard, which were reviewed and verified by the validator. At the discretion of the data user, the laboratory should be requested to revise the data package to include this documentation so that complete and accurate documentation is available for future reference.
- The internal standard used to calculate concentrations of PFTrDA in the calibration standards and laboratory QC samples could not be determined from the information in the data package as received. On request, the laboratory explained that the area used for this calculation is the average of the areas of internal standards M2PFTeDA and MPFDOA. This was confirmed by the validator. At the discretion of the data user, the laboratory should be requested to provide this information in the data package so that complete information is available for future reference.

The remainder of this report discusses the review effort for each of the parameters. The tables below document the quality control (QC) elements reviewed for each analysis parameter. Where a quality indicator was deemed acceptable after thorough review, no further discussion is included in this report. Detailed findings are included for each quality element that impacted the usability of the reported results. Additional information or explanation is included as needed, to provide support for decisions made, based on the validator's best professional judgment.

Where a result was qualified J+ or J- and J, the J qualifier takes precedence. Where a result was qualified biased high and low for differing data quality excursions, the final qualifier is J with an indeterminate bias.

### III. VOCs

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory and Field Blanks	N
Surrogates	Y
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	N
MS only	N/A
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	Y

#### A. Calibration

Data for two ICs were provided, one on instrument VOA130 and one on instrument 105. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable except for 1,4-dioxane (0.001 on both instruments). A review of other laboratory quality control data was performed, with further discussion below. Two initial calibration verification (ICV) standards were analyzed after each IC; all target compound percent differences (%Ds) were acceptable in the ICV standards except as summarized below.

Parameter	%D	Samples Affected	Qualifier Applied
<i>Batch 1635374</i>			
Dichlorodifluoromethane	-23.9	MW-DUP-1	UJ
Ethyl ether	+23.9		none
Vinyl acetate	-32.2		UJ

Parameter	%D	Samples Affected	Qualifier Applied
<i>Batch 1637761</i>			
Bromomethane	+24.3	MW-7A	none
Ethyl ether	+28.7	MW-9A	none
		MW-4A	
		MW-5A	
		WP-11	
		WP-12	
		FIELD BLANK	

Results for dichlorodifluoromethane and vinyl acetate in MW-DUP-1 were qualified as estimated (UJ) due to an unacceptable %D between the IC and the ICV.

Two CC standards were run in support of the data in this sample set. All target compound percent differences (%Ds) were acceptable in the CC standards except as summarized below.

Parameter	%D	Samples Affected	Qualifier Applied
Batch 1639023-2			
Bromomethane	+35.5	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 FIELD BLANK	none
Chloroethane	+32.7		
Trichlorofluoromethane	+52.5		
Ethyl ether	+21.3		
Acetone	-33.4		J-, UJ
1,4-Dioxane	-21.1		UJ
4-Methyl-2-pentanone	-21.5		
2-Hexanone	-23.3		
1,2,3-Trichloropropane	-21.3		
trans-1,4-Dichloro-2-butene	-21.2		
Batch 1640338-2			
Ethyl ether	-21.7	MW-DUP-1	UJ
2-Butanone	-23.2		
1,4-Dioxane	-21.7		
Bromoform	-24.1		
trans-1,4-Dichloro-2-butene	-24.2		

Results were qualified estimated (J-, UJ) due to loss in sensitivity from the IC as summarized in the table above.

## B. Laboratory and Field Blanks

Two method blanks were prepared and analyzed with these samples. No analytes were reported at a concentration greater than the analyte specific reporting limit. Acetone was reported in FIELD BLANK (4.0 µg/L) as well as in MW-4A (3.3 µg/L). The result for

acetone in MW-4A was qualified as not detected at the reporting limit (5.0 µg/L) due to field blank contamination.

### C. LCS/LCSD

Two LCS/LCSD pair was prepared and analyzed with these samples. Recoveries for all spiked compounds assessed (70-130% R) and agreement between paired results (<20 RPD) were acceptable except as summarized below.

Parameter	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1639023-3/4</i>					
Trichlorofluoromethane	150	160	a	MW-7A MW-9A MW-4A	none
Bromomethane	140	130	a	MW-5A WP-11 WP-12	none
Acetone	67	94	34	FIELD BLANK	J, UJ

### D. Field Duplicates

Sample MW-DUP-1 was submitted as a field duplicate of sample MW-7A. Paired results exceeding acceptance criteria (greater than 30% RPD) are summarized below.

Compound	MW-7A	MW-DUP-1	%RPD
Benzene	7.4	4.1	57
Toluene	48	27	56
n-Butylbenzene	6.3	12	-62
o-Xylene	300	210	35
1,4-Diethylbenzene	61	90	-38
p-Isopropyltoluene	11	21	-63
p/m-Xylene	1100	730	40
sec-Butylbenzene	7.9	11	-33

Results for benzene, toluene, n-butylbenzene, o-xylene, 1,4-diethylbenzene, p-isopropyltoluene, p/m-xylene, and sec-butylbenzene in all field samples in this data set were qualified estimated (J, UJ) due to failure to confirm in paired field samples.

### IV. SVOCs (8270D Fullscan)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N

Review Element	Acceptable?
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	Y
MS/MSD	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

### A. Calibration

One initial calibration was provided in support of the sample results, performed on 4/20-21/22, on instrument DAKOTA. All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. Initial calibration verification (ICV) standards were analyzed after the IC and included all of the target analytes reported; all percent differences (%Ds) were acceptable ( $\leq 20\%$ ) in the ICV standards, for the target compounds reported.

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable ( $\leq 20\%$ ) with the following exceptions:

CC Date	Compound	%D	Samples Affected	Qualifier Applied
5/8/22 @ 09:07 DAKOTA	2,4-Dinitrophenol 4,6-Dinitro-o-cresol	+49.9 +32.4	QC samples only	None
5/9/22 @ 07:32 DAKOTA	2,4-Dinitrophenol 4,6-Dinitro-o-cresol	+43.1 +31.3	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 FIELD BLANK MW-DUP-1	None

The high %Ds for 2,4-dinitrophenol and 4,6-dinitro-o-cresol are indicative of high bias or the presence of false positives and neither compound was detected in any of the field samples; therefore, no action was necessary.

### A. Blanks

A method blank was prepared with the extraction batch that included the field samples. A field blank was submitted with the sample set. None of the target analytes were detected in the laboratory of field blanks.



## B. Surrogates

Six surrogate compounds were added before extraction to all QC and field samples. Recoveries for the surrogates were acceptable (70-130%) with the exceptions detailed below:

Sample	2FP	PHL	NBZ	FBP	TBP	TPHd14	Qualifier Applied
MW-7A	61	45	68	58	50	64	J-, UJ
MW-9A	54	41	65	58	61	65	
MW-4A	58	47	66	57	a	61	
MW-5A	51	37	62	52	54	59	
WP-11	49	40	60	57	53	58	
WP-12	39	33	47	46	47	49	
FIELD BLANK	55	43	69	65	59	67	
MW-DUP-1	53	44	69	62	47	63	

Results for all target compounds in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (J-, UJ) based on low recoveries for two or more surrogates in each of the acid and base/neutral extractables fractions.

## C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

One LCS/LCSD pair was prepared and analyzed with the field samples. Recoveries for spiked compounds assessed (data validation limits 70-130% R) and agreement between paired results (<20 RPD) were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1635587-2/3</i>					
Acenaphthene	66	66	a	All samples	J-, UJ
1,2,4-Trichlorobenzene	60	55	a		
Hexachlorobenzene	66	66	a		
bis(2-Chloroethyl)ether	66	64	a		
2-Chloronaphthalene	64	60	a		
1,2-Dichlorobenzene	59	54	a		
1,3-Dichlorobenzene	58	54	a		
1,4-Dichlorobenzene	60	54	a		
3,3'-Dichlorobenzidine	57	62	a		
4-Chlorophenyl phenyl ether	67	65	a		
4-Bromophenyl phenyl ether	66	66	a		
bis(2-Chloroisopropyl)ether	64	61	a		

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
bis(2-Chloroethoxy)methane	67	65	a		
Hexachlorobutadiene	58	54	a		
Hexachlorocyclopentadiene	54	52	a		
Hexachloroethane	57	49	a		
Isophorone	62	59	a		
Naphthalene	66	62	a		
n-Nitrosodiphenylamine	69	a	a		
n-Nitrosodi-n-propylamine	66	65	a		
Dimethyl phthalate	68	66	a		
Acenaphthylene	66	64	a		
Fluorene	68	68	a		
Phenanthrene	69	69	a		
Biphenyl	69	65	a		
4-Chloroaniline	58	63	a		
Dibenzofuran	a	69	a		
2-Methylnaphthalene	64	62	a		
1,2,4,5-Tetrachlorobenzene	61	59	a		
Acetophenone	65	64	a		
2,4,6-Trichlorophenol	69	a	a		
4-Chloro-3-methylphenol	a	69	a		
2-Chlorophenol	69	66	a		
2,4-Dichlorophenol	68	67	a		
2,4-Dimethylphenol	66	64	a		
Pentachlorophenol	67	a	a		
Phenol	49	50	a		
2-Methylphenol	65	66	a		
3&4-Methylphenol	67	66	a		
2,4,5-Trichlorophenol	a	69	a		
Benzoic acid	48	65	30		
Benzyl alcohol	63	64	a		

Results for acenaphthene, 1,2,4-trichlorobenzene, hexachlorobenzene, bis(2-chloroethyl)ether, 2-chloronaphthalene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 3,3'-dichlorobenzidine, 4-chlorophenyl phenyl ether, 4-bromophenyl phenyl ether, bis(2-chloroisopropyl)ether, bis(2-chloroethoxy)methane, hexachlorobutadiene, hexachlorocyclopentadiene, hexachloroethane, isophorone, naphthalene, n-nitrosodiphenylamine, n-nitrosodi-n-propylamine, dimethyl phthalate, acenaphthylene, fluorene, phenanthrene, biphenyl, 4-chloroaniline, dibenzofuran, 2-methylnaphthalene, 1,2,4,5-tetrachlorobenzene, acetophenone, 2,4,6-trichlorophenol, 4-chloro-3-methylphenol, 2-chlorophenol, 2,4-dichlorophenol, 2,4-dimehtylphenol, pentachlorophenol, phenol, 2-methylphenol, 3&4-methyphenol, 2,4,5-trichlorophenol, benzoic acid, and benzyl alcohol in all samples in this data set were qualified as estimated

(J-, UJ) with potential low bias, based on low recoveries in the LCS and/or LCSD. The results for benzoic acid in these samples were also qualified as estimated based on imprecision between the LCS and LCSD.

#### D. Field Duplicates

Sample MW-DUP-1 was submitted as a field duplicate of sample MW-7A. Bis(2-chloroethyl)ether was detected in MW-DUP-1 (2.3 µg/L) but was not detected in MW-7A. Results for bis(2-chloroethyl)ether in all field samples in this dataset were qualified as estimated (J, UJ) based on imprecision in the field duplicate pair. No other target analytes were detected in either sample of the field duplicate pair.

### V. SVOCs (Method 8270D SIM)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	Y
Laboratory and Field Blanks	N
Surrogates	N
Laboratory Control Sample (LCS)/LCS duplicate (LCSD)	N
Field Duplicates	N
MS/MSD	NA
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	NA

NA = not applicable or not analyzed

#### A. Calibration

One initial calibration, performed on 2/9/22 on instrument SV128, was provided in support of the PAHs and pentachlorophenol results for the samples. Another IC was performed on 5/4/22 on instrument PAH22 for 1,4-dioxane only. Calibration was established using internal standard methodology with average response factors, linear regression, and by isotope dilution (for 1,4-dioxane only). All IC relative response factors (RRFs) and percent relative standard deviations (%RSDs) were acceptable. An initial calibration verification (ICV) standard was analyzed after each of the ICs and all percent differences (%Ds) in these ICVs were acceptable (≤20%).

Continuing calibration (CC) standards were analyzed at the appropriate frequency and %Ds were acceptable (≤20%).

## B. Blanks

Two method blanks were prepared with the field samples, one with the analytical batch extracted for acid- and base/neutral extractable compounds and a second for the extraction for 1,4-dioxane, only. One field blank was submitted with the field samples. The following compounds were detected in the method blanks and field blank at concentration below the RLs but above the MDLs:

Blank	Compound	%D	Samples Affected	Qualifier Applied
WG1635588-1	Benzo(a)anthracene	0.02 J µg/L	MW-9A	U
	Benzo(b)fluoranthene	0.01 J µg/L	FIELD BLANK	
FIELD BLANK	Benzo(b)fluoranthene	0.01 J µg/L	MW-9A	
	Benzo(k)fluoranthene	0.01 J µg/L		

Results for benzo(a)anthracene and benzo(b)fluoranthene in MW-9A and FIELD BLANK were qualified as not detected (U) at the reporting limits based on contamination at similar concentrations in the laboratory method blank. Results for benzo(b)fluoranthene and benzo(k)fluoranthene in MW-9A were qualified as not detected (U) at the reporting limit, based on the presence of these compounds in the associated field blank at similar concentrations.

## C. Surrogates

Six surrogate compounds (2-fluorophenol [2FP], phenol-d<sub>5</sub> [PHL], nitrobenzene-d<sub>5</sub> [NBZ], fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], and terphenyl-d<sub>14</sub> [TPHd14]) were added before extraction to all QC and field samples. Of these, the three base/neutral extractable surrogate compounds (NBZ, FBP, and TPHd14), the acid-extractable compound 2,4,6-tribromophenol (TBP), and 1,4-dioxane-d<sub>8</sub> (DXd8, applicable to the 1,4-dioxane analyses only) have bearing on the selected target compounds. Recoveries for these surrogates were acceptable (70-130% for acid- and base/neutral extractable surrogates and 30-130% for 1,4-dioxane-d<sub>8</sub>) with the exceptions detailed below:

Sample	DXd8	2FP	PHL	NBZ	FBP	TBP	TPHd14	Qualifier Applied
MW-7A	a	63	50	a	64	56	65	J-, UJ
MW-9A	a	68	52	a	69	a	a	
MW-4A	a	53	47	66	60	a	60	
MW-5A	a	50	45	64	58	69	62	
WP-11	a	45	43	63	57	55	58	
WP-12	a	42	36	51	47	60	49	
FIELD BLANK	a	53	46	68	62	64	61	
MW-DUP-1	a	51	46	a	63	45	62	

Results for all target analytes in MW-7A, MW-5A, MW-5A, WP-11, WP-12, FIELD BLANK, and MW-DUP-1 were qualified as estimated (J-, UJ) with potential low bias, based on low recoveries for the associated surrogate compounds.

Results for 2-chloronaphthalene, hexachloroethane, and fluorene in MW-9A were qualified as estimated (J-, UJ) with potential low bias, based on low recovery for the associated surrogate compound.

#### D. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Two LCS/LCSD pairs were prepared and analyzed with the field samples (one for acid/base/neutral extractable target list, and one for 1,4-dioxane only). Recoveries for spiked compounds assessed (data validation limits 70-130% R) and agreement between paired results (<20 RPD) were acceptable, with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch 1635588-2/3</i>					
Hexachlorobutadiene	62	62	a	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 FIELD BLANK MW-DUP-1	J-, UJ
Acenaphthylene	68	67	a		
Hexachloroethane	65	68	a		

Results for hexachlorobutadiene, acenaphthylene, and hexachloroethane were qualified as estimated (J-, UJ) with potential low bias, as detailed in the table above, based on low recoveries in the associated batch LCS and/or LCSD.

#### E. Field Duplicates

MW-DUP-1 was submitted as a field duplicate of sample MW-7A. Results showed good agreement with the following exceptions:

Compound	MW-7A	MW-DUP-1	RPD	Qualifier Applied
1,4-Dioxane	64 J	144 U	nc	J, UJ
Naphthalene	47	33	35	

Results for 1,4-dioxane and naphthalene in all of the field samples were qualified as estimated (J, UJ), based on imprecision in the field duplicate pair.

#### VI. Pesticides

Review Element	Acceptable?
Calibration - IC, ICV, CCV	N

Review Element	Acceptable?
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	NA
Compound Identification	Y
Compound Quantitation	Y

NA = not analyzed

## A. Calibration

Two initial calibrations were associated with the sample analyses; these were run on January 31, 2022, on instrument PEST18 and on April 22, 2022, on instrument PEST20. Calibration factors (CFs) and %RSDs were correctly calculated and reported. All %RSDs were all less than the maximum acceptance limit of 20%. ICV standards for the single-component pesticides, multi-component chlordane, and multi-component toxaphene were analyzed after each IC. The %Ds for all target analyte peaks on both columns in the ICV standards were less than the maximum acceptance limit of 20%, except for the first selected toxaphene peak (toxaphene-1) on the primary column of the ICV standard run on January 31, 2022, at 14:01 on instrument PEST18. Based on professional judgment, since the secondary column %D for this peak was acceptable and toxaphene was not detected in the associated site sample, no action was taken on this basis.

Seven CC standards were analyzed with the samples. CFs and %Ds for all analyte peaks on both columns were correctly calculated and reported. The %D values were less than the maximum acceptance limit of 20%, with the following exceptions:

CC Standard	Analyte	Column	%D	Associated Samples	Qualifier Applied
5/10/22 @ 14:46 PEST20	4,4'-DDD	Column 1	22.8	Lab QC Samples Only	none
	Methoxychlor		25.4		
	4,4'-DDT	Column 2	24.2		
5/10/22 @ 14:58 PEST20	Chlordane-1	Column 1	23.3	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 FIELD BLANK	none
5/10/22 @ 21:44 PEST20	4,4'-DDD	Column 1	26.7		
	Methoxychlor	Column 2	29.7		
	delta-BHC		20.7		
	trans-Chlordane		27.9		
	Dieldrin		22.4		
	4,4'-DDD		30.6		
5/11/22 @ 22:22 PEST18	Toxaphene-1	Column 1	21.1	MW-DUP-1	none

The high %Ds for all peaks listed above resulted from an increase in sensitivity relative to the IC, which suggests the potential for reporting false positives. Since no target analytes were detected in any of the field samples, no action was necessary based on the high responses.



## B. Surrogate Recovery

Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1	TCX %R Column 2	DCB %R Column 1	DCB %R Column 2	Qualifier
MW-7A	66	a	45	57	UJ
MW-9A	62	64	41	42	
MW-4A	58	64	42	42	
MW-5A	a	a	65	63	
WP-11	a	a	65	62	
WP-12	69	67	61	56	
FIELD BLANK	a	a	64	62	
MW-DUP-1	59	61	50	44	

a = acceptable

Results for all target analytes in all samples in this data set were qualified as estimated (UJ) due to low surrogate recoveries.

## C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

Two LCS/LCSD pairs were prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Batch WG1636383-2/3					
delta-BHC	64	a	a	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 FIELD BLANK	UJ
beta-BHC	67	a	a		
Heptachlor	68	a	a		
Aldrin	67	a	a		
Endrin	69	a	a		
Endrin aldehyde	64	a	a		
4,4'-DDT	69	a	a		
Endosulfan I	64	a	a		
cis-Chlordane	59	67	a		
Batch WG1637021-2/3					
delta-BHC	67	67	a	MW-DUP-1	UJ
Heptachlor epoxide	67	69	a		
Endrin	67	69	a		
Endrin aldehyde	55	55	a		

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
Endrin ketone	64	65	a		
Dieldrin	69	a	a		
4,4'-DDE	68	69	a		
4,4'-DDT	68	a	a		
Endosulfan I	66	66	a		
Endosulfan II	65	67	a		
Endosulfan sulfate	61	62	a		
Methoxychlor	68	69	a		
cis-Chlordane	63	63	a		

Results for delta-BHC, beta-BHC, heptachlor, aldrin, endrin, endrin aldehyde, 4,4'-DDT, endosulfan I, and cis-chlordane in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and FIELD BLANK and for delta-BHC, heptachlor epoxide, endrin, endrin aldehyde, endrin ketone, dieldrin, 4,4'-DDE, 4,4'-DDT, endosulfan I, endosulfan II, endosulfan sulfate, methoxychlor, and cis-chlordane in MW-DUP-1 were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.

## VII. PCBs

Review Element	Acceptable?
Calibration - IC, ICV, CCV	N
Laboratory and Field Blanks	Y
Surrogates	N
Laboratory Control Sample (LCS)	N
Field Duplicates	Y
MS/MSD	NA
Compound Identification	Y
Compound Quantitation	Y

NA = not analyzed

### A. Calibration

One initial calibration, run on April 19-20, 2022, on instrument PEST2, was associated with the sample analyses. Calibration factors (CFs) and %RSDs were correctly calculated and reported. All %RSDs were all less than the maximum acceptance limit of 20%. ICV standards for Aroclor 1248 and the Aroclor 1016/1260, Aroclor 1242/1268, Aroclor 1232/1262, and Aroclor 1221/1254 mixtures were analyzed after the IC, and %Ds for all selected Aroclor peaks on both columns in the ICV standards were less than the maximum acceptance limit of 20%.

Two CC standards were analyzed with the samples on May 19, 2022, at 06:42 and 12:27. CFs and %Ds for all selected Aroclor 1016 and 1260 peaks on both columns were correctly calculated and reported. The %D values were less than the maximum

acceptance limit of 20%, except for the fourth selected Aroclor 1260 peak (Aroclor 1260-4) on the CLP-Pesticide II column of the CC standard run at 12:27 (21.9%). Based on professional judgment, since all %Ds on the CLP-Pesticide column were acceptable, and no Aroclors were detected in any of the site samples, no action was necessary on this basis.

## B. Surrogate Recovery

TCX and DCB were used as the surrogate compounds for these analyses. Recoveries of TCX and DCB for the reported site and laboratory QC samples were within the validation acceptance limits of 70-130%, with the following exceptions:

Sample	TCX %R Column 1*	TCX %R Column 2**	DCB %R Column 1	DCB %R Column 2	Qualifier
MW-9A	a	69	68	65	UJ
MW-4A	a	a	69	69	
WP-11	a	64	a	a	none

\*CLP-Pesticide column

\*\*CLP-Pesticide II column

a = acceptable

Results for all target Aroclors in MW-9A and MW-4A were qualified as estimated (UJ) due to low surrogate recoveries on both columns. Based on professional judgment, since DCB recoveries on both columns and the TCX recovery on the CLP-Pesticide column in WP-11 were acceptable, and no target Aroclors were detected in this sample, no action was necessary due to the low TCX recovery on the CLP-Pesticide II column.

## C. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD)

An LCS/LCSD pair was prepared and analyzed with the site samples. Recoveries and precision between paired recoveries were acceptable (70-130% R and <20% RPD), with the following exceptions:

Compound	LCS %R	LCSD %R	RPD	Samples Affected	Qualifier Applied
<i>Batch WG1640120-2/3</i>					
Aroclor 1016	a / a	a / a	22 / a	All samples	UJ
Aroclor 1260	64 / 63	65 / 64	a / a		

Results for all pcbs in all samples in this data set were qualified as estimated (UJ) due to low LCS/LCSD recoveries and/or LCS/LCSD imprecision. Total PCBs results were also qualified as estimated (UJ).

## VIII. Total and Dissolved ICP-MS Metals

Review Element	Acceptable?
ICP-MS Instrument Tunes	Y
Calibrations - ICs, ICVs, CCVs	N
Laboratory and Field Blanks	N
Interference Check Samples	N
Laboratory Control Samples / LCS Duplicates	Y
Field and Laboratory Duplicates	N
Matrix Spike / Matrix Spike Duplicates	N
Post Digestion Spikes	N
Serial Dilution Analysis	Y
Internal Standard Recoveries	N
Total vs. Dissolved	N
Analyte Quantitation	Y

### A. Calibrations – ICs, ICVs, CCVs

The initial calibration was established on 5/26/22 on instrument ICPMSQ. Calibration criteria ( $R^2 > 0.995$  for the linear regression) were met in for all reported analytes. The calculated percent differences for all non-zero standards were within the 30% limit with the exception of beryllium (-42%D) and cadmium (-34%D). All results for total and dissolved beryllium and total and dissolved cadmium were less than the calibration supported RL of 0.001 mg/L and were qualified as estimated (UJ) due to elevated %D in the low level calibration standard

A low level continuing calibration verification (LLCCV) was analyzed at the beginning and the end of the analytical sequence. All recoveries were within the 65-135% acceptance limits with exceptions following:

LLCCV ID	Analyte	%R	Associated Samples	Qualifier
LLCCV 5/26/22 @ 08:39:42	Beryllium, Total and Dissolved	63.5	All samples	J-, UJ
	Chromium, Total and Dissolved	56.1		
	Antimony, Total and Dissolved	55.2		
LLCCV 5/26/22 @ 22:50:52	Chromium, Total and Dissolved	62.6		
	Antimony, Total and Dissolved	58.4		
	Total and Dissolved Lead	61.8		

LLCCV ID	Analyte	%R	Associated Samples	Qualifier
	Iron, Total	178	MW-5A WP-12	J+
	Iron, Dissolved	178	MW-4A WP-12 FIELD BLANK	J+

Results for total and dissolved beryllium, chromium, and antimony were less than 10x the reporting limit and qualified as estimated (J-, UJ) due to low recoveries demonstrated in the LLCCV standard. Results may be biased low, or the limit of detection may be higher than reported. Results for total iron in MW-5A and WP-12 and dissolved iron in MW-4A, WP-12, and FIELD BLANK were less than 10x the RL and qualified as estimated (J+), biased high, due to elevated LLCCV recoveries.

## B. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. One preparation blank for total metals and one preparation blank for dissolved metals were prepared and analyzed with the samples. One field blank (FIELD BLANK) was submitted with this SDG. The following analytes were detected in these blanks:

Blank ID	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
MB(WG1642946-1BLANK)	Antimony, Dissolved	0.00047	All samples	none
	Sodium, Dissolved	0.0311		none
	Chromium, Dissolved	0.00022	MW-9A MW-5A WP-11 WP-12 FIELD BLANK MW-DUP-1	none
			MW-7A MW-4A	U
FIELD BLANK	Antimony, Dissolved	0.00052	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 MW-DUP-1	none
	Barium, Dissolved	0.00029		none
	Iron, Dissolved	0.0371		none
	Sodium, Dissolved	0.0662		none
	Aluminum, Dissolved	0.00908	MW-9A MW-5A WP-11 WP-12	none
			MW-7A MW-4A	U

Blank ID	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
	Manganese, Dissolved	0.00237	MW-DUP-1	
			MW-7A MW-9A MW-4A WP-11 WP-12 MW-DUP-1	none
			MW-5A	U
	Barium, Total	0.00032	MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 MW-DUP-1	none none
CCB (R1568727-7)	Arsenic, Dissolved	0.000178	MW-7A MW-9A	none
	Iron, Dissolved	0.0366	MW-4A	
CCB (R1568727-9)		0.0336	MW-5A	
CCB (R1568727-7)	Thallium, Dissolved	0.000651	MW-4A MW-5A	none
CCB (R1568727-9)	Thallium, Dissolved	0.000657	MW-7A MW-9A	U
CCB (R1568727-9)	Thallium, Dissolved	0.000657	WP-11 WP-12	U
CCB (R1568727-12)	Thallium, Dissolved	0.000639	FIELD BLANK MW-DUP-1	none
	Iron, Dissolved	0.0292	WP-11 WP-12 FIELD BLANK MW-DUP-1	none
CCB (R1568727-18)	Iron, Total	0.0311	MW-7A MW-9A	none
CCB (R1568727-20)	Iron, Total	0.0346	MW-5A WP-11 WP-12 FIELD BLANK	none
CCB (R1568727-22)	Iron, Total	0.0358	MW-DUP-1	none
CCB (R1568727-18)	Thallium, Total	0.000767	MW-7A MW-9A MW-5A WP-11 WP-12	none
CCB (R1568727-20)	Thallium, Total	0.000703	FIELD BLANK	U
CCB (R1568727-22)	Thallium, Total	0.000804	MW-DUP-1	U



Blank ID	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
CCB (R1568727-24)	Sodium, Total	0.0315	MW-4A	none
CCB (R1568727-28)	Iron, Total	0.0376	MW-4A	none
	Thallium, Total	0.000724		

The method blank associated with the dissolved metals analysis was detected at an actionable contamination level for dissolved chromium. Results for dissolved chromium in MW-7A and MW-4A were qualified as not detected (U) at the reporting limit due to method blank contamination. The FIELD BLANK associated with the dissolved metals analysis was detected at actionable contamination levels for dissolved aluminum and dissolved manganese. Results for dissolved aluminum in MW-7A, MW-4A, and MW-DUP-1, as well as dissolved manganese in MW-5A, were qualified as not detected (U) at the reporting limit or reported value, whichever was greater, due to field blank contamination. The results for dissolved thallium in MW-7A, MW-9A, WP-11, and WP-12 were qualified as not detected (U) due to continuing calibration blank contamination. Results for total thallium in FIELD BLANK and MW-DUP-1 were qualified as not detected (U) due to continuing calibration blank contamination. Where blank contamination was detected at concentrations levels less than reported in the sample, or associated samples were not detected, exceedance were noted, but qualification of results was not warranted.

### C. Interference Check Samples (ICSA/ICSAB)

The interference check samples associated with these samples were acceptable for all analytes with exceptions in the ICSA standard. All ICSAB recoveries were within acceptance criteria (85-115%).

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
ICSA R1568727-3	Total and Dissolved Barium	0.000240	MW-7A	none
			MW-9A	
			MW-4A	
	Chromium, Total	0.000328	MW-5A	J+
			WP-11	
			WP-12	
	Chromium, Dissolved		FIELD BLANK	none
			MW-DUP-1	
	Chromium, Total		FIELD BLANK	J+
			MW-7A	
			MW-9A	
	Chromium, Dissolved		MW-4A	none
			MW-5A	
			WP-11	
	Chromium, Dissolved		WP-12	none
			MW-DUP-1	
	Chromium, Dissolved		MW-7A	none
			MW-9A	

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
			MW-4A WP-11 FIELD BLANK MW-DUP-1	
			MW-5A WP-12	J+
	Cobalt, Total	0.000472	MW-5A WP-12 FIELD BLANK	none
			MW-7A MW-9A MW-4A WP-11 MW-DUP-1	J+
			WP-12 FIELD BLANK	none
			MW-7A MW-9A MW-4A MW-5A WP-11 MW-DUP-1	J+
	Cobalt, Dissolved			
	Copper, Total	0.0012	FIELD BLANK	none
			MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 MW-DUP-1	J+
			MW-7A MW-9A MW-4A WP-11 FIELD BLANK MW-DUP-1	none
			MW-5A WP-12	J+
	Manganese, Total	0.000851	FIELD BLANK MW-7A MW-9A MW-4A MW-DUP-1	none
			MW-5A WP-11 WP-12	J+
			MW-5A MW-7A MW-9A	none
	Manganese, Dissolved			

ICSA Standard	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
			MW-4A MW-DUP-1	
			WP-11 WP-12 FIELD BLANK	J+
	Nickel, Total	0.000614	FIELD BLANK	none
	Nickel, Dissolved		MW-7A MW-9A MW-4A MW-5A WP-11 WP-12 MW-DUP-1	J+
			WP-12 FIELD BLANK	none
			MW-7A MW-9A MW-4A MW-5A WP-11 MW-DUP-1	J+
	Zinc, Total	0.00504	WP-11 WP-12 FIELD BLANK MW-DUP-1	none
	Zinc, Dissolved		MW-7A MW-9A MW-4A MW-5A	J+
			MW-7A MW-9A WP-11 FIELD BLANK MW-DUP-1	none
			MW-4A MW-5A WP-12	J+

The ICSA was detected at concentrations greater than the MDL for barium (MDL - 0.000173 mg/L), chromium (MDL – 0.000178 mg/L), cobalt (MDL – 0.000163), copper (MDL - 0.000384 mg/L), manganese (MDL – 0.000440 mg/L), nickel (MDL – 0.000556 mg/L), and zinc (MDL – 0.00341 mg/L), exhibiting an elevated response with potential for high bias in detected samples. The ICSAB was spiked with a known concentrations for aluminum (20 mg/L), calcium (60 mg/L), iron (50 mg/L), magnesium (20 mg/L), sodium (50 mg/L) and potassium (20 mg/L) and recovered within acceptance limits (85-115%). The results for total and dissolved barium in FIELD BLANK were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for total chromium in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and MW-DUP-1 were

qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved chromium in MW-5A and WP-12 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for total cobalt in MW-7A, MW-9A, MW-4A, WP-11, and MW-DUP-1 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved cobalt in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, and MW-DUP-1 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for total manganese in MW-5A, WP-11, and WP-12 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for total copper and total nickel in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, WP-12, and MW-DUP-1 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved copper in MW-5A and WP-12 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved manganese in WP-11, WP-12, and FIELD BLANK were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved nickel in MW-7A, MW-9A, MW-4A, MW-5A, WP-11, and MW-DUP-1 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for total zinc in MW-7A, MW-9A, MW-4A, and MW-5A were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Results for dissolved zinc in MW-4A, MW-5A, and WP-12 were qualified as estimated and biased high (J+) due to elevated response in the ICSA standard. Where sample concentrations were not detected or significantly greater than the detected ICSA concentration, qualification was not warrant qualification.

#### **D. Matrix Spike (MS), Matrix Spike Duplicate (MSD) and Post Digestion Spike (PDS)**

One MS/MSD pair was prepared and analyzed with the site samples for the dissolved metals fraction. A single PDS was analyzed with the site samples. Percent recoveries (%Rs) and relative percent differences (RPDs) were acceptable (validation QC 75-125%R, RPDs ≤20 RPD), with the exceptions noted below.

Sample ID	Analyte	MS %R	PDS %R
QC Sample: MW-7A	Calcium, Dissolved	208	a
	Iron, Dissolved	160	a
	Magnesium, Dissolved	153	a
	Manganese, Dissolved	204	a
	Potassium, Dissolved	133	a
	Sodium, Dissolved	530	a

a-acceptable

The matrix spike recovered high for dissolved calcium, dissolved iron, dissolved magnesium, dissolved manganese, dissolved potassium, and dissolved sodium. The dissolved results for iron, magnesium, manganese, and potassium in MW-7A were qualified as estimated (J), due to elevated MS recoveries. Although spike recoveries fell outside of acceptance limits for dissolved calcium and dissolved sodium, the parent sample concentrations were more than four times the spike concentrations added. There

is no expectation of acceptable recoveries at these spike levels, and qualification was not warranted.

### E. Duplicates

MW-DUP-1 was collected as a field duplicate of MW-7A and analyzed in support of this sampling event. The laboratory also analyzed the dissolved metals fraction of MW-7A in duplicate as part of their standard batch QC practices. Evaluation of these duplicate analyses were performed with acceptable relative percent differences (RPDs) and low-level comparability with exceptions noted in the table below.

Analyte	Original conc. (mg/L)	Duplicate conc. (mg/L)	RPD	Associated Sample
<i>Field Duplicate Pair: MW-7A : MW-DUP-1</i>				
Iron, Dissolved	1.38	0.957	36.2	MW-7A
Lead, Dissolved	0.00047	ND	N/C	MW-9A
Aluminum, Total	0.105	0.446	123	MW-4A
Zinc, Total	0.03409	ND	N/C	MW-5A
				WP-11
				WP-12
				MW-DUP-1
<i>Laboratory Duplicate Pair: MW-7A : MW-7ADUP</i>				
Antimony, Dissolved	ND	0.00067	N/C	MW-7A
				MW-9A
Copper, Dissolved	ND	0.00104	N/C	MW-4A
Silver, Dissolved	ND	0.00018	N/C	MW-5A
Zinc, Dissolved	ND	0.00415	N/C	WP-11
				WP-12
				MW-DUP-1

N/C – Not Calculated

The results for dissolved iron and total aluminum in all site samples were qualified as estimated (J, UJ) due to elevated RPD in the field duplicate pair. The results for dissolved antimony, dissolved copper, dissolved lead, dissolved silver, and total and dissolved zinc in all site samples were less than five times the RL and qualified as estimated (J, UJ) due to lack of confirmation in the field and/or laboratory duplicate.

### F. Internal Standards

The laboratory used five internal standards (ISs), (<sup>6</sup>Li, <sup>45</sup>Sc, <sup>74</sup>Ge, <sup>115</sup>In and <sup>209</sup>Bi) in support of sample analysis. The percent relative intensities (%RI) were monitored throughout the analytical run and were within the 70-130% limits in all site samples with exceptions noted in the table below.

Sample	<sup>6</sup> Li	<sup>45</sup> Sc	<sup>74</sup> Ge	<sup>115</sup> In	<sup>209</sup> Bi
MW-4A (Diss)	166	143	a	a	a
MW-4A (5x) (Diss)	140	a	a	a	a
MW-5A (Diss)	161	151	133	135	131

Sample	<sup>6</sup> Li	<sup>45</sup> Sc	<sup>74</sup> Ge	<sup>115</sup> In	<sup>209</sup> Bi
WP-11 (Diss)	a	132	a	a	a
WP-12 (Diss)	131	a	a	a	132
MW-9A (Total)	a	a	a	a	132
MW-4A (5x) (Total)	131	a	a	a	a
MW-4A (Total)	150	133	a	a	a
W-5A (Total)	158	142	a	a	a
WP-11 (Total)	147	a	a	a	a
WP-12	142	a	a	a	131

a-acceptable

The total and dissolved results for aluminum, beryllium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, nickel, and vanadium in MW-4A were qualified as estimated (J, UJ) due to IS %RI drift. The results for all dissolved metals in MW-5A were qualified as estimated (J, UJ) due to IS %RI drift. The dissolved results for aluminum, beryllium, calcium, chromium, cobalt, copper, iron, potassium, magnesium, manganese, nickel, sodium, and vanadium in WP-11 were qualified as estimated (J, UJ) due to IS %RI drift. The total and dissolved results for beryllium, lead and thallium in WP12 were qualified as estimated (J, UJ) due to IS %RI drift. The total results for lead and thallium in MW-9A were qualified as estimated (J, UJ) due to IS %RI drift. The total beryllium results for WP-11 were qualified as estimated (J, UJ) due to IS %RI drift.

### G. Total Vs. Dissolved

Total and dissolved metals analysis was performed on all samples. The relationship is based on the logic that total concentrations can equal or be greater than the dissolved concentrations but cannot be less. The percent differences between the sample concentrations were within the 10% acceptance limit. Any exceptions are noted in the table below:

Analyte	Total Conc. (mg/L)	Dissolved Conc. (mg/L)	% Difference
<b>Sample: MW-7A</b>			
Barium	0.1325	0.1345	1.5
Cobalt	0.00244	0.0025	2.5
Magnesium	14.3	14.4	0.69
Manganese	1.783	1.803	1.1
Nickel	0.00326	0.00332	1.8
Potassium	7.76	7.82	0.77
Sodium	245	255	4.1
<b>Sample: MW-9A</b>			
Sodium	183	184	0.55
<b>Sample: MW-4A</b>			
Antimony	0.00057	0.00074	31
Calcium	442	464	5.0
Magnesium	104	112	7.7
Manganese	0.5132	0.5207	1.5
Nickel	0.00198	0.00214	8.1
<b>Sample: MW-5A</b>			



Analyte	Total Conc. (mg/L)	Dissolved Conc. (mg/L)	% Difference
Barium	0.3751	0.3869	3.14
Cobalt	ND	0.00016	N/C
Copper	0.00202	0.00372	<b>84</b>
Nickel	0.00227	0.00231	1.8
Zinc	0.00428	0.00553	<b>29</b>
<b>Sample: WP-12</b>			
Zinc	ND	0.00493	N/C
<b>Sample: Field Blank</b>			
Aluminum	ND	0.00908	N/C
Antimony	ND	0.00052	N/C
Iron	ND	0.00371	N/C
Manganese	ND	0.00237	N/C
Sodium	ND	0.0662	N/C
<b>Sample: MW-DUP-1</b>			
Sodium	270	277	2.6

N/C – Not Calculated

Results for total and dissolved antimony in MW-4A and total and dissolved copper and zinc in MW-5A were qualified as estimated (J) because the dissolved concentrations exceeded the total concentrations by more than ten percent difference. The results for total and dissolved cobalt in MW-5A, total and dissolved zinc in WP-12, and total and dissolved aluminum, antimony, iron, manganese, and sodium in Field Blank were qualified as estimated (J, UJ), because the dissolved concentrations were greater than the non-detected and unconfirmed total concentrations. In instances where the dissolved concentrations exceeded the total concentrations by less than 10% difference, the difference can be attributed to experimental error, and qualification of data is not warranted.

## H. Analyte Quantitation

Dilutions were performed on one of the samples to bring the analyte concentrations within instrument calibration range. Sample WP-12 was analyzed at 5-fold dilution for total and dissolved potassium and sodium to bring the sample concentrations within the instrument calibration range. All sample concentrations, RLs, and MDLs were appropriately raised to reflect the dilution factors applied.

## IX. Cold Vapor – Total and Dissolved Mercury

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Field and Laboratory Duplicates	Y
Matrix Spike	Y
Post Digestion Spikes	N/A
Serial Dilution Analysis	N/A

Review Element	Acceptable?
Total vs. Dissolved	Y
Analyte Quantitation	Y

### A. Analyte Quantitation

Preparatory dilutions were performed on all total mercury samples due to limited sample volume. Sample MW-7A was analyzed at a 25-fold dilution, and MW-9A, MW-4A, MW-5A, WP-11, WP-12 and FIELD BLANK were analyzed at 5-fold dilutions. All sample concentrations, RLs, and MDLs were appropriately raised to reflect the dilution factors applied.

## X. PFAS

Review Element	Acceptable?
Calibration - IC, ICV, CC	Y
Laboratory and Field Blanks	N
Labeled Analogs	N
LCS/LCSD	Y
Field Duplicates	NA
MS/MSD	Y
Internal Standard Responses	N
Compound Identification	N

### A. Blanks

The following analyte was detected in an associated blank:

Blank	Analyte	Concentration	Affected Sample	Qualifier Applied
FIELD BLANK	6:2-FTS	19.8 ng/L	MW-7A MW-4A	U

Results for 6:2 FTS in MW-7A and MW-4A were qualified as not detected (U) at the RL due to field blank contamination.

### B. Labeled Analogs

Eighteen labeled analogs (also referred to as extraction standards) were used. Percent recoveries (%Rs) of the labeled analogs were assessed against validation criteria of 40-140%R. Exceedances that impacted sample results are detailed below:

Sample	Labeled Analog	%R	Native Compound	Qualifier Applied
MW-7A	M2-6:2 FTS	194	6:2 FTS	J+
	M8FOSA	21	FOSA	UJ

Sample	Labeled Analog	%R	Native Compound	Qualifier Applied
MW-9A	M8FOSA	14	FOSA	
MW-4A	M5PFPEA	31	PFPeA	
	M4PFHXA	33	PFHxA	
	M2-6:2 FTS	323	6:2 FTS	J+
FIELD BLANK	M8FOSA	35	FOSA	UJ

Results were qualified as follows:

- Results for 6:2 FTS in MW-7A and MW-4A were qualified as estimated with potential high bias (J+) due to high labeled analog recoveries.
- Results for FOSA in MW-7A and FIELD BLANK were qualified as estimated (UJ) due to low labeled analog recoveries.
- Results for PFPeA and PFHxA in MW-4A were qualified as estimated (UJ) due to low labeled analog recoveries.

Where a labeled analog recovery was greater than 140%R and the associated compound was not detected in the sample, no qualification of sample results was warranted, and the recovery is not detailed above.

### C. Internal Standard Responses

Recoveries of internal standards M3PFBA, M2PFOA, M4PFOS, and M2PFDA were within the acceptance limits of 50-150% with the following exceptions:

Sample	Internal Standard	%R	Affected Compounds	Qualifier Applied
MW-4A	M3PFBA	26	PFBA PFPeA	J, UJ
	M2PFOA	42	PFHxA PFHpA PFOA PFNA	

Results for PFBA, PFPeA, PFHxA, PFHpA, PFOA, and PFNA in MW-4A were qualified as estimated (J, UJ) due to low areas of the corresponding internal standard.

### D. Identification

The result for PFNA in MW-9A was flagged by the laboratory with an “F” to indicate that this represents an estimated maximum possible concentration (EMPC). The mass ratio for this compound was slightly outside the criteria established by the reference standards. In keeping with a conservative approach, which errs on the side of false positives, this result was qualified as presumptively present and estimated (NJ) because the mass ratio was outside the established range.

## XI. Hexavalent Chromium

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Field and Laboratory Duplicates	Y
Matrix Spike	Y
Analyte Quantitation	Y

### A. Analyte Quantitation

Sample MW-7A was analyzed at 5-fold dilution for hexavalent chromium because the sample had a low pH (1.9). The sample concentration, RL, and MDL were appropriately raised to reflect the dilution factor applied.

## XII. Cyanide, Total

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	N
Laboratory Control Samples	Y
Laboratory and Field Duplicates	N
Matrix Spike and Matrix Spike Duplicate	Y
Compound Quantitation	Y

### A. Blanks

Initial and continuing calibration blanks were analyzed at the proper frequencies. Two preparation blanks and one field blank (FIELD BLANK) for total cyanide were prepared and analyzed with the samples. The following blank was detected for cyanide:

Blank ID	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
Method Blank WG1639913- 1BLANK	Cyanide	0.001	MW-DUP-1	none

The sample associated with the method blank contamination was not detected and did not warrant qualification.

### B. Field Duplicates

MW-DUP-1 was collected as a field duplicate of MW-7A. MW-DUP-1 was not detected for cyanide, and MW-7A was detected at a low-level concentration between the MDL and RL (0.002 mg/L). Results for cyanide in MW-7A, MW-9A, MW-5A, WP-11, FIELD BLANK, and MW-DUP-1 were less than twice the reporting limit and were qualified as estimated (J, UJ) due to low level field duplicate imprecision.

### XIII. Sulfide, Total

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	N
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Laboratory Duplicates	n/a
Matrix Spike	n/a
Compound Quantitation	Y

n/a – not applicable (non-site sample)

#### A. Calibrations – ICs, ICVs, CCVs

A multi-point calibration was performed with an acceptable correlation coefficient ( $>0.995$ ). The percent difference for each calibration level was within the acceptance limit ( $<30\%$ ). The initial calibration verification (ICV) was within acceptance limits (90-110%). The closing calibration verification (CCV) standard associated with MW-7A and MW-9A demonstrated elevated recovery (112%) and was biased high, outside acceptance limits (90-110%). Both reported samples were not detected and did not warrant qualification.

### XIV. Nitrogen, Nitrite

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Laboratory Duplicates	Y
Matrix Spike	Y
Compound Quantitation	Y

All nitrogen, nitrite results were acceptable as reported and did not warrant qualification.

### XV. Nitrogen, Nitrate

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	N
Laboratory Control Samples	Y
Laboratory Duplicates	n/a
Matrix Spike	n/a
Compound Quantitation	Y

n/a – not applicable (non-site sample)

Initial and continuing calibration blanks were analyzed at the proper frequencies. One preparation blank for nitrogen, nitrate was prepared and analyzed with the samples. One

field blank (FIELD BLANK) was submitted with this SDG. The following negative concentrations were found in these blanks:

Blank ID	Analyte	Concentration (mg/L)	Associated Samples	Qualifier
CCB	Nitrogen, Nitrate	-0.03391	MW-7A MW-9A	NONE

NONE – Not Qualified

The continuing calibration blank (CCB) associated with the above samples indicated a negative instrument response slightly above the MDL and below the RL. Results for nitrogen, nitrate in MW-7A and MW-9A were more than ten times the negative blank and its effects and did not warrant qualification of samples.

## XVI. Sulfate

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Laboratory Duplicates	Y
Matrix Spike	Y
Compound Quantitation	Y

All sulfate results were acceptable as reported and did not warrant qualification.

## XVII. Ferrous Iron

Review Element	Acceptable?
Calibrations - ICs, ICVs, CCVs	Y
Laboratory and Field Blanks	Y
Laboratory Control Samples	Y
Laboratory Duplicates	n/a
Matrix Spike	Y
Compound Quantitation	Y

n/a – not applicable (non-site sample)

All ferrous iron results were acceptable as reported and did not warrant qualification.

## XVIII. Ferric Iron

Review Element	Acceptable?
Compound Quantitation	Y

All ferric iron results were acceptable as reported and did not warrant qualification.



**Attachment A**  
**Volatiles QC Summary Forms - Excursions**

# Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220505NICAL\  
 Data File : V30220505N18.D  
 Acq On : 05 May 2022 11:11 pm  
 Operator : VOA130:PD  
 Sample : C8260STD10PPB  
 Misc : WG1635374,ICAL  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 06 11:02:52 2022  
 Quant Method : I:\VOLATILES\VOA130\2022\220505NICAL\VOA130\_220505N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Fri May 06 10:59:18 2022  
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220505NICAL\V30220505N09.D  
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Fluorobenzene	5.568	96	263950	10.000	ug/L	0.00
Standard Area 1 = 270448			Recovery	=	97.60%	
59) Chlorobenzene-d5	8.549	117	197269	10.000	ug/L	0.00
Standard Area 1 = 200720			Recovery	=	98.28%	
79) 1,4-Dichlorobenzene-d4	10.030	152	105584	10.000	ug/L	0.00
Standard Area 1 = 111510			Recovery	=	94.69%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.586	113	71918	9.938	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	99.38%	
43) 1,2-Dichloroethane-d4	5.222	65	74091	9.990	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	99.90%	
60) Toluene-d8	7.266	98	258719	10.176	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	101.76%	
83) 4-Bromofluorobenzene	9.363	95	94901	10.213	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	102.13%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.961	85	49623	7.624	ug/L	98
3) Chloromethane	1.092	50	63216	9.602	ug/L	99
4) Vinyl chloride	1.136	62	66303	10.332	ug/L	96
5) Bromomethane	1.343	94	34206	11.061	ug/L	98
6) Chloroethane	1.429	64	41202	10.809	ug/L	95
7) Trichlorofluoromethane	1.530	101	90642	10.587	ug/L	98
8) Ethyl ether	1.772	74	30120	12.469	ug/L	73
10) 1,1-Dichloroethene	1.901	96	50989	10.273	ug/L	# 65
11) Carbon disulfide	1.906	76	158145	11.681	ug/L	96
12) Freon-113	1.942	101	58866	11.439	ug/L	95
13) Iodomethane	2.007	142	23564	7.383	ug/L	85
14) Acrolein	2.188	56	5304	9.652	ug/L	95
15) Methylene chloride	2.400	84	63243	10.366	ug/L	70
17) Acetone	2.467	43	10697	10.334	ug/L	97
18) trans-1,2-Dichloroethene	2.548	96	58424	10.529	ug/L	75
19) Methyl acetate	2.601	43	25490	10.136	ug/L	# 95
20) Methyl tert-butyl ether	2.693	73	117679	10.836	ug/L	94
21) tert-Butyl alcohol	2.857	59	11469	47.627	ug/L	# 84
22) Diisopropyl ether	3.139	45	157508	9.558	ug/L	# 91
23) 1,1-Dichloroethane	3.203	63	113931	10.771	ug/L	98
24) Halothane	3.359	117	47757	10.856	ug/L	98

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA105\2022\220511N-ICAL\  
 Data File : V05220511N18.d  
 Acq On : 11 May 2022 10:00 pm  
 Operator : VOA105:PD  
 Sample : C8260STD10PPB  
 Misc : WG1637761,ICAL  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 12:41:07 2022  
 Quant Method : I:\VOLATILES\VOA105\2022\220511N-ICAL\V105\_220511N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu May 12 12:36:57 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	90	0.00
2 TP	Dichlorodifluoromethane	0.265	0.312	-17.7	95	0.00
3 TP	Chloromethane	0.308	0.335	-8.8	100	0.00
4 TC	Vinyl chloride	0.269	0.299	-11.2	94	-0.01
5 TP	Bromomethane	0.152	0.189	-24.3#	122	0.00
6 TP	Chloroethane	0.147	0.162	-10.2	99	-0.01
7 TP	Trichlorofluoromethane	0.373	0.417	-11.8	94	-0.01
8 TP	Ethyl ether	0.080	0.103	-28.7#	131	0.00
10 TC	1,1-Dichloroethene	0.218	0.202	7.3	81	0.00
11 TP	Carbon disulfide	0.576	0.557	3.3	88	0.00
12 TP	Freon-113	0.216	0.208	3.7	78	0.00
13 TP	Iodomethane	0.344	0.278	19.2	73	0.00
14 TP	Acrolein	0.028	0.027	3.6	90	0.00
15 TP	Methylene chloride	0.241	0.226	6.2	87	0.00
17 TP	Acetone	* 10.000	8.321	16.8	92	0.00
18 TP	trans-1,2-Dichloroethene	0.239	0.228	4.6	85	0.00
19 TP	Methyl acetate	0.105	0.095	9.5	92	0.00
20 TP	Methyl tert-butyl ether	0.433	0.450	-3.9	102	0.00
21 TP	tert-Butyl alcohol	0.010	0.011	-10.0	118	0.00
22 TP	Diisopropyl ether	0.754	0.689	8.6	90	0.00
23 TP	1,1-Dichloroethane	0.424	0.414	2.4	90	0.00
24 TP	Halothane	0.188	0.172	8.5	81	0.00
25 TP	Acrylonitrile	0.047	0.048	-2.1	97	0.00
26 TP	Ethyl tert-butyl ether	0.597	0.558	6.5	93	0.00
27 TP	Vinyl acetate	0.476	0.413	13.2	90	0.00
28 TP	cis-1,2-Dichloroethene	0.272	0.249	8.5	86	0.00
29 TP	2,2-Dichloropropane	0.361	0.306	15.2	77	0.00
30 TP	Bromochloromethane	0.125	0.119	4.8	88	0.00
31 TP	Cyclohexane	0.419	0.357	14.8	73	0.00
32 TC	Chloroform	0.416	0.389	6.5	89	0.00
33 TP	Ethyl acetate	0.150	0.143	4.7	104	0.00
34 TP	Carbon tetrachloride	0.332	0.310	6.6	82	0.00
35 TP	Tetrahydrofuran	0.047	0.050	-6.4	101	0.00
36 S	Dibromofluoromethane	0.267	0.270	-1.1	91	0.00
37 TP	1,1,1-Trichloroethane	0.357	0.363	-1.7	90	0.00
39 TP	2-Butanone	0.062	0.059	4.8	104	0.00
40 TP	1,1-Dichloropropene	0.302	0.283	6.3	83	0.00
41 TP	Benzene	0.967	0.892	7.8	87	0.00
42 TP	tert-Amyl methyl ether	0.508	0.462	9.1	92	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA105\2022\220514B\  
 Data File : V05220514B02.d  
 Acq On : 14 May 2022 10:54 am  
 Operator : VOA105:PD  
 Sample : WG1639023-2  
 Misc : WG1639023,ICAL19020  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 14 11:15:42 2022  
 Quant Method : I:\VOLATILES\VOA105\2022\220514B\V105\_220511N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Thu May 12 12:36:57 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	96	0.00
2 TP	Dichlorodifluoromethane	0.265	0.305	-15.1	100	0.00
3 TP	Chloromethane	0.308	0.284	7.8	91	0.00
4 TC	Vinyl chloride	0.269	0.287	-6.7	97	0.00
5 TP	Bromomethane	0.152	0.206	-35.5#	143	0.00
6 TP	Chloroethane	0.147	0.195	-32.7#	127	0.00
7 TP	Trichlorofluoromethane	0.373	0.569	-52.5#	138	0.00
8 TP	Ethyl ether	0.080	0.097	-21.3#	133	0.00
10 TC	1,1-Dichloroethene	0.218	0.220	-0.9	95	0.00
11 TP	Carbon disulfide	0.576	0.596	-3.5	101	0.00
12 TP	Freon-113	0.216	0.246	-13.9	99	0.00
15 TP	Methylene chloride	0.241	0.242	-0.4	100	0.00
17 TP	Acetone	* 10.000	6.663	33.4#	81	0.00
18 TP	trans-1,2-Dichloroethene	0.239	0.241	-0.8	97	0.00
19 TP	Methyl acetate	0.105	0.082	21.9#	85	0.00
20 TP	Methyl tert-butyl ether	0.433	0.384	11.3	93	0.00
21 TP	tert-Butyl alcohol	0.01009	0.00533#	47.2#	59	0.00
22 TP	Diisopropyl ether	0.754	0.679	9.9	95	0.00
23 TP	1,1-Dichloroethane	0.424	0.415	2.1	97	0.00
24 TP	Halothane	0.188	0.196	-4.3	99	0.00
25 TP	Acrylonitrile	0.047	0.045	4.3	98	0.00
26 TP	Ethyl tert-butyl ether	0.597	0.516	13.6	92	0.00
27 TP	Vinyl acetate	0.476	0.386	18.9	91	0.00
28 TP	cis-1,2-Dichloroethene	0.272	0.264	2.9	98	0.00
29 TP	2,2-Dichloropropane	0.361	0.331	8.3	90	0.00
30 TP	Bromochloromethane	0.125	0.132	-5.6	106	0.00
31 TP	Cyclohexane	0.419	0.437	-4.3	95	0.00
32 TC	Chloroform	0.416	0.446	-7.2	110	0.00
33 TP	Ethyl acetate	0.150	0.120	20.0	93	0.00
34 TP	Carbon tetrachloride	0.332	0.343	-3.3	97	0.00
35 TP	Tetrahydrofuran	0.047	0.042	10.6	91	0.00
36 S	Dibromofluoromethane	0.267	0.283	-6.0	103	0.00
37 TP	1,1,1-Trichloroethane	0.357	0.406	-13.7	108	0.00
39 TP	2-Butanone	0.062	0.050	19.4	96	0.00
40 TP	1,1-Dichloropropene	0.302	0.320	-6.0	101	0.00
41 TP	Benzene	0.967	0.968	-0.1	101	0.00
42 TP	tert-Amyl methyl ether	0.508	0.407	19.9	87	0.00
43 S	1,2-Dichloroethane-d4	0.261	0.284	-8.8	102	0.00
44 TP	1,2-Dichloroethane	0.270	0.281	-4.1	109	0.00

# Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\220518N\  
 Data File : V30220518N01.D  
 Acq On : 18 May 2022 05:50 pm  
 Operator : VOA130:TMS  
 Sample : WG1640338-2  
 Misc : WG1640338,ICAL18995  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 18:09:32 2022  
 Quant Method : I:\VOLATILES\VOA130\2022\220518N\VOA130\_220505N\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Fri May 06 10:59:18 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	94	0.00
2 TP	Dichlorodifluoromethane	0.247	0.258	-4.5	88	0.00
3 TP	Chloromethane	0.249	0.283	-13.7	103	0.00
4 TC	Vinyl chloride	0.243	0.262	-7.8	94	0.00
5 TP	Bromomethane	0.117	0.103	12.0	85	0.00
6 TP	Chloroethane	0.144	0.152	-5.6	90	0.00
7 TP	Trichlorofluoromethane	0.324	0.340	-4.9	91	0.00
8 TP	Ethyl ether	0.092	0.072	21.7#	75	0.00
10 TC	1,1-Dichloroethene	0.188	0.190	-1.1	88	0.00
11 TP	Carbon disulfide	0.513	0.532	-3.7	92	0.00
12 TP	Freon-113	0.195	0.202	-3.6	88	0.00
13 TP	Iodomethane	* 10.000	6.073	39.3#	71	0.00
14 TP	Acrolein	0.021	0.021	0.0	93	0.00
15 TP	Methylene chloride	0.231	0.235	-1.7	93	0.00
17 TP	Acetone	0.039	0.036	7.7	82	0.00
18 TP	trans-1,2-Dichloroethene	0.210	0.224	-6.7	96	0.00
19 TP	Methyl acetate	0.095	0.082	13.7	79	0.00
20 TP	Methyl tert-butyl ether	0.411	0.337	18.0	78	0.00
21 TP	tert-Butyl alcohol	0.00912	0.00639#	29.9#	68	0.00
22 TP	Diisopropyl ether	0.624	0.593	5.0	94	0.00
23 TP	1,1-Dichloroethane	0.401	0.411	-2.5	93	0.00
24 TP	Halothane	0.167	0.171	-2.4	90	0.00
25 TP	Acrylonitrile	0.046	0.040	13.0	76	0.00
26 TP	Ethyl tert-butyl ether	0.529	0.442	16.4	84	0.00
27 TP	Vinyl acetate	0.307	0.297	3.3	105	0.00
28 TP	cis-1,2-Dichloroethene	0.241	0.245	-1.7	91	0.00
29 TP	2,2-Dichloropropane	0.290	0.324	-11.7	104	0.00
30 TP	Bromochloromethane	0.111	0.108	2.7	87	0.00
31 TP	Cyclohexane	0.371	0.406	-9.4	96	0.00
32 TC	Chloroform	0.413	0.410	0.7	91	0.00
33 TP	Ethyl acetate	0.120	0.078	35.0#	62	0.00
34 TP	Carbon tetrachloride	0.284	0.298	-4.9	90	0.00
35 TP	Tetrahydrofuran	0.036	0.031	13.9	75	0.00
36 S	Dibromofluoromethane	0.274	0.268	2.2	92	0.00
37 TP	1,1,1-Trichloroethane	0.323	0.335	-3.7	92	0.00
39 TP	2-Butanone	0.056	0.043	23.2#	85	0.00
40 TP	1,1-Dichloropropene	0.281	0.289	-2.8	90	0.00
41 TP	Benzene	0.862	0.901	-4.5	94	0.00
42 TP	tert-Amyl methyl ether	0.446	0.362	18.8	82	0.00

# Results Summary

## Form 1

### Volatile Organics by GC/MS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V05220514B19  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/14/22 17:31  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA105  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	4.0	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U





# Laboratory Control Sample Summary

## Form 3

### Volatiles

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1639023-3      Analysis Date : 05/14/22 10:54      File ID : V05220514B02  
 LCSD Sample ID : WG1639023-4      Analysis Date : 05/14/22 11:17      File ID : V05220514B03

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Trichloroethene	10	9.8	98	10	10	100	2	70-130	20
1,2-Dichlorobenzene	10	9.6	96	10	9.6	96	0	70-130	20
1,3-Dichlorobenzene	10	9.8	98	10	9.9	99	1	70-130	20
1,4-Dichlorobenzene	10	9.7	97	10	9.7	97	0	70-130	20
Methyl tert butyl ether	10	8.9	89	10	9.3	93	4	63-130	20
p/m-Xylene	20	22	110	20	22	110	0	70-130	20
o-Xylene	20	21	105	20	21	105	0	70-130	20
cis-1,2-Dichloroethene	10	9.7	97	10	10	100	3	70-130	20
Dibromomethane	10	10	100	10	11	110	10	70-130	20
1,2,3-Trichloropropane	10	7.8	78	10	8.5	85	9	64-130	20
Acrylonitrile	10	9.5	95	10	9.6	96	1	70-130	20
Styrene	20	21	105	20	22	110	5	70-130	20
Dichlorodifluoromethane	10	12	120	10	12	120	0	36-147	20
Acetone	10	6.7	67	10	9.4	94	34 Q	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	8.2	82	10	9.4	94	14	63-138	20
Vinyl acetate	10	8.1	81	10	8.5	85	5	70-130	20
4-Methyl-2-pentanone	10	7.9	79	10	8.8	88	11	59-130	20
2-Hexanone	10	7.7	77	10	8.5	85	10	57-130	20
Bromochloromethane	10	10	100	10	10	100	0	70-130	20
2,2-Dichloropropane	10	9.2	92	10	9.3	93	1	63-133	20
1,2-Dibromoethane	10	10	100	10	11	110	10	70-130	20
1,3-Dichloropropane	10	10	100	10	10	100	0	70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	9.9	99	1	64-130	20
Bromobenzene	10	9.6	96	10	9.6	96	0	70-130	20



**Attachment B**  
**Semi-volatiles Full Scan QC Summary Forms – Excursions**

# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 23459-07  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/09/22 09:30  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : AH  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	0.01	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.01	0.10	0.01	J
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 23459-09  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/09/22 09:46  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : AH  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	0.02	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	33	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.02	0.10	0.01	J
85-01-8	Phenanthrene	0.04	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	9.0	0.10	0.02	
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D  
 Lab File ID : 23459-09  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/09/22 18:03  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : ALS  
 Instrument ID : DAKOTA  
 GC Column : RTX5-MS  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	2.3	2.0	0.50	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635587-2      Analysis Date : 05/08/22 12:06      File ID : 635587-2  
 LCSD Sample ID : WG1635587-3      Analysis Date : 05/08/22 12:29      File ID : 635587-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Acenaphthene	18	12.	66	18	12.	66	0	37-111	30
1,2,4-Trichlorobenzene	18	11.	60	18	9.9	55	9	39-98	30
Hexachlorobenzene	18	12.	66	18	12.	66	0	40-140	30
Bis(2-chloroethyl)ether	18	12.	66	18	12.	64	3	40-140	30
2-Chloronaphthalene	18	12.	64	18	11.	60	6	40-140	30
1,2-Dichlorobenzene	18	11.	59	18	9.9	54	9	40-140	30
1,3-Dichlorobenzene	18	10.	58	18	9.8	54	7	40-140	30
1,4-Dichlorobenzene	18	11.	60	18	9.8	54	11	36-97	30
3,3'-Dichlorobenzidine	18	10.	57	18	11.	62	8	40-140	30
2,4-Dinitrotoluene	18	14.	80	18	15.	81	1	48-143	30
2,6-Dinitrotoluene	18	13.	74	18	14.	79	7	40-140	30
Fluoranthene	18	13.	72	18	13.	70	3	40-140	30
4-Chlorophenyl phenyl ether	18	12.	67	18	12.	65	3	40-140	30
4-Bromophenyl phenyl ether	18	12.	66	18	12.	66	0	40-140	30
Bis(2-chloroisopropyl)ether	18	12.	64	18	11.	61	5	40-140	30
Bis(2-chloroethoxy)methane	18	12.	67	18	12.	65	3	40-140	30
Hexachlorobutadiene	18	11.	58	18	9.9	54	7	40-140	30
Hexachlorocyclopentadiene	18	9.8	54	18	9.4	52	4	40-140	30
Hexachloroethane	18	10.	57	18	8.9	49	15	40-140	30
Isophorone	18	11.	62	18	11.	59	5	40-140	30
Naphthalene	18	12.	66	18	11.	62	6	40-140	30
Nitrobenzene	18	13.	71	18	13.	70	1	40-140	30
NDPA/DPA	18	13.	69	18	13.	72	4	40-140	30
n-Nitrosodi-n-propylamine	18	12.	66	18	12.	65	2	29-132	30
Bis(2-ethylhexyl)phthalate	18	13.	72	18	14.	78	8	40-140	30
Butyl benzyl phthalate	18	13.	72	18	13.	72	0	40-140	30





# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635587-2      Analysis Date : 05/08/22 12:06      File ID : 635587-2  
 LCSD Sample ID : WG1635587-3      Analysis Date : 05/08/22 12:29      File ID : 635587-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Di-n-butylphthalate	18	13.	70	18	13.	70	0	40-140	30
Di-n-octylphthalate	18	13.	71	18	14.	77	8	40-140	30
Diethyl phthalate	18	13.	70	18	13.	70	0	40-140	30
Dimethyl phthalate	18	12.	68	18	12.	66	3	40-140	30
Benzo(a)anthracene	18	13.	71	18	14.	74	4	40-140	30
Benzo(a)pyrene	18	13.	74	18	14.	77	4	40-140	30
Benzo(b)fluoranthene	18	14.	74	18	14.	75	1	40-140	30
Benzo(k)fluoranthene	18	13.	74	18	14.	76	3	40-140	30
Chrysene	18	13.	73	18	14.	76	4	40-140	30
Acenaphthylene	18	12.	66	18	12.	64	3	45-123	30
Anthracene	18	13.	70	18	13.	71	1	40-140	30
Benzo(ghi)perylene	18	14.	76	18	14.	74	3	40-140	30
Fluorene	18	12.	68	18	12.	68	0	40-140	30
Phenanthrene	18	12.	69	18	12.	69	0	40-140	30
Dibenzo(a,h)anthracene	18	14.	77	18	14.	77	0	40-140	30
Indeno(1,2,3-cd)pyrene	18	14.	78	18	14.	77	1	40-140	30
Pyrene	18	13.	70	18	13.	71	1	26-127	30
Biphenyl	18	12.	69	18	12.	65	6	40-140	30
4-Chloroaniline	18	10.	58	18	11.	63	8	40-140	30
2-Nitroaniline	18	15.	82	18	15.	80	2	52-143	30
3-Nitroaniline	18	14.	78	18	14.	79	1	25-145	30
4-Nitroaniline	18	14.	78	18	15.	81	4	51-143	30
Dibenzofuran	18	13.	70	18	13.	69	1	40-140	30
2-Methylnaphthalene	18	12.	64	18	11.	62	3	40-140	30
1,2,4,5-Tetrachlorobenzene	18	11.	61	18	11.	59	3	2-134	30
Acetophenone	18	12.	65	18	12.	64	2	39-129	30



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635587-2      Analysis Date : 05/08/22 12:06      File ID : 635587-2  
 LCSD Sample ID : WG1635587-3      Analysis Date : 05/08/22 12:29      File ID : 635587-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
2,4,6-Trichlorophenol	18	12.	69	18	13.	70	1	30-130	30
p-Chloro-m-cresol	18	14.	76	18	12.	69	10	23-97	30
2-Chlorophenol	18	12.	69	18	12.	66	4	27-123	30
2,4-Dichlorophenol	18	12.	68	18	12.	67	1	30-130	30
2,4-Dimethylphenol	18	12.	66	18	12.	64	3	30-130	30
2-Nitrophenol	18	15.	80	18	14.	77	4	30-130	30
4-Nitrophenol	18	13.	73	18	14.	79	8	10-80	30
2,4-Dinitrophenol	18	15.	83	18	18.	98	17	20-130	30
4,6-Dinitro-o-cresol	18	17.	92	18	17.	94	2	20-164	30
Pentachlorophenol	18	12.	67	18	13.	74	10	9-103	30
Phenol	18	8.9	49	18	9.1	50	2	12-110	30
2-Methylphenol	18	12.	65	18	12.	66	2	30-130	30
3-Methylphenol/4-Methylphenol	18	12.	67	18	12.	66	2	30-130	30
2,4,5-Trichlorophenol	18	13.	72	18	13.	69	4	30-130	30
Benzoic Acid	18	8.7	48	18	12.	65	30	10-164	30
Benzyl Alcohol	18	11.	63	18	12.	64	2	26-116	30
Carbazole	18	14.	74	18	13.	73	1	55-144	30



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : WG1635588-1  
 Client ID : WG1635588-1BLANK  
 Sample Location :  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 635588-1  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/07/22 19:40  
 Date Extracted : 05/06/22  
 Dilution Factor : 1  
 Analyst : JJW  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	0.02	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	0.01	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D  
 Lab File ID : 23459-01  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/09/22 15:26  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : ALS  
 Instrument ID : DAKOTA  
 GC Column : RTX5-MS  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-02  
 Client ID : MW-9A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 23459-02  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 14:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/09/22 08:08  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : AH  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	0.03	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	49	0.10	0.05	
56-55-3	Benzo(a)anthracene	0.05	0.10	0.02	J
50-32-8	Benzo(a)pyrene	0.04	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.08	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.03	0.10	0.01	J
218-01-9	Chrysene	0.04	0.10	0.01	J
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	0.02	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	0.04	0.10	0.01	J
86-73-7	Fluorene	0.04	0.10	0.01	J
85-01-8	Phenanthrene	0.08	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	0.10	0.01	J
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	15	0.10	0.02	
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-7A (L2223459-01)	61	45	68	58	50	64	0
MW-9A (L2223459-02)	54	41	65	58	61	65	0
MW-4A (L2223459-03)	58	47	66	57	73	61	0
MW-5A (L2223459-04)	51	37	62	52	54	59	0
WP-11 (L2223459-05)	49	40	60	57	53	58	0
WP-12 (L2223459-06)	39	33	47	46	47	49	0
FIELD BLANK (L2223459-07)	55	43	69	65	59	67	0
MW-DUP-1 (L2223459-09)	53	44	69	62	47	63	0
WG1635587-1BLANK	63	51	77	74	63	78	0
WG1635587-2LCS	64	49	69	65	70	71	0
WG1635587-3LCSD	62	50	67	64	75	69	0

#### QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(15-120) FBP = 2-FLUOROBIPHENYL  
(10-120) TBP = 2,4,6-TRIBROMOPHENOL  
(41-149) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-LVI





**Attachment C**  
**Semi-volatiles SIM QC Summary Forms – Excursions**

**Results Summary**  
**Form 1**  
**1,4 Dioxane by 8270D-SIM**

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Lab ID : L2223459-09  
Client ID : MW-DUP-1  
Sample Location : 60 MCLEAN AVE YONKERS NY  
Sample Matrix : WATER  
Analytical Method : 1,8270D-SIM  
Lab File ID : F2205122211  
Sample Amount : 260 ml  
Extraction Method : EPA 3510C  
Extract Volume : 2500 uL  
GPC Cleanup : N

Lab Number : L2223459  
Project Number : 15514  
Date Collected : 05/05/22 12:15  
Date Received : 05/05/22  
Date Analyzed : 05/12/22 20:59  
Date Extracted : 05/11/22  
Dilution Factor : 1  
Analyst : DB  
Instrument ID : PAH22  
GC Column : RTX-5  
%Solids : N/A  
Injection Volume : 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	ND	144	32.6	U



# Results Summary

## Form 1

### Semivolatile Organics by GC/MS-SIM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,8270D-SIM  
 Lab File ID : 23459-01  
 Sample Amount : 275 ml  
 Extraction Method : EPA 3510C  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/09/22 07:52  
 Date Extracted : 05/07/22  
 Dilution Factor : 1  
 Analyst : AH  
 Instrument ID : SV128  
 GC Column : RXI-5SiLM  
 %Solids : N/A  
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	0.02	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	47	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.03	0.10	0.01	J
85-01-8	Phenanthrene	0.03	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	11	0.10	0.02	
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



**Results Summary**  
**Form 1**  
**1,4 Dioxane by 8270D-SIM**

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Lab ID : L2223459-01  
Client ID : MW-7A  
Sample Location : 60 MCLEAN AVE YONKERS NY  
Sample Matrix : WATER  
Analytical Method : 1,8270D-SIM  
Lab File ID : F2205122207  
Sample Amount : 270 ml  
Extraction Method : EPA 3510C  
Extract Volume : 2500 uL  
GPC Cleanup : N

Lab Number : L2223459  
Project Number : 15514  
Date Collected : 05/04/22 11:30  
Date Received : 05/04/22  
Date Analyzed : 05/12/22 19:32  
Date Extracted : 05/11/22  
Dilution Factor : 1  
Analyst : DB  
Instrument ID : PAH22  
GC Column : RTX-5  
%Solids : N/A  
Injection Volume : 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	64.0	139	31.4	J



# Laboratory Control Sample Summary

## Form 3

### Semivolatiles

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1635588-2      Analysis Date : 05/07/22 19:08      File ID : 635588-2  
 LCSD Sample ID : WG1635588-3      Analysis Date : 05/07/22 19:24      File ID : 635588-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Acenaphthene	3.6	2.9	79	3.6	2.9	79	0	40-140	40
2-Chloronaphthalene	3.6	2.6	71	3.6	2.6	72	1	40-140	40
Fluoranthene	3.6	2.8	78	3.6	2.8	78	0	40-140	40
Hexachlorobutadiene	3.6	2.2	62	3.6	2.3	62	0	40-140	40
Naphthalene	3.6	2.6	72	3.6	2.6	73	1	40-140	40
Benzo(a)anthracene	3.6	2.9	80	3.6	2.9	81	1	40-140	40
Benzo(a)pyrene	3.6	2.6	72	3.6	2.7	74	3	40-140	40
Benzo(b)fluoranthene	3.6	2.8	77	3.6	2.9	80	4	40-140	40
Benzo(k)fluoranthene	3.6	3.0	84	3.6	3.1	85	1	40-140	40
Chrysene	3.6	2.8	78	3.6	3.1	84	7	40-140	40
Acenaphthylene	3.6	2.5	68	3.6	2.4	67	1	40-140	40
Anthracene	3.6	2.9	79	3.6	2.8	78	1	40-140	40
Benzo(ghi)perylene	3.6	3.1	86	3.6	3.1	85	1	40-140	40
Fluorene	3.6	2.9	79	3.6	2.9	80	1	40-140	40
Phenanthrene	3.6	2.8	78	3.6	2.9	80	3	40-140	40
Dibenzo(a,h)anthracene	3.6	3.3	90	3.6	3.3	90	0	40-140	40
Indeno(1,2,3-cd)pyrene	3.6	3.2	89	3.6	3.3	92	3	40-140	40
Pyrene	3.6	2.9	80	3.6	2.9	80	0	40-140	40
2-Methylnaphthalene	3.6	2.6	71	3.6	2.6	71	0	40-140	40
Pentachlorophenol	3.6	3.0	83	3.6	3.0	82	1	40-140	40
Hexachlorobenzene	3.6	3.0	82	3.6	3.2	87	6	40-140	40
Hexachloroethane	3.6	2.4	65	3.6	2.4	68	5	40-140	40



# Surrogate Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-7A (L2223459-01)	63	50	71	64	56	65	0
MW-9A (L2223459-02)	68	52	78	69	81	75	0
MW-4A (L2223459-03)	53	47	66	60	83	60	0
MW-5A (L2223459-04)	50	45	64	58	69	62	0
WP-11 (L2223459-05)	45	43	63	57	55	58	0
WP-12 (L2223459-06)	42	36	51	47	60	49	0
FIELD BLANK (L2223459-07)	53	46	68	62	64	61	0
MW-DUP-1 (L2223459-09)	51	46	70	63	45	62	0
WG1635588-1BLANK	64	55	85	74	86	78	0
WG1635588-2LCS	66	55	80	67	91	73	0
WG1635588-3LCSD	67	57	78	68	93	70	0

#### QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL  
(10-120) PHL = PHENOL-D6  
(23-120) NBZ = NITROBENZENE-D5  
(15-120) FBP = 2-FLUOROBIPHENYL  
(10-120) TBP = 2,4,6-TRIBROMOPHENOL  
(41-149) TPH = 4-TERPHENYL-D14

\* Values outside of QC limits

FORM II NYTCL-8270-SIM-LVI





**Attachment D**  
**Pesticide QC Summary Forms – Excursions**

# Surrogate Recovery Summary

## Form 2

### Pesticides

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

GC Column 1: CLPPesticides  
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
MW-7A (L2223459-01)	66	70	45	57			0
MW-9A (L2223459-02)	62	64	41	42			0
MW-4A (L2223459-03)	58	64	42	42			0
MW-5A (L2223459-04)	73	76	65	63			0
WP-11 (L2223459-05)	74	75	65	62			0
WP-12 (L2223459-06)	69	67	61	56			0
FIELD BLANK (L2223459-07)	75	75	64	62			0
MW-DUP-1 (L2223459-09)	59	61	50	44			0
WG1636383-1BLANK	73	74	69	67			0
WG1636383-2LCS	65	67	61	61			0
WG1636383-3LCSD	70	72	66	64			0
WG1637021-1BLANK	62	66	58	52			0
WG1637021-2LCS	65	71	53	52			0
WG1637021-3LCSD	62	66	55	52			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8081



# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1636383-2      Analysis Date : 05/10/22 17:46      File ID : 20220510a-08  
 LCSD Sample ID : WG1636383-3      Analysis Date : 05/10/22 17:58      File ID : 20220510a-09

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Delta-BHC	0.357	0.227	64	0.357	0.251	70	10	30-150	20
Lindane	0.357	0.254	71	0.357	0.278	78	9	30-150	20
Alpha-BHC	0.357	0.265	74	0.357	0.291	82	9	30-150	20
Beta-BHC	0.357	0.240	67	0.357	0.268	75	11	30-150	20
Heptachlor	0.357	0.244	68	0.357	0.271	76	11	30-150	20
Aldrin	0.357	0.240	67	0.357	0.269	75	11	30-150	20
Heptachlor epoxide	0.357	0.249	70	0.357	0.278	78	11	30-150	20
Endrin	0.357	0.245	69	0.357	0.276	77	12	30-150	20
Endrin aldehyde	0.357	0.229	64	0.357	0.262	73	14	30-150	20
Endrin ketone	0.357	0.253	71	0.357	0.294	82	15	30-150	20
Dieldrin	0.357	0.265	74	0.357	0.300	84	12	30-150	20
4,4'-DDE	0.357	0.262	73	0.357	0.302	85	14	30-150	20
4,4'-DDD	0.357	0.297	83	0.357	0.334	94	12	30-150	20
4,4'-DDT	0.357	0.247	69	0.357	0.288	81	15	30-150	20
Endosulfan I	0.357	0.228	64	0.357	0.258	72	12	30-150	20
Endosulfan II	0.357	0.249	70	0.357	0.284	80	13	30-150	20
Endosulfan sulfate	0.357	0.249	70	0.357	0.284	80	13	30-150	20
Methoxychlor	0.357	0.304	85	0.357	0.346	97	13	30-150	20
cis-Chlordane	0.357	0.211	59	0.357	0.239	67	12	30-150	20
trans-Chlordane	0.357	0.271	76	0.357	0.304	85	11	30-150	20



# Laboratory Control Sample Summary

## Form 3

### Pesticides

Client : Impact Environmental      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1637021-2      Analysis Date : 05/12/22 06:11      File ID : 18220511c-25  
 LCSD Sample ID : WG1637021-3      Analysis Date : 05/12/22 06:21      File ID : 18220511c-26

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Delta-BHC	0.357	0.239	67	0.357	0.240	67	0	30-150	20
Lindane	0.357	0.268	75	0.357	0.263	74	2	30-150	20
Alpha-BHC	0.357	0.313	88	0.357	0.283	79	10	30-150	20
Beta-BHC	0.357	0.284	80	0.357	0.276	77	3	30-150	20
Heptachlor	0.357	0.258	72	0.357	0.257	72	0	30-150	20
Aldrin	0.357	0.264	74	0.357	0.252	71	5	30-150	20
Heptachlor epoxide	0.357	0.240	67	0.357	0.245	69	2	30-150	20
Endrin	0.357	0.240	67	0.357	0.247	69	3	30-150	20
Endrin aldehyde	0.357	0.197	55	0.357	0.198	55	0	30-150	20
Endrin ketone	0.357	0.227	64	0.357	0.233	65	2	30-150	20
Dieldrin	0.357	0.247	69	0.357	0.256	72	4	30-150	20
4,4'-DDE	0.357	0.243	68	0.357	0.246	69	1	30-150	20
4,4'-DDD	0.357	0.249	70	0.357	0.259	73	4	30-150	20
4,4'-DDT	0.357	0.242	68	0.357	0.249	70	3	30-150	20
Endosulfan I	0.357	0.235	66	0.357	0.236	66	0	30-150	20
Endosulfan II	0.357	0.232	65	0.357	0.238	67	2	30-150	20
Endosulfan sulfate	0.357	0.216	61	0.357	0.222	62	3	30-150	20
Methoxychlor	0.357	0.242	68	0.357	0.245	69	1	30-150	20
cis-Chlordane	0.357	0.224	63	0.357	0.226	63	1	30-150	20
trans-Chlordane	0.357	0.282	79	0.357	0.273	76	3	30-150	20



**Attachment E**  
**PCB QC Summary Forms – Excursions**

# Surrogate Recovery Summary

## Form 2

### PCBs

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

GC Column 1: CLP-Pesticide  
GC Column 2: CLP-PesticideII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
MW-7A (L2223459-01)	77	75	71	70			0
MW-9A (L2223459-02)	83	69	68	65			0
MW-4A (L2223459-03)	84	81	69	69			0
MW-5A (L2223459-04)	79	75	83	88			0
WP-11 (L2223459-05)	70	64	70	72			0
WP-12 (L2223459-06)	78	75	81	82			0
FIELD BLANK (L2223459-07)	85	80	84	87			0
MW-DUP-1 (L2223459-09)	89	80	64	62			0
WG1640120-1BLANK	73	68	73	67			0
WG1640120-2LCS	83	77	87	83			0
WG1640120-3LCSD	75	67	71	70			0

#### QC LIMITS

(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

(30-150) DCBP = DECACHLOROBIPHENYL

\* Values outside of QC limits

FORM II NYTCL-8082-LVI





# Laboratory Control Sample Summary

## Form 3

### PCBs

Client : Impact Environmental                      Lab Number : L2223459  
 Project Name : 60 MCLEAN AVE                      Project Number : 15514  
 Matrix : WATER  
 LCS Sample ID : WG1640120-2    Analysis Date : 05/19/22 11:37    File ID : P2220519a-20  
 LCSD Sample ID : WG1640120-3    Analysis Date : 05/19/22 11:46    File ID : P2220519a-21

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Aroclor 1016	1.78	1.42	80	1.78	1.14	64	22	40-140	50
Aroclor 1260	1.78	1.40	78	1.78	1.16	65	19	40-140	50



**Attachment F**  
**Metals QC Summary Forms – Excursions**

# Alpha ICPMSQ Data

5/27/2022 9:35:11 AM



Analysis index: 4      Analysis started at: 5/26/2022 7:53:46 AM      Rack 0  
Analysis label: 0.2/20 Cal      User name: ALPHALABIMetals-Instrument      Vial 2

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.280 %	95.089 %	0.116 ppb	12.353 ppb	13.925 ppb	0.629 ppb	5.708 ppb	129.985 ppb	102.534 %
Concentration per Run 1	96.930 %	96.274 %	0.117 ppb	14.352 ppb	15.431 ppb	0.245 ppb	-3.632 ppb	110.179 ppb	100.431 %
Concentration per Run 2	98.884 %	98.433 %	0.130 ppb	11.548 ppb	13.581 ppb	0.743 ppb	-1.895 ppb	137.721 ppb	103.831 %
Concentration per Run 3	98.965 %	90.559 %	0.100 ppb	11.159 ppb	12.764 ppb	0.900 ppb	22.653 ppb	142.056 ppb	103.340 %
Concentration RSD	1.2 %	4.3 %	13.0 %	14.1 %	9.8 %	54.4 %	257.5 %	13.3 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.178 ppb	0.209 ppb	0.139 ppb	17.256 ppb	0.132 ppb	0.170 ppb	0.153 ppb	0.392 ppb	101.284 %
Concentration per Run 1	0.210 ppb	0.218 ppb	0.215 ppb	17.360 ppb	0.141 ppb	0.087 ppb	0.128 ppb	0.438 ppb	100.002 %
Concentration per Run 2	0.089 ppb	0.200 ppb	0.012 ppb	15.232 ppb	0.131 ppb	0.197 ppb	0.175 ppb	0.408 ppb	103.782 %
Concentration per Run 3	0.236 ppb	0.210 ppb	0.191 ppb	19.176 ppb	0.126 ppb	0.225 ppb	0.157 ppb	0.329 ppb	100.068 %
Concentration RSD	44.0 %	4.2 %	79.6 %	11.4 %	5.8 %	43.0 %	15.3 %	14.4 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)
Concentration average	0.253 ppb	0.008 ppb	0.252 ppb	100.472 %	0.127 ppb	0.131 ppb	100.152 %	0.075 ppb	0.168 ppb
Concentration per Run 1	0.232 ppb	0.069 ppb	0.243 ppb	99.885 %	0.117 ppb	0.129 ppb	99.909 %	0.014 ppb	0.161 ppb
Concentration per Run 2	0.289 ppb	-0.153 ppb	0.237 ppb	101.103 %	0.139 ppb	0.121 ppb	100.455 %	0.047 ppb	0.176 ppb
Concentration per Run 3	0.237 ppb	0.108 ppb	0.274 ppb	100.427 %	0.123 ppb	0.143 ppb	100.092 %	0.164 ppb	0.168 ppb
Concentration RSD	12.5 %	1,795.6 %	7.8 %	0.6 %	9.2 %	8.7 %	0.3 %	105.4 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.103 ppb	99.551 %	98.973 %	0.128 ppb	0.128 ppb	98.963 %
Concentration per Run 1	0.056 ppb	99.479 %	96.718 %	0.124 ppb	0.124 ppb	101.967 %
Concentration per Run 2	0.131 ppb	99.666 %	100.195 %	0.128 ppb	0.128 ppb	98.658 %
Concentration per Run 3	0.122 ppb	99.509 %	100.005 %	0.132 ppb	0.132 ppb	96.264 %
Concentration RSD	39.4 %	0.1 %	2.0 %	3.2 %	3.2 %	2.9 %

Alpha ICPMSQ Data

5/27/2022 8:34:48 AM



Analysis index: 12	Analysis started at: 5/26/2022 8:39:42 AM	Rack 4
Analysis label: LLCCV	User name: ALPHALABMetals-Instrument	Vial 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.151 %	101.905 %	0.318 ppb	106.278 ppb	73.370 ppb	13.175 ppb	109.576 ppb	152.249 ppb	98.141 %
Concentration per Run 1	98.392 %	99.831 %	0.307 ppb	104.993 ppb	70.985 ppb	11.349 ppb	111.349 ppb	144.581 ppb	96.982 %
Concentration per Run 2	98.213 %	102.117 %	0.319 ppb	104.810 ppb	69.911 ppb	12.769 ppb	103.386 ppb	134.494 ppb	98.902 %
Concentration per Run 3	97.859 %	103.768 %	0.328 ppb	109.031 ppb	79.213 ppb	13.194 ppb	113.994 ppb	177.673 ppb	98.540 %
Recovery Percentage 1			63.527 %	106.278 %	104.814 %	131.747 %	109.576 %	152.249 %	
Concentration RSD	0.3 %	1.9 %	3.3 %	2.2 %		3.0 %	5.0 %	14.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.509 ppb	0.561 ppb	1.127 ppb	68.774 ppb	0.575 ppb	2.126 ppb	1.220 ppb	11.657 ppb	106.721 %
Concentration per Run 1	5.563 ppb	0.615 ppb	0.943 ppb	68.109 ppb	0.550 ppb	1.996 ppb	1.221 ppb	11.956 ppb	103.478 %
Concentration per Run 2	5.389 ppb	0.541 ppb	1.217 ppb	68.019 ppb	0.573 ppb	2.005 ppb	1.217 ppb	11.332 ppb	106.628 %
Concentration per Run 3	5.574 ppb	0.527 ppb	1.220 ppb	70.196 ppb	0.603 ppb	2.378 ppb	1.223 ppb	11.683 ppb	110.056 %
Recovery Percentage 1	110.173 %	56.086 %	112.654 %	137.549 %	115.045 %	106.312 %	122.033 %	116.571 %	
Concentration RSD	1.9 %	8.4 %	14.1 %	1.8 %	4.6 %	10.3 %	0.3 %	2.7 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)
Concentration average	0.594 ppb	5.835 ppb	0.644 ppb	105.088 %	0.316 ppb	0.230 ppb	111.153 %	31.821 ppb	2.210 ppb
Concentration per Run 1	0.431 ppb	6.181 ppb	0.657 ppb	104.151 %	0.330 ppb	0.249 ppb	108.302 %	31.056 ppb	2.207 ppb
Concentration per Run 2	0.725 ppb	5.687 ppb	0.605 ppb	103.737 %	0.325 ppb	0.278 ppb	109.954 %	32.451 ppb	2.184 ppb
Concentration per Run 3	0.625 ppb	5.638 ppb	0.670 ppb	107.375 %	0.293 ppb	0.164 ppb	115.204 %	31.956 ppb	2.237 ppb
Recovery Percentage 1	118.745 %	116.704 %	128.853 %	78.952 %	115.213 %			1,060.705 %	55.238 %
Concentration RSD	25.1 %	5.2 %	5.3 %	1.9 %	6.2 %	25.7 %	3.2 %	2.2 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.582 ppb	109.012 %	111.071 %	0.651 ppb	0.589 ppb	110.909 %
Concentration per Run 1	0.520 ppb	109.360 %	109.975 %	0.657 ppb	0.580 ppb	112.331 %
Concentration per Run 2	0.669 ppb	106.805 %	109.390 %	0.652 ppb	0.591 ppb	110.579 %
Concentration per Run 3	0.558 ppb	110.872 %	113.846 %	0.665 ppb	0.597 ppb	109.818 %
Recovery Percentage 1	116.444 %			130.262 %	117.872 %	
Concentration RSD	13.3 %	1.9 %	2.2 %	2.1 %	1.5 %	1.2 %

Alpha ICPMSQ Data

5/27/2022 8:34:48 AM



Analysis index: 154	Analysis started at: 5/26/2022 10:50:52 PM	Rack 4
Analysis label: LLCCV	ALPHALABMetals-Instrument	Vial 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.117 %	100.296 %	0.336 ppb	104.603 ppb	75.475 ppb	13.021 ppb	115.630 ppb	180.531 ppb	75.019 %
Concentration per Run 1	80.654 %	96.147 %	0.306 ppb	107.671 ppb	70.518 ppb	12.075 ppb	127.646 ppb	194.435 ppb	73.899 %
Concentration per Run 2	84.229 %	103.895 %	0.357 ppb	103.831 ppb	81.761 ppb	12.784 ppb	104.973 ppb	193.907 ppb	76.652 %
Concentration per Run 3	84.467 %	100.847 %	0.346 ppb	102.307 ppb	74.147 ppb	14.204 ppb	114.270 ppb	153.251 ppb	74.505 %
Recovery Percentage 1			67.223 %	104.603 %	107.822 %	130.210 %	115.630 %	180.531 %	
Concentration RSD	2.6 %	3.9 %	8.0 %	2.6 %	7.6 %	8.3 %	9.9 %	13.1 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.417 ppb	0.626 ppb	1.288 ppb	89.081 ppb	0.537 ppb	2.209 ppb	1.399 ppb	14.099 ppb	101.386 %
Concentration per Run 1	5.540 ppb	0.648 ppb	1.264 ppb	89.632 ppb	0.555 ppb	2.335 ppb	1.472 ppb	13.631 ppb	99.441 %
Concentration per Run 2	5.199 ppb	0.592 ppb	1.262 ppb	86.188 ppb	0.483 ppb	2.008 ppb	1.433 ppb	14.127 ppb	102.307 %
Concentration per Run 3	5.511 ppb	0.637 ppb	1.337 ppb	91.423 ppb	0.575 ppb	2.285 ppb	1.291 ppb	14.539 ppb	102.410 %
Recovery Percentage 1	108.333 %	62.551 %	128.773 %	178.162 %	107.491 %	110.473 %	139.893 %	140.990 %	
Concentration RSD	3.5 %	4.8 %	3.3 %	3.0 %	9.0 %	8.0 %	6.8 %	3.2 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)
Concentration average	0.438 ppb	5.890 ppb	0.669 ppb	106.357 %	0.291 ppb	0.221 ppb	108.414 %	33.820 ppb	2.335 ppb
Concentration per Run 1	0.419 ppb	5.614 ppb	0.652 ppb	105.510 %	0.312 ppb	0.211 ppb	105.269 %	34.052 ppb	2.390 ppb
Concentration per Run 2	0.466 ppb	5.688 ppb	0.711 ppb	107.821 %	0.278 ppb	0.204 ppb	110.729 %	33.802 ppb	2.335 ppb
Concentration per Run 3	0.429 ppb	6.367 ppb	0.643 ppb	105.741 %	0.283 ppb	0.248 ppb	109.245 %	33.607 ppb	2.279 ppb
Recovery Percentage 1	87.579 %	117.799 %	133.777 %		72.698 %	110.540 %		1,127,343 %	58.368 %
Concentration RSD	5.6 %	7.0 %	5.5 %	1.2 %	6.3 %	10.8 %	2.6 %	0.7 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.669 ppb	115.415 %	118.590 %	1.501 ppb	0.618 ppb	115.843 %
Concentration per Run 1	0.752 ppb	114.711 %	115.501 %	1.570 ppb	0.619 ppb	115.862 %
Concentration per Run 2	0.683 ppb	117.401 %	119.218 %	1.518 ppb	0.604 ppb	117.100 %
Concentration per Run 3	0.573 ppb	114.133 %	121.052 %	1.414 ppb	0.630 ppb	114.568 %
Recovery Percentage 1	133.860 %			150.072 %	61.751 %	
Concentration RSD	13.5 %	1.5 %	2.4 %	5.3 %	2.2 %	1.1 %

# Form 1 METALS

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Lab ID : WG1642946-1  
Client ID : WG1642946-1BLANK  
Sample Location :  
Sample Matrix : WATER  
Analytical Method : 1,6020B  
Lab File ID : WG1643133.pdf  
Sample Amount : 50ml  
Digestion Method : EPA 3005A

Lab Number : L2223459  
Project Number : 15514  
Date Collected : NA  
Date Received : NA  
Date Analyzed : 05/26/22 10:10  
Dilution Factor : 1  
Analyst : SV  
Instrument ID : ICPMSQ  
%Solids : N/A  
Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00047	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	0.00022	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	0.0311	0.100	0.0293	J
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U





# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:41  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00908	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00052	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00029	0.00050	0.00017	J
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0371	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	0.00237	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	0.0662	0.100	0.0293	J
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 3 Blanks

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Instrument ID : ICPMSQ

Lab Number : L2223459  
Project Number : 15514

Parameter	Initial Calibration Blank		Continuing Calibration Blank(s)				Preparation Blank	
	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U
Arsenic	0.165	U	0.165	U	0.178	J	0.165	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U
Iron	22.5	J	32.7	J	36.6	J	33.6	J
Lead	0.343	U	0.343	U	0.343	U	0.343	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U
Thallium	0.672	J	0.636	J	0.651	J	0.657	J
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U



# Form 3 Blanks

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Instrument ID : ICPMSQ

Lab Number : L2223459  
Project Number : 15514

Parameter	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank
	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	Q
Aluminum			3.27	U	3.27	U	3.27	U	
Antimony			0.429	U	0.429	U	0.429	U	
Arsenic			0.165	U	0.165	U	0.165	U	
Barium			0.173	U	0.173	U	0.173	U	
Beryllium			0.107	U	0.107	U	0.107	U	
Cadmium			0.0599	U	0.0599	U	0.0599	U	
Calcium			39.4	U	39.4	U	39.4	U	
Chromium			0.178	U	0.178	U	0.178	U	
Cobalt			0.163	U	0.163	U	0.163	U	
Copper			0.384	U	0.384	U	0.384	U	
Iron			31.1	J	34.6	J	35.8	J	
Lead			0.343	U	0.343	U	0.343	U	
Magnesium			24.2	U	24.2	U	24.2	U	
Manganese			0.440	U	0.440	U	0.440	U	
Nickel			0.556	U	0.556	U	0.556	U	
Potassium			30.9	U	30.9	U	30.9	U	
Selenium			1.73	U	1.73	U	1.73	U	
Silver			0.163	U	0.163	U	0.163	U	
Sodium			29.3	U	29.3	U	29.3	U	
Thallium			0.767	J	0.703	J	0.804	J	
Vanadium			1.57	U	1.57	U	1.57	U	
Zinc			3.41	U	3.41	U	3.41	U	



# Form 3 Blanks

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Instrument ID : ICPMSQ

Lab Number : L2223459  
Project Number : 15514

Parameter	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank
	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	Q
Aluminum			3.27	U	3.27	U	3.27	U	
Antimony			0.429	U	0.429	U	0.429	U	
Arsenic			0.165	U	0.165	U	0.165	U	
Barium			0.173	U	0.173	U	0.173	U	
Beryllium			0.107	U	0.107	U	0.107	U	
Cadmium			0.0599	U	0.0599	U	0.0599	U	
Calcium			39.4	U	39.4	U	39.4	U	
Chromium			0.178	U	0.178	U	0.178	U	
Cobalt			0.163	U	0.163	U	0.163	U	
Copper			0.384	U	0.384	U	0.384	U	
Iron			31.1	J	34.6	J	35.8	J	
Lead			0.343	U	0.343	U	0.343	U	
Magnesium			24.2	U	24.2	U	24.2	U	
Manganese			0.440	U	0.440	U	0.440	U	
Nickel			0.556	U	0.556	U	0.556	U	
Potassium			30.9	U	30.9	U	30.9	U	
Selenium			1.73	U	1.73	U	1.73	U	
Silver			0.163	U	0.163	U	0.163	U	
Sodium			29.3	U	29.3	U	29.3	U	
Thallium			0.767	J	0.703	J	0.804	J	
Vanadium			1.57	U	1.57	U	1.57	U	
Zinc			3.41	U	3.41	U	3.41	U	



# Form 4a

## Interference Check Sample

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Instrument ID : ICPMSQ

Lab Number : L2223459  
 Project Number : 15514  
 Concentration Units : ug/l

Analyte	True		Initial Found				Final Found			
	Lab ID :		R1568727-3							
	Analysis Date :		05/26/22 08:44							
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
	A	AB	A	%R	AB	%R	A	%R	AB	%R
Aluminum	20000		19000	95						
Antimony			0.0638							
Arsenic			-0.0899							
Barium			0.240							
Beryllium			-0.00398							
Cadmium			0.0571							
Calcium	60000		58700	98						
Chromium			0.328							
Cobalt			0.472							
Copper			1.20							
Iron	50000		47900	96						
Lead			0.136							
Magnesium	20000		19200	96						
Manganese			0.851							
Nickel			0.614							
Potassium	20000		19500	98						
Selenium			-0.0295							
Silver			0.00202							
Sodium	50000		50300	101						
Thallium			0.124							
Vanadium			-0.0825							
Zinc			5.04							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%



## Form 5a Matrix Spike

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Client Sample ID : MW-7A  
 Lab Sample ID : L2223459-01  
 Matrix Spike : WG1642946-3  
 Matrix Spike Dup :

Lab Number : L2223459  
 Project Number : 15514  
 Matrix : WATER

MS Analysis Date : 05/26/22 10:37  
 MSD Analysis Date :

Parameter	Sample Conc. (mg/l)	Matrix Spike Sample		%R	Matrix Spike Duplicate		%R	RPD	Recovery Limits	RPD Limit
		Spike Added (mg/l)	Spike Conc. (mg/l)		Spike Added (mg/l)	Spike Conc. (mg/l)				
Aluminum, Dissolved	0.00376J	2	2.42	121					75-125	20
Antimony, Dissolved	ND	0.5	0.5689	114					75-125	20
Arsenic, Dissolved	ND	0.12	0.1501	125					75-125	20
Barium, Dissolved	0.1345	2	2.522	119					75-125	20
Beryllium, Dissolved	ND	0.05	0.05820	116					75-125	20
Cadmium, Dissolved	ND	0.053	0.06459	122					75-125	20
Calcium, Dissolved	51.2	10	72.0	208 Q					75-125	20
Chromium, Dissolved	0.00020J	0.2	0.2340	117					75-125	20
Cobalt, Dissolved	0.00250	0.5	0.5735	114					75-125	20
Copper, Dissolved	ND	0.25	0.2911	116					75-125	20
Iron, Dissolved	1.38	1	2.98	160 Q					75-125	20
Lead, Dissolved	0.00047J	0.53	0.6432	121					75-125	20
Magnesium, Dissolved	14.4	10	29.7	153 Q					75-125	20
Manganese, Dissolved	1.803	0.5	2.821	204 Q					75-125	20
Nickel, Dissolved	0.00332	0.5	0.5717	114					75-125	20
Potassium, Dissolved	7.82	10	21.1	133 Q					75-125	20
Selenium, Dissolved	ND	0.12	0.149	124					75-125	20
Silver, Dissolved	ND	0.05	0.06148	123					75-125	20
Sodium, Dissolved	255.	10	308.	530 Q					75-125	20
Thallium, Dissolved	0.00025J	0.12	0.1448	121					75-125	20
Vanadium, Dissolved	ND	0.5	0.5778	116					75-125	20
Zinc, Dissolved	ND	0.5	0.5621	112					75-125	20





## Form 5b Post Digest Spike Recovery

Client	: Impact Environmental	Lab Number	: L2223459
Project Name	: 60 MCLEAN AVE	Project Number	: 15514
Client Sample ID	: MW-7A	Matrix	: WATER
Lab Sample ID	: L2223459-01		
Post Spike	: WG1642946-5	PS Analysis Date	: 05/26/22 10:42

Parameter	Sample Conc. (mg/l)	Post Spike Sample		%R	Recovery Limits
		Spike Added (mg/l)	Spike Conc. (mg/l)		
Iron, Dissolved	1.38	50	47.5	92	75-125
Magnesium, Dissolved	14.4	50	61.8	95	75-125
Manganese, Dissolved	1.803	0.5	2.371	114	75-125
Potassium, Dissolved	7.82	50	56.4	97	75-125



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 10:52  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00376	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.1345	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	51.2	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00020	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00250	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	1.38	0.0500	0.0191	
7439-92-1	Lead, Dissolved	0.00047	0.00100	0.00034	J
7439-95-4	Magnesium, Dissolved	14.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.803	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00332	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	7.82	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	255.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00025	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/26/22 11:46  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00860	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.1406	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	50.9	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00222	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.957	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	15.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.369	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00351	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	6.63	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	277.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 25ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:33  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.105	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.1325	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	51.6	0.100	0.0394	
7440-47-3	Chromium, Total	0.00047	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00244	0.00050	0.00016	
7440-50-8	Copper, Total	0.00086	0.00100	0.00038	J
7439-89-6	Iron, Total	1.54	0.0500	0.0191	
7439-92-1	Lead, Total	0.00092	0.00100	0.00034	J
7439-95-4	Magnesium, Total	14.3	0.0700	0.0242	
7439-96-5	Manganese, Total	1.783	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00326	0.00200	0.00055	
7440-09-7	Potassium, Total	7.76	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	245.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.03409	0.01000	0.00341	



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:13  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00032	0.00050	0.00017	J
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	0.00029	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



## Form 6 Lab Duplicates

**Client** : Impact Environmental  
**Project Name** : 60 MCLEAN AVE  
**Client Sample ID** : MW-7A  
**Lab Sample ID** : L2223459-01  
**Dup Sample ID** : WG1642946-4

**Lab Number** : L2223459  
**Project Number** : 15514  
**Matrix** : WATER  
**Analysis Date** : 05/26/22 10:52  
**DUP Analysis Date** : 05/26/22 10:47

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Aluminum, Dissolved	0.00376J	0.00663J	NC	20
Antimony, Dissolved	ND	0.00067J	NC	20
Arsenic, Dissolved	ND	ND	NC	20
Barium, Dissolved	0.1345	0.1309	3	20
Beryllium, Dissolved	ND	ND	NC	20
Cadmium, Dissolved	ND	ND	NC	20
Calcium, Dissolved	51.2	50.6	1	20
Chromium, Dissolved	0.00020J	ND	NC	20
Cobalt, Dissolved	0.00250	0.00245	2	20
Copper, Dissolved	ND	0.00104	NC	20
Iron, Dissolved	1.38	1.38	0	20
Lead, Dissolved	0.00047J	0.00053J	NC	20
Magnesium, Dissolved	14.4	14.0	3	20
Manganese, Dissolved	1.803	1.813	1	20
Nickel, Dissolved	0.00332	0.00317	5	20
Potassium, Dissolved	7.82	7.50	4	20
Selenium, Dissolved	ND	ND	NC	20
Silver, Dissolved	ND	0.00018J	NC	20
Sodium, Dissolved	255.	247.	3	20
Thallium, Dissolved	0.00025J	0.00073J	NC	20
Vanadium, Dissolved	ND	ND	NC	20
Zinc, Dissolved	ND	0.00415J	NC	20





# Form 15

## ICP-MS Internal Standards Relative Intensity Summary

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Instrument ID : ICPMSQ  
 Start Date : 05/26/22

Lab Number : L2223459  
 Project Number : 15514  
 Analysis Method : 1,6020B  
 End Date : 05/26/22

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1568727-1 ICV	08:22:47	97	102	110	114	115
R1568727-2 ICB	08:27:39	89	89	97	100	103
R1568727-3 ICSEA	08:44:36	100	101	117	117	121
R1568727-4 CCV	08:54:17	99	109	112	114	119
R1568727-5 CCB	08:59:09	91	92	99	101	106
R1568727-6 CCV	09:49:04	112	120	120	121	124
R1568727-7 CCB	09:53:56	101	100	108	111	109
WG1642946-1 BLANK	10:10:35	112	119	119	118	120
WG1642946-2 LCS	10:33:04	116	129	125	126	126
WG1642946-3 MS	10:37:54	109	109	122	127	131
WG1642946-5 PS	10:42:45	102	100	123	127	130
WG1642946-4 DUP	10:47:32	110	114	125	127	129
L2223459-01	10:52:24	117	114	128	127	125
L2223459-02	10:57:15	124	126	128	128	128
L2223459-03	11:02:02	166	143	122	121	114
L2223459-04	11:06:50	161	151	133	135	131
WG1642946-6 SERDIL	11:11:39	153	147	128	129	129
R1568727-8 CCV	11:16:26	141	147	119	124	132
R1568727-9 CCB	11:21:19	121	115	111	116	121
L2223459-05	11:28:05	128	132	128	124	130
L2223459-06	11:32:52	131	124	123	128	132
L2223459-07	11:41:40	129	128	120	123	129
L2223459-09	11:46:29	128	124	122	123	126
L2223459-03	11:51:18	140	119	127	129	130
R1568727-11 CCV	12:29:21	128	134	119	124	135
R1568727-12 CCB	12:34:14	110	102	106	114	120
WG1642946-2 LCS	13:07:26	119	112	121	125	134



# Form 15

## ICP-MS Internal Standards Relative Intensity Summary

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Instrument ID : ICPMSQ  
 Start Date : 05/26/22

Lab Number : L2223459  
 Project Number : 15514  
 Analysis Method : 1,6020B  
 End Date : 05/26/22

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1568727-1 ICV	08:22:47	97	102	110	114	115
R1568727-2 ICB	08:27:39	89	89	97	100	103
R1568727-3 ICSEA	08:44:36	100	101	117	117	121
R1568727-4 CCV	08:54:17	99	109	112	114	119
R1568727-5 CCB	08:59:09	91	92	99	101	106
R1568727-6 CCV	09:49:04	112	120	120	121	124
R1568727-7 CCB	09:53:56	101	100	108	111	109
R1568727-8 CCV	11:16:26	141	147	119	124	132
R1568727-9 CCB	11:21:19	121	115	111	116	121
R1568727-11 CCV	12:29:21	128	134	119	124	135
R1568727-12 CCB	12:34:14	110	102	106	114	120
R1568727-13 CCV	13:14:38	114	114	117	122	132
R1568727-14 CCB	13:19:30	100	95	104	111	118
WG1642418-1 BLANK	14:01:51	104	96	110	115	124
WG1642418-2 LCS	14:10:41	100	92	121	126	131
WG1642418-3 MS	14:15:28	109	103	123	127	134
WG1642418-4 MSD	14:20:16	109	102	124	128	134
WG1642418-7 MS	14:25:05	111	105	122	126	133
WG1642418-8 MSD	14:29:54	109	102	125	127	134
WG1642418-6 SERDIL	14:39:33	104	92	128	134	132
R1568727-15 CCV	14:49:10	110	117	120	128	134
R1568727-16 CCB	14:54:03	96	90	107	112	121
R1568727-17 CCV	15:02:26	104	111	120	127	136
R1568727-18 CCB	15:07:17	93	87	108	115	122
L2223459-07	15:13:20	98	98	113	119	128
L2223459-01	15:33:55	120	120	127	128	128
L2223459-02	15:38:44	121	110	123	128	132



# Form 15

## ICP-MS Internal Standards Relative Intensity Summary

Client	: Impact Environmental	Lab Number	: L2223459
Project Name	: 60 MCLEAN AVE	Project Number	: 15514
Instrument ID	: ICPMSQ	Analysis Method	: 1,6020B
Start Date	: 05/26/22	End Date	: 05/26/22

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
L2223459-04	15:48:20	158	142	129	130	129
L2223459-05	15:53:08	147	128	126	127	129
L2223459-06	15:57:57	142	124	126	128	131
R1568727-19 CCV	16:02:46	136	136	120	124	131
R1568727-20 CCB	16:07:39	114	102	106	110	117
R1568727-21 CCV	16:14:45	128	136	115	121	131
R1568727-22 CCB	16:19:37	110	98	106	110	119
L2223459-09	16:25:36	124	107	121	124	130
R1568727-23 CCV	17:13:47	137	138	120	126	130
R1568727-24 CCB	17:18:40	110	97	109	113	115
L2223459-03	18:00:53	131	111	128	129	127
R1568727-25 CCV	18:15:21	127	127	120	126	131
R1568727-26 CCB	18:20:13	106	96	104	112	115
L2223459-03	19:10:31	150	133	122	122	120
R1568727-27 CCV	19:15:19	145	139	120	123	127
R1568727-28 CCB	19:20:12	121	108	107	112	113



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 10:52  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00376	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.1345	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	51.2	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00020	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00250	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	1.38	0.0500	0.0191	
7439-92-1	Lead, Dissolved	0.00047	0.00100	0.00034	J
7439-95-4	Magnesium, Dissolved	14.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.803	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00332	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	7.82	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	255.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00025	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-01  
 Client ID : MW-7A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 25ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:30  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:33  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.105	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.1325	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	51.6	0.100	0.0394	
7440-47-3	Chromium, Total	0.00047	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00244	0.00050	0.00016	
7440-50-8	Copper, Total	0.00086	0.00100	0.00038	J
7439-89-6	Iron, Total	1.54	0.0500	0.0191	
7439-92-1	Lead, Total	0.00092	0.00100	0.00034	J
7439-95-4	Magnesium, Total	14.3	0.0700	0.0242	
7439-96-5	Manganese, Total	1.783	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00326	0.00200	0.00055	
7440-09-7	Potassium, Total	7.76	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	245.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.03409	0.01000	0.00341	



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-02  
 Client ID : MW-9A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 14:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 10:57  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00030	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.06701	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	38.6	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00149	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	2.79	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	11.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.6428	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00152	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	4.91	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	184.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00016	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-02  
 Client ID : MW-9A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 14:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:38  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	2.70	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00086	0.00050	0.00016	
7440-39-3	Barium, Total	0.08924	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	39.4	0.100	0.0394	
7440-47-3	Chromium, Total	0.00549	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00379	0.00050	0.00016	
7440-50-8	Copper, Total	0.00732	0.00100	0.00038	
7439-89-6	Iron, Total	8.56	0.0500	0.0191	
7439-92-1	Lead, Total	0.00326	0.00100	0.00034	
7439-95-4	Magnesium, Total	12.5	0.0700	0.0242	
7439-96-5	Manganese, Total	0.7852	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00645	0.00200	0.00055	
7440-09-7	Potassium, Total	5.30	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	183.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00679	0.00500	0.00157	
7440-66-6	Zinc, Total	0.01764	0.01000	0.00341	





# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-03  
 Client ID : MW-4A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 12:20  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:02  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00612	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00074	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00067	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.02342	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	464.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00018	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00174	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0829	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	112.	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.5207	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00214	0.00200	0.00055	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	0.01837	0.01000	0.00341	



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-03  
 Client ID : MW-4A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 12:20  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:02  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00612	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00074	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00067	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.02342	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	464.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00018	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00174	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0829	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	112.	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.5207	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00214	0.00200	0.00055	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	0.01837	0.01000	0.00341	



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-03  
 Client ID : MW-4A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 12:20  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 19:10  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.0226	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00057	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00150	0.00050	0.00016	
7440-39-3	Barium, Total	0.03978	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	442.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00055	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00189	0.00050	0.00016	
7440-50-8	Copper, Total	0.00130	0.00100	0.00038	
7439-89-6	Iron, Total	13.0	0.0500	0.0191	
7439-92-1	Lead, Total	0.00202	0.00100	0.00034	
7439-95-4	Magnesium, Total	104.	0.0700	0.0242	
7439-96-5	Manganese, Total	0.5132	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00198	0.00200	0.00055	J
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.04678	0.01000	0.00341	



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-04  
 Client ID : MW-5A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 13:15  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:06  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.0123	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.03869	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	29.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00028	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00016	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00372	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	11.6	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00139	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00231	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	4.61	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	51.6	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	0.00553	0.01000	0.00341	J



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-04  
 Client ID : MW-5A  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 13:15  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:48  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.0200	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.03751	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	29.6	0.100	0.0394	
7440-47-3	Chromium, Total	0.00044	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	0.00202	0.00100	0.00038	
7439-89-6	Iron, Total	0.0712	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	11.9	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00150	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00227	0.00200	0.00055	
7440-09-7	Potassium, Total	4.61	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	51.7	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.00428	0.01000	0.00341	J



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-06  
 Client ID : WP-12  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 13:20  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:32  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.0230	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.05018	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	41.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00062	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	0.00051	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	0.111	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	14.5	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00270	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	4.46	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	123.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00016	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	0.00493	0.01000	0.00341	J



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-06  
 Client ID : WP-12  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 13:20  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:57  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.0592	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.05096	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	42.5	0.100	0.0394	
7440-47-3	Chromium, Total	0.00214	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	0.00077	0.00100	0.00038	J
7439-89-6	Iron, Total	0.267	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	15.1	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00328	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00073	0.00200	0.00055	J
7440-09-7	Potassium, Total	4.63	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	127.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U





# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 11:41  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00908	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00052	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00029	0.00050	0.00017	J
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0371	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	0.00237	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	0.0662	0.100	0.0293	J
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1

## METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/26/22 15:13  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00032	0.00050	0.00017	J
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	0.00029	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/26/22 11:46  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Dissolved	0.00860	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.1406	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	50.9	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00222	0.00050	0.00016	
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.957	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	15.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.369	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00351	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	6.63	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	277.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U



# Form 1 METALS

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,6020B  
 Lab File ID : WG1643133.pdf  
 Sample Amount : 50ml  
 Digestion Method : EPA 3005A

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/26/22 16:25  
 Dilution Factor : 1  
 Analyst : SV  
 Instrument ID : ICPMSQ  
 %Solids : N/A  
 Date Digested : 05/25/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.446	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.1489	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	54.3	0.100	0.0394	
7440-47-3	Chromium, Total	0.00134	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00253	0.00050	0.00016	
7440-50-8	Copper, Total	0.00150	0.00100	0.00038	
7439-89-6	Iron, Total	1.99	0.0500	0.0191	
7439-92-1	Lead, Total	0.00102	0.00100	0.00034	
7439-95-4	Magnesium, Total	15.9	0.0700	0.0242	
7439-96-5	Manganese, Total	1.457	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00431	0.00200	0.00055	
7440-09-7	Potassium, Total	6.79	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	270.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00030	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



**Attachment G**  
**pfas QC Summary Forms – Excursions**

# Results Summary

## Form 1

### Perfluorinated Alkyl Acids by Isotope Dilution

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 134,LCMSMS-ID  
 Lab File ID : I20370  
 Sample Amount : 272.23 g  
 Extraction Method : ALPHA 23528  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/20/22 10:13  
 Date Extracted : 05/17/22  
 Dilution Factor : 1  
 Analyst : RS  
 Instrument ID : LCMS01  
 GC Column : Acquity UPLC BEH C18  
 %Solids : N/A  
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.84	0.375	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.84	0.364	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.84	0.218	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.84	0.301	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.84	0.207	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.84	0.345	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.84	0.217	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	19.8	1.84	1.22	
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.84	0.632	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.84	0.286	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.84	0.463	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.84	0.279	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.84	1.11	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.84	0.595	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.84	0.239	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.84	0.900	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.84	0.533	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.84	0.738	U



# Results Summary

## Form 1

### Perfluorinated Alkyl Acids by Isotope Dilution

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-07  
 Client ID : FIELD BLANK  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 134,LCMSMS-ID  
 Lab File ID : I20370  
 Sample Amount : 272.23 g  
 Extraction Method : ALPHA 23528  
 Extract Volume : 1000 uL  
 GPC Cleanup : N

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/04/22 11:00  
 Date Received : 05/04/22  
 Date Analyzed : 05/20/22 10:13  
 Date Extracted : 05/17/22  
 Dilution Factor : 1  
 Analyst : RS  
 Instrument ID : LCMS01  
 GC Column : Acquity UPLC BEH C18  
 %Solids : N/A  
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.84	0.342	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.84	0.300	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.84	0.228	U
NONE	PFOA/PFOS, Total	ND	1.84	0.217	U





Alpha Analytical Inc.  
Dataset: C:\MassLynx\Data\2022\220519\_537ISO.PRO\Data\wg1640657-E.qld  
Last Altered: Friday, May 20, 2022 19:40:39 Eastern Daylight Time  
Printed: Friday, May 20, 2022 19:41:13 Eastern Daylight Time

Method: C:\MassLynx\Data\2022\220519\_537ISO.PRO\MethDB\537ISO\_Q\_220427\_RT.mdb 17 May 2022 09:16:45  
Calibration: C:\MassLynx\Data\2022\220519\_537ISO.PRO\CurveDB\220427\_ICAL.cdb 28 Apr 2022 13:10:49

ID: L2223459-02  
Name: I20367  
Date: 20-May-2022  
Time: 09:23:47  
Description: WG1640657,WG1639295,ICAL18975  
Instrument: XEVO-TQSmicro#QEA0276  
User: LCMS01:RS  
Inlet Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\LCMS\_537\_ISO\_FULL  
Tune Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\220113\_TUNE.IPR  
MS Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\537ISO\_M\_SPAN2\_DOD\_TOP\_220429.EXP

	Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Ratio Flag	%Rec
1	PFBA	375-22-4	2.13	213.032 > 169.022	4859	M4	1.300		na	
2	M3PFBA	INT STD	2.14	216.009 > 171.999	37658		7.270		na	72.7
3	MPFBA	INT STD	2.14	217.001 > 171.999	36869		8.851		na	88.5
4	PFPeA	2706-90-3	4.89	263.039 > 219.03	9976	M4	1.688		na	
5	M5PFPEA	INT STD	4.89	268.001 > 222.999	54834		11.616		na	116.2
6	PFBS	375-73-5	5.52	299.092 > 80.062	2822		1.068	2.10	NO	
7	M3PFBS	INT STD	5.52	302.069 > 80.062	20624		9.507		na	102.0
8	4:2FTS	757124-72-4		327.146 > 307.139			ND		YES	
9	M2-4:2FTS	INT STD	6.67	329.13 > 309.124	9526		13.135		na	140.0
10	PFHxA	307-24-4	6.75	313.047 > 269.037	11154		1.358	14.04	NO	
11	M5PFHxA	INT STD	6.75	318.009 > 273.007	76354		8.133		na	81.3
12	PFPeS	2706-91-4	7.07	349.1 > 80.062	328	M7	0.125	1.66	NO	
13	PFHpA	375-85-9	8.02	363.055 > 319.045	7380		0.904	3.86	NO	
14	M4PFHpA	INT STD	8.02	367.025 > 322.022	74355		8.640		na	86.4
15	br-PFHxS	355-46-4	7.95	399.107 > 80.062	509	M5,M7	0.237	2.37	NO	
16	L-PFHxS	355-46-4	8.18	399.107 > 80.062	2593		1.067	1.56	NO	
17	PFHxS	355-46-4		399.107 > 80.062	3102		1.304		na	
18	M3PFHxS	INT STD	8.18	402.084 > 80.062	23521		10.550		na	111.3
19	br-PFOA	335-67-1	8.74	413.063 > 369.053	3720	M7	0.405	1.71	NO	
20	L-PFOA	335-67-1	8.97	413.063 > 369.053	47351		5.155	9.98	NO	
21	PFOA	335-67-1		413.063 > 369.053	51071		5.560		na	
22	M8PFOA	INT STD	8.97	421.002 > 376.	80803		9.144		na	91.4
23	M2PFOA	INT STD	8.97	415.048 > 370.045	89227		11.057		na	110.6
24	6:2FTS	27619-97-2		427.161 > 407.155			ND		YES	
25	M2-6:2FTS	INT STD	8.93	429.146 > 409.14	9230		12.711		na	133.7
26	PFHpS	375-92-8	9.07	449.115 > 80.062	151	M7	0.063	2.02	NO	
27	PFNA	375-95-1	9.74	463.071 > 419.061	2044		0.252	9.14	YES	
28	M9PFNA	INT STD	9.74	472.002 > 427.	71863		8.218		na	82.2
29	br-PFOS	1763-23-1	9.53	499.123 > 80.062	2384	M5,M7	0.907	4.20	NO	
30	L-PFOS	1763-23-1	9.79	499.123 > 80.062	2716		1.242	1.79	NO	
31	PFOS	1763-23-1		499.123 > 80.062	5100		2.149		na	
32	M4PFOS	INT STD	9.79	503.093 > 80.062	22872		10.271		na	102.7
33	M8PFOS	INT STD	9.79	507.062 > 80.062	23237		9.457		na	98.6
34	PFDA	335-76-2	10.38	513.078 > 469.069	676		0.107	1.90	NO	
35	M2PFDA	INT STD	10.37	515.063 > 470.061	75763		12.728		na	127.3
36	M6PFDA	INT STD	10.37	519.033 > 474.03	64170		8.173		na	81.7
37	8:2FTS	39108-34-4		527.177 > 507.171			ND		YES	
38	M2-8:2FTS	INT STD	10.36	529.162 > 509.155	6406		11.799		na	122.9
39	PFNS	68259-12-1		549.131 > 80.062			ND		YES	

Alpha Analytical Inc.

Dataset: C:\MassLynx\Data\2022\220519\_537ISO.PRO\Data\wg1640657-E.qld

Last Altered: Friday, May 20, 2022 19:40:39 Eastern Daylight Time

Printed: Friday, May 20, 2022 19:41:13 Eastern Daylight Time

ID: L2223459-02

Name: I20367

Date: 20-May-2022

Time: 09:23:47

Description: WG1640657,WG1639295,ICAL18975

Instrument: XEVO-TQSmicro#QEA0276

User: LCMS01:RS

Inlet Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\LCMS\_537\_ISO\_FULL

Tune Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\220113\_TUNE.IPR

MS Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\537ISO\_M\_SPAN2\_DOD\_TOP\_220429.EXP

	Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Ratio Flag	%Rec
40	d3-NMeFOSAA	INT STD	10.75	573.22 > 419.061	11985		8.732		na	87.3
41	br-NMeFOSAA	2355-31-9		570.202 > 419.061			ND		YES	
42	L-NMeFOSAA	2355-31-9		570.202 > 419.061			ND		YES	
43	NMeFOSAA	2355-31-9		570.202 > 419.061	0		ND		na	
44	PFUnA	2058-94-8		563.086 > 519.076			ND		YES	
45	M7-PFUDA	INT STD	10.92	570.033 > 525.031	56679		7.428		na	74.3
46	PFDS	335-77-3		598.926 > 80.062			ND		YES	
47	FOSA	754-91-6		498.146 > 78.07			ND		YES	
48	M8FOSA	INT STD	10.79	506.077 > 78.07	10936		1.380		na	13.8
49	d5-NEtFOSAA	INT STD	11.04	589.259 > 419.061	10829		8.235		na	82.3
50	br-NEtFOSAA	2991-50-6		584.229 > 419.061			ND		YES	
51	L-NEtFOSAA	2991-50-6		584.229 > 419.061			ND		YES	
52	NEtFOSAA	2991-50-6		584.229 > 419.061	0		ND		na	
53	PFDaA	307-55-1		613.094 > 569.084			ND		YES	
54	MPFDOA	INT STD	11.39	615.079 > 570.077	58992		7.368		na	73.7
55	PFTTrDA	72629-94-8		663.102 > 619.092			ND		YES	
56	PFTA	376-06-7		713.11 > 669.1			ND		YES	
57	M2PFTEDA	INT STD	12.18	715.094 > 670.092	42383		7.757		na	77.6

Alpha Analytical Inc.  
Dataset: C:\MassLynx\Data\2022\220519\_537ISO.PRO\Data\wg1640657-E.qld  
Last Altered: Friday, May 20, 2022 19:40:39 Eastern Daylight Time  
Printed: Friday, May 20, 2022 19:41:17 Eastern Daylight Time

Method: C:\MassLynx\Data\2022\220519\_537ISO.PRO\MethDB\537ISO\_Q\_220427\_RT.mdb 17 May 2022 09:16:45  
Calibration: C:\MassLynx\Data\2022\220519\_537ISO.PRO\CurveDB\220427\_ICAL.cdb 28 Apr 2022 13:10:49

ID: L2223459-03  
Name: I20369  
Date: 20-May-2022  
Time: 09:56:52  
Description: WG1640657,WG1639295,ICAL18975  
Instrument: XEVO-TQSmicro#QEA0276  
User: LCMS01:RS  
Inlet Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\LCMS\_537\_ISO\_FULL  
Tune Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\220113\_TUNE.IPR  
MS Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\537ISO\_M\_SPAN2\_DOD\_TOP\_220429.EXP

	Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Ratio Flag	%Rec
1	PFBA	375-22-4	1.85	213.032 > 169.022	18596		13.815		na	
2	M3PFBA	INT STD	1.86	216.009 > 171.999	13400		2.587		na	25.9
3	MPFBA	INT STD	1.86	217.001 > 171.999	13277		8.957		na	89.6
4	PFPeA	2706-90-3	4.62	263.039 > 219.03	9325	M4	16.433		na	
5	M5PFPEA	INT STD	4.62	268.001 > 222.999	5265		3.134		na	31.3
6	PFBS	375-73-5		299.092 > 80.062			ND		YES	
7	M3PFBS	INT STD	5.28	302.069 > 80.062	9858		5.352		na	57.4
8	4:2FTS	757124-72-4	6.47	327.146 > 307.139	237	M7	0.321	0.61	YES	
9	M2-4:2FTS	INT STD	6.47	329.13 > 309.124	6873		11.162		na	119.0
10	PFHxA	307-24-4	6.55	313.047 > 269.037	23991	M2,M7	19.240	13.87	NO	
11	M5PFHxA	INT STD	6.55	318.009 > 273.007	11592		3.286		na	32.9
12	PFPeS	2706-91-4	7.06	349.1 > 80.062	835	M7	0.481	15.13	YES	
13	PFHpA	375-85-9	7.90	363.055 > 319.045	40716		20.111	3.97	NO	
14	M4PFHpA	INT STD	7.90	367.025 > 322.022	18446		5.704		na	57.0
15	br-PFHxS	355-46-4		399.107 > 80.062			ND		YES	
16	L-PFHxS	355-46-4		399.107 > 80.062			ND		YES	
17	PFHxS	355-46-4		399.107 > 80.062	0		ND		na	
18	M3PFHxS	INT STD	8.08	402.084 > 80.062	15587		8.234		na	86.9
19	br-PFOA	335-67-1	8.64	413.063 > 369.053	2052	M5,M7	0.671	13.65	NO	
20	L-PFOA	335-67-1	8.90	413.063 > 369.053	63984		20.906	8.49	NO	
21	PFOA	335-67-1		413.063 > 369.053	66036		21.576		na	
22	M8PFOA	INT STD	8.90	421.002 > 376.	26925		8.108		na	81.1
23	M2PFOA	INT STD	8.90	415.048 > 370.045	33530		4.155		na	41.5
24	6:2FTS	27619-97-2	8.85	427.161 > 407.155	50951		30.681	2.63	NO	
25	M2-6:2FTS	INT STD	8.85	429.146 > 409.14	18984		30.790		na	323.8
26	PFHpS	375-92-8		449.115 > 80.062			ND		YES	
27	PFNA	375-95-1	9.69	463.071 > 419.061	76411		19.069	4.99	NO	
28	M9PFNA	INT STD	9.69	472.002 > 427.	35492		10.801		na	108.0
29	br-PFOS	1763-23-1	9.48	499.123 > 80.062	1456	M5,M7	0.780	4.90	NO	
30	L-PFOS	1763-23-1	9.75	499.123 > 80.062	908	M4,M7	0.585	2.41	NO	
31	PFOS	1763-23-1		499.123 > 80.062	2363		1.365		na	
32	M4PFOS	INT STD	9.75	503.093 > 80.062	19420		8.721		na	87.2
33	M8PFOS	INT STD	9.75	507.062 > 80.062	16503		7.910		na	82.5
34	PFDA	335-76-2	10.35	513.078 > 469.069	2692	M4	0.718	4.21	NO	
35	M2PFDA	INT STD	10.35	515.063 > 470.061	52214		8.772		na	87.7
36	M6PFDA	INT STD	10.35	519.033 > 474.03	38114		7.044		na	70.4
37	8:2FTS	39108-34-4		527.177 > 507.171			ND		YES	
38	M2-8:2FTS	INT STD	10.33	529.162 > 509.155	17299		37.526		na	390.9
39	PFNS	68259-12-1		549.131 > 80.062			ND		YES	

Alpha Analytical Inc.

Dataset: C:\MassLynx\Data\2022\220519\_537ISO.PRO\Data\wg1640657-E.qld

Last Altered: Friday, May 20, 2022 19:40:39 Eastern Daylight Time

Printed: Friday, May 20, 2022 19:41:17 Eastern Daylight Time

ID: L2223459-03

Name: I20369

Date: 20-May-2022

Time: 09:56:52

Description: WG1640657,WG1639295,ICAL18975

Instrument: XEVO-TQSmicro#QEA0276

User: LCMS01:RS

Inlet Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\LCMS\_537\_ISO\_FULL

Tune Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\220113\_TUNE.IPR

MS Method Name: C:\MassLynx\Data\2022\220519\_537ISO.PRO\ACQUDB\537ISO\_M\_SPAN2\_DOD\_TOP\_220429.EXP

	Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Ratio Flag	%Rec
40	d3-NMeFOSAA	INT STD	10.74	573.22 > 419.061	10208		10.792		na	107.9
41	br-NMeFOSAA	2355-31-9		570.202 > 419.061			ND		YES	
42	L-NMeFOSAA	2355-31-9		570.202 > 419.061			ND		YES	
43	NMeFOSAA	2355-31-9		570.202 > 419.061	0		ND		na	
44	PFUnA	2058-94-8	10.90	563.086 > 519.076	5449		1.104	5.24	NO	
45	M7-PFUDA	INT STD	10.90	570.033 > 525.031	50129		9.532		na	95.3
46	PFDS	335-77-3		598.926 > 80.062			ND		YES	
47	FOSA	754-91-6		498.146 > 78.07			ND		YES	
48	M8FOSA	INT STD	10.78	506.077 > 78.07	23747		4.347		na	43.5
49	d5-NEtFOSAA	INT STD	11.03	589.259 > 419.061	12240		13.505		na	135.1
50	br-NEtFOSAA	2991-50-6		584.229 > 419.061			ND		YES	
51	L-NEtFOSAA	2991-50-6		584.229 > 419.061			ND		YES	
52	NEtFOSAA	2991-50-6		584.229 > 419.061	0		ND		na	
53	PFDaA	307-55-1		613.094 > 569.084			ND		YES	
54	MPFDOA	INT STD	11.38	615.079 > 570.077	53590		9.712		na	97.1
55	PFTTrDA	72629-94-8	11.79	663.102 > 619.092	290	M7	0.071	41.79	YES	
56	PFTA	376-06-7		713.11 > 669.1			ND		YES	
57	M2PFTEDA	INT STD	12.17	715.094 > 670.092	35503		9.428		na	94.3

# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 ( )	S2 ( )	S3 ( )	S4 ( )	S5 ( )	S6 ( )	S7 ( )
MW-7A (L2223459-01)	90	98	104	77	87	113	88
MW-9A (L2223459-02)	89	116	102	81	86	111	91
MW-4A (L2223459-03)	90	31*	57*	33*	57*	87	81
FIELD BLANK (L2223459-07)	107	126	103	103	108	112	103
WG1639295-1BLANK	106	120	104	106	107	106	102
WG1639295-2LCS	106	118	107	106	106	107	105
MW-7AMS	88	102	101	76	85	107	86
MW-9ADUP	85	113	99	77	85	104	84

#### QC LIMITS

(58-132) S1 = PERFLUORO[13C4]BUTANOIC ACID (MPFBA)  
 (62-163) S2 = PERFLUORO[13C5]PENTANOIC ACID (M5PFPEA)  
 (70-131) S3 = PERFLUORO[2,3,4-13C3]BUTANESULFONIC ACID (M3PFBS)  
 (57-129) S4 = PERFLUORO[1,2,3,4,6-13C5]HEXANOIC ACID (M5PFHXA)  
 (60-129) S5 = PERFLUORO[1,2,3,4-13C4]HEPTANOIC ACID (M4PFHPA)  
 (71-134) S6 = PERFLUORO[1,2,3-13C3]HEXANESULFONIC ACID (M3PFHXS)  
 (71-134) S7 = PERFLUORO[13C8]OCTANOIC ACID (M8PFOA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE



# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S8 ( )	S9 ( )	S10 ( )	S11 ( )	S12 ( )	S13 ( )	S14 ( )
MW-7A (L2223459-01)	194*	86	104	86	120	70	79
MW-9A (L2223459-02)	134	82	99	82	123	87	74
MW-4A (L2223459-03)	323*	108	82	70	391*	108	95
FIELD BLANK (L2223459-07)	93	102	108	99	90	123*	98
WG1639295-1BLANK	100	105	105	106	119	92	98
WG1639295-2LCS	108	97	106	102	123	99	94
MW-7AMS	176*	83	102	85	120	85	75
MW-9ADUP	127	81	102	83	120	89	76

#### QC LIMITS

- (14-147) S8 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]OCTANESULFONIC ACID (M2-6:2FTS)  
 (59-139) S9 = PERFLUORO[13C9]NONANOIC ACID (M9PFNA)  
 (69-131) S10 = PERFLUORO[13C8]OCTANESULFONIC ACID (M8PFOS)  
 (62-124) S11 = PERFLUORO[1,2,3,4,5,6-13C6]DECANOIC ACID (M6PFDA)  
 (10-162) S12 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]DECANESULFONIC ACID (M2-8:2FTS)  
 (24-116) S13 = N-DEUTERIOMETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D3-NMEFOSAA)  
 (24-116) S14 = PERFLUORO[1,2,3,4,5,6,7-13C7]UNDECANOIC ACID (M7-PFUDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



# Surrogate (Extracted Internal Standard) Recovery Summary

## Form 2

### Semivolatiles

Client: Impact Environmental  
Project Name: 60 MCLEAN AVE

Lab Number: L2223459  
Project Number: 15514  
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S15 ( )	S16 ( )	S17 ( )	S18 ( )	S19 ( )	S20 ( )	S21 ( )	TOT OUT
MW-7A (L2223459-01)	21	74	74	73	--	--	--	1
MW-9A (L2223459-02)	14	82	74	78	--	--	--	0
MW-4A (L2223459-03)	43	135*	97	94	--	--	--	7
FIELD BLANK (L2223459-07)	35	103	96	92	--	--	--	1
WG1639295-1BLANK	55	96	101	101	--	--	--	0
WG1639295-2LCS	42	100	101	96	--	--	--	0
MW-7AMS	22	81	71	71	--	--	--	1
MW-9ADUP	19	87	77	81	--	--	--	0

#### QC LIMITS

(10-112) S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)  
 (27-126) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)  
 (48-131) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)  
 (22-136) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

\* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)





**Attachment H**  
**Cyanide QC Summary Forms – Excursions**

**Form 1**  
**WETCHEM**

Client : Impact Environmental  
Project Name : 60 MCLEAN AVE  
Lab ID : L2223459-01  
Client ID : MW-7A  
Sample Location : 60 MCLEAN AVE YONKERS NY  
Sample Matrix : WATER  
Analytical Method : 1,9010C/9012B  
Lab File ID : TCN051822-A  
Sample Amount :  
Digestion Method :

Lab Number : L2223459  
Project Number : 15514  
Date Collected : 05/04/22 11:30  
Date Received : 05/04/22  
Date Analyzed : 05/18/22 09:13  
Dilution Factor : 1  
Analyst : CS  
Instrument ID : LACHAT6  
%Solids : N/A  
Date Digested : 05/17/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
57-12-5	Cyanide, Total	0.002	0.005	0.001	J



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : L2223459-09  
 Client ID : MW-DUP-1  
 Sample Location : 60 MCLEAN AVE YONKERS NY  
 Sample Matrix : WATER  
 Analytical Method : 1,9010C/9012B  
 Lab File ID : TCN051922-A  
 Sample Amount :  
 Digestion Method :

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : 05/05/22 12:15  
 Date Received : 05/05/22  
 Date Analyzed : 05/19/22 09:57  
 Dilution Factor : 1  
 Analyst : CS  
 Instrument ID : LACHAT6  
 %Solids : N/A  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
57-12-5	Cyanide, Total	ND	0.005	0.001	U



# Form 1

## WETCHEM

Client : Impact Environmental  
 Project Name : 60 MCLEAN AVE  
 Lab ID : WG1639913-1  
 Client ID : WG1639913-1BLANK  
 Sample Location :  
 Sample Matrix : WATER  
 Analytical Method : 1,9010C/9012B  
 Lab File ID : TCN051922-A  
 Sample Amount :  
 Digestion Method :

Lab Number : L2223459  
 Project Number : 15514  
 Date Collected : NA  
 Date Received : NA  
 Date Analyzed : 05/19/22 09:53  
 Dilution Factor : 1  
 Analyst : CS  
 Instrument ID : LACHAT6  
 %Solids : N/A  
 Date Digested : 05/18/22

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
57-12-5	Cyanide, Total	0.001	0.005	0.001	J



**Attachment I**  
**Nitrate QC Summary Forms – Excursions**

CCB	1	S1	-0.01792	-0.00763			
	Known Conc:		0.00000	0.00000			
L2222250-15A	1	108	0.13383	0.01602			
L2222250-16A	1	109	0.06709	0.01092			
L2222250-17A	1	110	0.04119	0.01236			
L2222973-01A,R2C	1	111	2.36747	0.00658			
WG1634614-1; BLANK NO2 5.0725	1	112	0.03687	0.07206			0.10145 g
WG1634614-2; LCS NO2 5.1724	1	113	50.37178	47.21921			0.10345 g
WG1634615-1; BLANK NO3 5.0725	1	114	-0.28879	0.00814			0.10145 g
WG1634615-2; LCS NO3 5.0385	1	115	49.85104	0.07973			0.10077 g
L2222256-01B; 5.0858	1	116	3.83344	0.29042			0.10172 g
WG1634615-3; DUP NO3 256-01 5.1954	1	117	3.87068	0.30875			0.10391 g
CCV NO3	1	S2	1.02652	-0.00191			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.03877	0.98447			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01942	-0.00494			
	Known Conc:		0.00000	0.00000			
WG1634615-4; MS NO3 256-01 5.2917	1	118	79.46186	0.19734	5.00		0.10583 g
WG1634614-3; DUP NO2 256-01 5.1954	1	119	5.57651	0.44513			0.10391 g
WG1634614-4; MS NO2 256-01 5.1226	1	120	86.34721	78.47189	5.00		0.10245 g
L2222854-01B; 5.6485	1	121	0.19114	0.38486			0.11297 g
L2222200-01C 5.3696	1	122	0.37795	0.14876			0.10739 g
L2223376-01M	1	123	3.51199	0.07448			
L2223422-01A	1	124	0.01118	0.01134			
WG1634633-3; DUP NO3 422-01	1	125	0.01645	0.01267			
WG1634633-4; MS NO3 422-01	1	126	3.96010	0.01393			
WG1634631-3; DUP NO2 422-01	1	127	0.01666	0.01312			
CCV NO3	1	S2	1.02220	-0.00285			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.04658	0.98385			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.02083	-0.00285			
	Known Conc:		0.00000	0.00000			
WG1634631-4; MS NO2 422-01	1	128	4.37857	4.06706			
L2223422-02A	1	129	0.21337	0.09480			
L2223432-01A	1	130	1.03243	0.20792			
L2223432-02A	1	131	12.88181	0.27700			
L2223459-01S,PRI	1	132	2.07216	0.01195			
L2223459-02S,PRI	1	133	2.45250	0.01910			
L2223432-02A	1	131	14.49366	0.27290	5.00		
L2223459-01S,PRI	1	132	2.07441	0.01221			
CCV NO3	1	S2	1.01632	-0.00250			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.01835	0.98451			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.03391	-0.00291			
	Known Conc:		0.00000	0.00000			



**DATA VALIDATION  
FOR  
60 McLEAN AVENUE  
YONKERS, NY  
ORGANIC ANALYSIS DATA**

**Laboratory Sample Delivery Group (SDG) No. L2224094**

**Analyses Performed By:  
Alpha Analytical  
Westborough, Massachusetts**

**For:  
Impact Environmental Inc.  
Bohemia, NY**

**Data Validation By:  
ddms, inc.  
St. Paul, Minnesota 55102**

**July 28, 2022**

**2144-000102  
60 McLean Avenue\L2224094.docx**



### **EXECUTIVE SUMMARY**

Validation of the organic analyses data prepared by Alpha Analytical Westborough, Massachusetts for 16 soil vapor samples from the 60 McLean Avenue Site has been completed by de maximis Data Management Solutions, Inc. (ddms). Stage 4 validation was performed on all of the sample data. The data were reported by the laboratory under SDG No. L2224094. The following samples were reported:

---

SV-2A	SV-3A	SV-5A	IA-2A	SV-6A	SV-7A
SV-8A	OA-1A	SV-DUP	SV-9A	SV-10A	IA-4A
IA-3A	IA-1A	SV-4A	OA-2A		

---

Below is the Data Usability Summary Report (DUSR) associated with these samples.

<b>Data Usability Summary Report</b>	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See following sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes – See Attachment A

Based on the validation effort, the following data qualifiers were applied:

- Results for benzyl chloride and 1,2,4-trichlorobenzene in all samples were qualified as estimated (UJ) due to an unacceptable relative standard deviation (RSD) across the initial calibration (IC) range and/or percent difference (%D) between the initial calibration verification (ICV) and the IC.
- See Section C (Field Duplicates) for results qualified due to unacceptable field duplicate precision.

All other results were determined to be valid as reported by the laboratory. Review of Tentatively Identified Compounds (TICs) is outside the scope of this project.

This report should be considered part of the data package for all future distributions of the data.

## **INTRODUCTION**

Analyses for the requested parameters were performed by the laboratory according to the following analytical method:

Volatile Organic Compounds (VOCs)                      TO-15

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

ddms' validation was performed in conformance with ddms' Standard Operating Procedures (SOPs) for the methods followed, the USEPA "National Functional Guidelines (NGF) for Organic Data Review" (1999), the requirements of the analytical methods followed, and the specifications of the project-specific Quality Assurance Project Plan (QAPP). Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the CLP. This requires that the data package be presented in accordance with the CLP requirements, so that sufficient supporting documentation is available to facilitate the validation effort. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the NFG:

**U** The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

**J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

**J+** The result is an estimated quantity, but the result may be biased high.

**J-** The result is an estimated quantity, but the result may be biased low.

**NJ** The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.

**UU** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

## I. Holding Times, Preservation and Sample Integrity

Copies of the applicable chain of custody (COC) records were included in the data package, documenting a sample collection date of May 4, 2022. The samples were received at the laboratory on May 4, 2022. All samples were prepared and analyzed within method holding times.

## II. Documentation

The following documentation issue was observed during the validation effort:

- The chain of custody records included one revised page with OA-17A added to the revised page. A note on page one of the COC indicated that water had been encountered at SV-1A, and the field crew had been told not to sample that location. The login report and sample list indicate that OA-17A was received.

The remainder of this report discusses the review effort for each of the parameters. The tables below document the quality control (QC) elements reviewed for each analysis parameter. Where a quality indicator was deemed acceptable after thorough review, no further discussion is included in this report. Detailed findings are included for each quality element that impacted the usability of the reported results. Additional information or explanation is included as needed, to provide support for decisions made, based on the validator's best professional judgment.

Where a result was qualified J+ or J- and J, the J qualifier takes precedence. Where a result was qualified biased high and low for differing data quality excursions, the final qualifier is J with an indeterminate bias.

## III. VOCs (Full Scan and SIM)

Review Element	Acceptable?
GC/MS Instrument Tunes	Y
Calibration - IC, ICV, CC	N
Laboratory Blanks	Y
Surrogates	Y
Laboratory Control Sample (LCS)	N
Laboratory Duplicates*	Y
Field Duplicates	N
Matrix Spike (MS)	N/A
Internal Standard Responses	Y
Compound Identification	Y
Tentatively Identified Compounds (TICs)	N/A

\* Laboratory Duplicate = IA-2A

N/A – not applicable

## A. Calibration

One initial calibration was prepared on instrument Airlab19 in association with the samples in this SDG. All relative response factors (RRFs) and relative percent differences (RPDs) [ $<30\%$ ] were acceptable with the exception of benzyl chloride (RPD =  $31.3\%$ ). An initial calibration verification (ICV) standard was analyzed after the IC; all percent differences (%Ds) were acceptable in the ICV standard with the exception of benzyl chloride ( $-39.4\% \text{D}$ ) and 1,2,4-trichlorobenzene ( $-40.8\% \text{D}$ ). Results for benzyl chloride and 1,2,4-trichlorobenzene in all samples were qualified as estimated (UJ) due to and unacceptable RPD over the IC and/or RPD for the ICV.

## B. LCS

LCS recoveries for 3-chloropropene ( $133\%$ ), dibromochloromethane ( $132\%$ ), bromoform ( $134\%$ ) and benzyl chloride ( $134\%$ ) are above the upper  $130\%$  acceptance limit. None of the samples associated with this LCS have reportable amounts of these analytes. Therefore, no data required qualification on this basis.

## C. Field Duplicates

SV-DUP was collected as a field duplicate of SV-9A. Paired results, where detected in one or both samples, are summarized below.

Compound	SV-DUP	SV-9A	RPD	2X RL	<2X RL
1,2,4-Trimethylbenzene	2.35	1.87	N/C	1.97	yes
1,4-Dioxane	ND	0.948	N/C	1.44	yes
2-Butanone	6.4	6.55	-2.3	2.94	no
2-Hexanone	ND	0.832	N/C	1.64	yes
Acetone	132	87.7	40	4.76	no
Benzene	ND	1.51	N/C	1.28	yes
Chloromethane	ND	0.434	N/C	0.83	yes
Dichlorodifluoromethane	2.34	2.49	-6.2	1.98	no
Ethyl Alcohol	90.8	53.1	52	18.84	no
Ethylbenzene	ND	1.01	N/C	1.74	yes
Heptane	1.97	2.95	-40	1.64	no
Iso-Propyl Alcohol	10.6	63.4	-140	2.46	no
Methylene Chloride	ND	3.93	N/C	3.48	yes
Tert-Butyl Alcohol	4.27	4.4	-3.0	3.04	no
Tetrachloroethene	15.9	21.2	-29	2.72	no
Tetrahydrofuran	ND	2.6	N/C	2.94	yes
Toluene	9.12	8.93	2.1	1.51	no

Compound	SV-DUP	SV-9A	RPD	2X RL	<2X RL
n-Hexane	2.28	4.76	-70	1.41	no
o-Xylene	1.26	1.19	N/C	1.74	yes
p/m-Xylene	2.77	3.12	N/C	3.48	yes

N/C = not calculated

When one field duplicate result is positive but less than two times the analyte-specific RL, and the other result is not detected, it is ddms' policy to qualify for that analyte all associated sample results less than two times the RL, including non-detects, as estimated (J, UJ). Results summarized below were qualified as estimated (J, UJ) on this basis.

- 1,2,4-trimethylbenzene in SV-2A, SV-3A, SV-6A, SV-7A, SV-8A, SV-9A, SV-5A, SV-4A, and OA-2A
- 1,4-dioxane in all samples except SV-7A
- 2-hexanone in all samples except SV-6A
- benzene in SV-2A, SV-5A, SV-6A, SV-3A, SV-7A, SV-DUP, SV-4A, and OA-2A
- chloromethane in SV-5A, SV-6A, SV-7A, SV-9A, SV-2A, SV-3A, SV-8A, SV-DUP, SV-10A, and SV-4A
- ethylbenzene in SV-8A, OA-1A, SV-9A, SV-2A, SV-3A, SV-7A, SV-DUP, SV-10A, SV-4A, and OA-2A
- tetrahydrofuran in all samples
- o-xylene in SV-2A, SV-7A, SV-8A, SV-DUP, SV-9A, SV-10A, SV-3A, SV-4A, OA-2A, and IA-4A
- p/m-xylene in SV-2A, SV-3A, SV-7A, SV-8A, SV-DUP, SV-9A, SV-4A, OA-2A, and SV-10A

Results for acetone, ethyl alcohol, heptane, iso-propyl alcohol, tetrachloroethene, and n-hexane were qualified as estimated (J) due to unacceptable precision between results in the paired field samples as summarized below.

- acetone in all samples except OA-2A and SV-4A
- heptane in IA-2A, SV-6A, SV-7A, SV-8A, OA-1A, SV-DUP, SV-9A, SV-10A, IA-4A, IA-3A, IA-1A, and OA-2A
- ethyl alcohol, iso-propyl alcohol, and tetrachloroethene in all of the samples except SV-4A



**Attachment A**  
**QC Summary Forms - Excursions**

# Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2022\05\0509T\_I\  
Method File : TFS19\_220509.M  
Title : TO-14A/TO-15 SIM/Full Scan Analysis  
Last Update : Tue May 10 15:52:29 2022  
Response Via : Initial Calibration

## Calibration Files

0.2 =r1914626.D 0.5 =r1914627.D 1.0 =r1914628.D 5.0 =r1914629.D 10 =r1914630.D 20 =r1914631.D  
50 =r1914632.D 100 =r1914633.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)	n-propylbenzene	1.167	1.357	1.400	1.304	1.341	1.212	1.186	1.055	1.2529	9.33
95)	4-chlorotoluene	0.960	1.047	1.148	1.037	1.062	0.962	0.965	0.906	1.0108	7.60
96)	4-ethyl toluene	3.903	4.347	4.652	4.312	4.372	3.990	3.698	3.258	4.0665	10.99
97)	1,3,5-trimethylbenzene	3.352	3.696	3.650	3.687	4.141	3.849	3.599	3.041	3.6269	8.98
98)	tert-butylbenzene	3.624	3.885	3.695	3.688	3.581	3.455	2.844	2.124	3.3620	17.48
99)	1,2,4-trimethylbenzene	3.189	3.585	3.300	3.502	3.377	3.225	2.704	2.038	3.1148	16.37
100)	decane	2.786	3.513	3.668	3.659	3.672	3.373	3.247	2.848	3.3458	10.76
101) C	Benzyl Chloride	0.919	1.272	1.620	2.021	2.412	2.482	2.575	2.067	1.9209	31.30#
102)	1,3-dichlorobenzene	1.479	1.710	1.808	1.782	1.815	1.650	1.515	1.376	1.6419	10.16
103) C	1,4-dichlorobenzene	1.443	1.648	1.719	1.717	1.765	1.612	1.543	1.347	1.5992	9.13
104)	sec-butylbenzene	4.722	5.474	5.711	5.429	5.380	4.846	4.302	3.650	4.9392	14.20
105)	1,2,3-trimethylbenzene	2.824	3.301	3.412	3.160	3.187	2.710	2.366	1.801	2.8451	19.18
106)	p-isopropyltoluene	3.485	4.503	4.719	4.473	4.494	3.870	3.281	2.409	3.9042	20.53
107)	1,2-dichlorobenzene	1.243	1.544	1.685	1.663	1.665	1.514	1.472	1.259	1.5056	11.63
108)	n-butylbenzene	3.159	3.289	3.910	3.995	4.104	3.615	3.379	2.503	3.4942	15.15
109)	indan	2.765	3.155	3.379	3.153	3.246	2.914	2.737	2.245	2.9492	12.38
110)	indene	1.553	2.028	2.330	2.443	2.521	2.354	2.239	1.782	2.1563	15.79
111) C	1,2-dibromo-3-chloropropane	0.734	0.792	0.899	1.040	1.122	1.014	0.966	0.734	0.9128	16.14
112)	undecane	3.085	3.660	3.660	3.920	4.061	3.544	3.045	2.453	3.4285	15.51
113)	1,2,4,5-tetramethylbenzene	3.992	4.167	4.547	2.917	2.994	3.266	2.624	2.203	3.3388	24.48
114)	dodecane	2.074	3.045	3.666	4.028	3.993	3.169	3.183	2.942	3.2625	19.60
115) C	1,2,4-trichlorobenzene	0.444	0.770	0.888	1.080	1.242	0.814	0.878	1.057	0.8966	26.88
116)	naphthalene	2.070	3.051	3.133	3.521	3.956	2.642	2.894	3.331	3.0748	18.53
117)	1,2,3-trichlorobenzene	0.701	0.913	1.071	0.995	1.046	0.821	1.016	1.057	0.9527	13.82
118)	benzothiophene	3.176	5.023	5.760	3.508	4.175	3.933	4.430	4.450	4.3067	19.09
119) C	hexachlorobutadiene	1.155	1.157	1.242	1.281	1.256	0.828	0.771	0.800	1.0614	20.87
120)	2-methylnaphthalene			0.249	0.257	0.381	0.594	0.833	0.964	0.5464	55.41#
121)	1-methylnaphthalene			1.711	1.060	1.244	1.302	1.603	1.687	1.4349	18.77

(#) = Out of Range

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2022\05\0509T\_I\  
 Data File : r1914636.D  
 Acq On : 10 May 2022 11:47 AM  
 Operator : AIRLAB19:TS  
 Sample : CT015-LLSTD10.0  
 Misc : WG1637032  
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: May 10 15:59:28 2022  
 Quant Method : O:\Forensics\Data\Airlab19\2022\05\0509T\_I\TFS19\_220509.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Tue May 10 15:52:29 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81 C	ethylbenzene	3.740	4.181	-11.8	105	0.00
83 C	m+p-xylene	2.983	3.353	-12.4	103	0.00
84 C	bromoform	0.842	1.038	-23.3	109	0.00
85 C	styrene	2.327	2.708	-16.4	103	0.00
86 C	1,1,2,2-tetrachloroethane	2.147	2.523	-17.5	105	0.00
87 C	o-xylene	2.927	3.316	-13.3	103	0.00
88	1,2,3-trichloropropane	1.885	1.893	-0.4	91	0.00
89	nonane	3.230	3.152	2.4	90	0.00
90 s	bromofluorobenzene	2.754	2.743	0.4	97	0.00
91 C	isopropylbenzene	4.033	4.178	-3.6	95	0.00
92	bromobenzene	2.367	2.420	-2.2	92	0.00
93	2-chlorotoluene	1.050	1.040	1.0	91	0.00
94	n-propylbenzene	1.253	1.282	-2.3	92	0.00
95	4-chlorotoluene	1.011	1.029	-1.8	94	0.00
96	4-ethyl toluene	4.066	4.635	-14.0	102	0.00
97	1,3,5-trimethylbenzene	3.627	4.510	-24.3	105	0.00
98	tert-butylbenzene	3.362	3.594	-6.9	97	0.00
99	1,2,4-trimethylbenzene	3.115	3.833	-23.0	110	0.00
100	decane	3.346	3.499	-4.6	92	0.00
101 C	Benzyl Chloride	1.921	2.678	-39.4#	107	0.00
102	1,3-dichlorobenzene	1.642	1.909	-16.3	102	0.00
103 C	1,4-dichlorobenzene	1.599	1.875	-17.3	103	0.00
104	sec-butylbenzene	4.939	5.151	-4.3	92	0.00
106	p-isopropyltoluene	3.904	4.079	-4.5	88	0.00
107	1,2-dichlorobenzene	1.506	1.835	-21.8	106	0.00
108	n-butylbenzene	3.494	4.014	-14.9	94	0.00
111 C	1,2-dibromo-3-chloropropane	0.913	1.091	-19.5	94	0.00
112	undecane	3.429	3.984	-16.2	95	0.00
114	dodecane	3.262	3.917	-20.1	95	0.00
115 C	1,2,4-trichlorobenzene	0.897	1.263	-40.8#	98	0.00
116	naphthalene	3.075	3.646	-18.6	89	0.00
117	1,2,3-trichlorobenzene	0.953	1.039	-9.0	96	0.00
119 C	hexachlorobutadiene	1.061	1.353	-27.5	104	0.00

\* Evaluation of CC level amount vs concentration.  
 (#) = Out of Range SPCC's out = 0 CCC's out = 2

# Laboratory Control Sample Summary

## Form 3

### Air Volatiles

Client : Impact Environmental      Lab Number : L2224094  
 Project Name :      Project Number : 15514  
 Matrix : AIR  
 LCS Sample ID : WG1641106-3      Analysis Date : 05/20/22 13:53      File ID : r1914825  
 LCSD Sample ID :      Analysis Date :      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
Dichlorodifluoromethane	10	11.4	114				-	70-130	-
Chloromethane	10	12.0	120				-	70-130	-
Freon-114	10	11.5	115				-	70-130	-
Vinyl chloride	10	11.2	112				-	70-130	-
1,3-Butadiene	10	12.7	127				-	70-130	-
Bromomethane	10	11.1	111				-	70-130	-
Chloroethane	10	11.0	110				-	70-130	-
Ethanol	50	46.4	93				-	40-160	-
Vinyl bromide	10	11.5	115				-	70-130	-
Acetone	50	55.6	111				-	40-160	-
Trichlorofluoromethane	10	10.5	105				-	70-130	-
Isopropanol	25	28.4	114				-	40-160	-
1,1-Dichloroethene	10	11.6	116				-	70-130	-
Tertiary butyl Alcohol	10	10.5	105				-	70-130	-
Methylene chloride	10	11.7	117				-	70-130	-
3-Chloropropene	10	13.3	133 Q				-	70-130	-
Carbon disulfide	10	9.46	95				-	70-130	-
Freon-113	10	11.6	116				-	70-130	-
trans-1,2-Dichloroethene	10	10.9	109				-	70-130	-
1,1-Dichloroethane	10	11.4	114				-	70-130	-
Methyl tert butyl ether	10	11.4	114				-	70-130	-
2-Butanone	10	11.6	116				-	70-130	-
cis-1,2-Dichloroethene	10	11.6	116				-	70-130	-
Ethyl Acetate	10	12.3	123				-	70-130	-
Chloroform	10	11.3	113				-	70-130	-
Tetrahydrofuran	10	11.8	118				-	70-130	-



# Laboratory Control Sample Summary

## Form 3

### Air Volatiles

Client : Impact Environmental      Lab Number : L2224094  
 Project Name :      Project Number : 15514  
 Matrix : AIR  
 LCS Sample ID : WG1641106-3      Analysis Date : 05/20/22 13:53      File ID : r1914825  
 LCSD Sample ID :      Analysis Date :      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	10.2	102				-	70-130	-
n-Hexane	10	10.8	108				-	70-130	-
1,1,1-Trichloroethane	10	11.2	112				-	70-130	-
Benzene	10	10.7	107				-	70-130	-
Carbon tetrachloride	10	12.2	122				-	70-130	-
Cyclohexane	10	10.8	108				-	70-130	-
1,2-Dichloropropane	10	11.7	117				-	70-130	-
Bromodichloromethane	10	11.9	119				-	70-130	-
1,4-Dioxane	10	12.0	120				-	70-130	-
Trichloroethene	10	11.7	117				-	70-130	-
2,2,4-Trimethylpentane	10	11.0	110				-	70-130	-
Heptane	10	11.8	118				-	70-130	-
cis-1,3-Dichloropropene	10	12.8	128				-	70-130	-
4-Methyl-2-pentanone	10	12.7	127				-	70-130	-
trans-1,3-Dichloropropene	10	11.8	118				-	70-130	-
1,1,2-Trichloroethane	10	12.2	122				-	70-130	-
Toluene	10	11.6	116				-	70-130	-
2-Hexanone	10	12.4	124				-	70-130	-
Dibromochloromethane	10	13.2	132 Q				-	70-130	-
1,2-Dibromoethane	10	12.6	126				-	70-130	-
Tetrachloroethene	10	12.1	121				-	70-130	-
Chlorobenzene	10	12.1	121				-	70-130	-
Ethylbenzene	10	12.0	120				-	70-130	-
p/m-Xylene	20	23.6	118				-	70-130	-
Bromoform	10	13.4	134 Q				-	70-130	-
Styrene	10	11.8	118				-	70-130	-



# Laboratory Control Sample Summary

## Form 3

### Air Volatiles

Client : Impact Environmental      Lab Number : L2224094  
 Project Name :      Project Number : 15514  
 Matrix : AIR  
 LCS Sample ID : WG1641106-3      Analysis Date : 05/20/22 13:53      File ID : r1914825  
 LCSD Sample ID :      Analysis Date :      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,1,2,2-Tetrachloroethane	10	11.8	118				-	70-130	-
o-Xylene	10	11.6	116				-	70-130	-
4-Ethyltoluene	10	11.3	113				-	70-130	-
1,3,5-Trimethylbenzene	10	12.3	123				-	70-130	-
1,2,4-Trimethylbenzene	10	12.2	122				-	70-130	-
Benzyl chloride	10	13.4	134 Q				-	70-130	-
1,3-Dichlorobenzene	10	11.5	115				-	70-130	-
1,4-Dichlorobenzene	10	11.5	115				-	70-130	-
1,2-Dichlorobenzene	10	11.8	118				-	70-130	-
1,2,4-Trichlorobenzene	10	12.9	129				-	70-130	-
Hexachlorobutadiene	10	12.6	126				-	70-130	-

# Appendix I

60 McLean Avenue, Yonkers, NY

Laboratory Reports



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599





## ANALYTICAL REPORT

Lab Number:	L2223459
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	60 MCLEAN AVE
Project Number:	15514
Report Date:	05/27/22

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-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2223459-01	MW-7A	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 11:30	05/04/22
L2223459-02	MW-9A	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 14:00	05/04/22
L2223459-03	MW-4A	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 12:20	05/04/22
L2223459-04	MW-5A	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 13:15	05/04/22
L2223459-05	WP-11	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 12:30	05/04/22
L2223459-06	WP-12	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 13:20	05/04/22
L2223459-07	FIELD BLANK	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 11:00	05/04/22
L2223459-08	TRIP BLANK	WATER	60 MCLEAN AVE YONKERS NY	05/04/22 00:00	05/04/22
L2223459-09	MW-DUP-1	WATER	60 MCLEAN AVE YONKERS NY	05/05/22 12:15	05/05/22
L2223459-10	MW-MS	WATER	60 MCLEAN AVE YONKERS NY	05/05/22 12:50	05/05/22
L2223459-11	MW-MSD-1	WATER	60 MCLEAN AVE YONKERS NY	05/05/22 13:10	05/05/22

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### 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:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Case Narrative (continued)

#### Report Submission

May 27, 2022: This final report includes the results of all requested analyses.

May 25, 2022: 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.

The analyses of Functional Genes and Iron Reducing Bacteria were subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

#### Sample Receipt

Due to a laboratory error during login, the requested MS/MSD could not be performed on any analysis.

L2223459-01 through -06 and -09: The analyses performed were specified by the client.

L2223459-07: A sample identified as "FIELD BLANK" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

L2223459-08: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody and was not analyzed.

#### Semivolatile Organics

The WG1635587-1 Method Blank, associated with L2223459-01 through -07 and -09, has TICs detected.

The results are qualified with a "B" for any associated samples that have detections of the same TICs.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2223459-01, -03, and -07: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

L2223459-07: The Field Blank has a result for 6:2 FTS present above the reporting limit. The sample was

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Case Narrative (continued)

verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over. There is no remaining volume for re-extraction confirmation.

WG1639295-3: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

#### Total Metals

L2223459-01 through -07 and -09: The sample has an elevated detection limit for mercury due to the prep dilution required by the limited sample volume available for analysis.

#### Dissolved Metals

L2223459-07: The Field Blank has a result for manganese present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1642946-3 MS recoveries, performed on L2223459-01, are outside the acceptance criteria for iron (160%), magnesium (153%), manganese (204%) and potassium (133%). A post digestion spike was performed and was within acceptance criteria.

The WG1642946-3 MS recoveries for calcium (208%) and sodium (530%), performed on L2223459-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

#### Hexavalent Chromium

L2223459-01: The sample has an elevated detection limit due to the dilution required by the sample matrix.

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

Authorized Signature:

*Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 05/27/22

# ORGANICS

# **VOLATILES**



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01 D  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 19:27  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	10	2.8	4
1,1-Dichloroethane	ND		ug/l	10	2.8	4
Chloroform	ND		ug/l	10	2.8	4
Carbon tetrachloride	ND		ug/l	2.0	0.54	4
1,2-Dichloropropane	ND		ug/l	4.0	0.55	4
Dibromochloromethane	ND		ug/l	2.0	0.60	4
1,1,2-Trichloroethane	ND		ug/l	6.0	2.0	4
Tetrachloroethene	ND		ug/l	2.0	0.72	4
Chlorobenzene	ND		ug/l	10	2.8	4
Trichlorofluoromethane	ND		ug/l	10	2.8	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
1,1,1-Trichloroethane	ND		ug/l	10	2.8	4
Bromodichloromethane	ND		ug/l	2.0	0.77	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	0.66	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	0.58	4
1,3-Dichloropropene, Total	ND		ug/l	2.0	0.58	4
1,1-Dichloropropene	ND		ug/l	10	2.8	4
Bromoform	ND		ug/l	8.0	2.6	4
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	0.67	4
Benzene	7.4		ug/l	2.0	0.64	4
Toluene	48		ug/l	10	2.8	4
Ethylbenzene	330		ug/l	10	2.8	4
Chloromethane	ND		ug/l	10	2.8	4
Bromomethane	ND		ug/l	10	2.8	4
Vinyl chloride	ND		ug/l	4.0	0.28	4
Chloroethane	ND		ug/l	10	2.8	4
1,1-Dichloroethene	ND		ug/l	2.0	0.68	4
trans-1,2-Dichloroethene	ND		ug/l	10	2.8	4

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01 D  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	2.0	0.70	4
1,2-Dichlorobenzene	ND		ug/l	10	2.8	4
1,3-Dichlorobenzene	ND		ug/l	10	2.8	4
1,4-Dichlorobenzene	ND		ug/l	10	2.8	4
Methyl tert butyl ether	ND		ug/l	10	2.8	4
p/m-Xylene	1100		ug/l	10	2.8	4
o-Xylene	300		ug/l	10	2.8	4
Xylenes, Total	1400		ug/l	10	2.8	4
cis-1,2-Dichloroethene	ND		ug/l	10	2.8	4
1,2-Dichloroethene, Total	ND		ug/l	10	2.8	4
Dibromomethane	ND		ug/l	20	4.0	4
1,2,3-Trichloropropane	ND		ug/l	10	2.8	4
Acrylonitrile	ND		ug/l	20	6.0	4
Styrene	ND		ug/l	10	2.8	4
Dichlorodifluoromethane	ND		ug/l	20	4.0	4
Acetone	ND		ug/l	20	5.8	4
Carbon disulfide	ND		ug/l	20	4.0	4
2-Butanone	ND		ug/l	20	7.8	4
Vinyl acetate	ND		ug/l	20	4.0	4
4-Methyl-2-pentanone	ND		ug/l	20	4.0	4
2-Hexanone	ND		ug/l	20	4.0	4
Bromochloromethane	ND		ug/l	10	2.8	4
2,2-Dichloropropane	ND		ug/l	10	2.8	4
1,2-Dibromoethane	ND		ug/l	8.0	2.6	4
1,3-Dichloropropane	ND		ug/l	10	2.8	4
1,1,1,2-Tetrachloroethane	ND		ug/l	10	2.8	4
Bromobenzene	ND		ug/l	10	2.8	4
n-Butylbenzene	6.3	J	ug/l	10	2.8	4
sec-Butylbenzene	7.9	J	ug/l	10	2.8	4
tert-Butylbenzene	ND		ug/l	10	2.8	4
o-Chlorotoluene	ND		ug/l	10	2.8	4
p-Chlorotoluene	ND		ug/l	10	2.8	4
1,2-Dibromo-3-chloropropane	ND		ug/l	10	2.8	4
Hexachlorobutadiene	ND		ug/l	10	2.8	4
Isopropylbenzene	49		ug/l	10	2.8	4
p-Isopropyltoluene	11		ug/l	10	2.8	4
Naphthalene	73		ug/l	10	2.8	4

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01 D  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	57		ug/l	10	2.8	4
1,2,3-Trichlorobenzene	ND		ug/l	10	2.8	4
1,2,4-Trichlorobenzene	ND		ug/l	10	2.8	4
1,3,5-Trimethylbenzene	110		ug/l	10	2.8	4
1,2,4-Trimethylbenzene	340		ug/l	10	2.8	4
1,4-Dioxane	ND		ug/l	1000	240	4
p-Diethylbenzene	61		ug/l	8.0	2.8	4
p-Ethyltoluene	340		ug/l	8.0	2.8	4
1,2,4,5-Tetramethylbenzene	12		ug/l	8.0	2.2	4
Ethyl ether	ND		ug/l	10	2.8	4
trans-1,4-Dichloro-2-butene	ND		ug/l	10	2.8	4

## Tentatively Identified Compounds

Total TIC Compounds	1470	J	ug/l	4
Pentane, 3-methyl-	54.2	NJ	ug/l	4
Ethylidenecyclobutane	69.9	NJ	ug/l	4
n-Hexane	115	NJ	ug/l	4
Cyclopentane, Methyl-	276	NJ	ug/l	4
Unknown	288	J	ug/l	4
Pentane	96.2	NJ	ug/l	4
Unknown Cycloalkane	59.7	J	ug/l	4
Cyclohexane, methyl-	310	NJ	ug/l	4
Pentane, 2-methyl-	142	NJ	ug/l	4
Unknown Cycloalkene	58.2	J	ug/l	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02 D  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 19:50  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	ND		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
1,3-Dichloropropene, Total	ND		ug/l	1.2	0.36	2.5
1,1-Dichloropropene	ND		ug/l	6.2	1.8	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	4.6		ug/l	1.2	0.40	2.5
Toluene	17		ug/l	6.2	1.8	2.5
Ethylbenzene	230		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02 D  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	230		ug/l	6.2	1.8	2.5
o-Xylene	14		ug/l	6.2	1.8	2.5
Xylenes, Total	240		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethene, Total	ND		ug/l	6.2	1.8	2.5
Dibromomethane	ND		ug/l	12	2.5	2.5
1,2,3-Trichloropropane	ND		ug/l	6.2	1.8	2.5
Acrylonitrile	ND		ug/l	12	3.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
Vinyl acetate	ND		ug/l	12	2.5	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
2,2-Dichloropropane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,3-Dichloropropane	ND		ug/l	6.2	1.8	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	6.2	1.8	2.5
Bromobenzene	ND		ug/l	6.2	1.8	2.5
n-Butylbenzene	5.6	J	ug/l	6.2	1.8	2.5
sec-Butylbenzene	5.7	J	ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
o-Chlorotoluene	ND		ug/l	6.2	1.8	2.5
p-Chlorotoluene	ND		ug/l	6.2	1.8	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Hexachlorobutadiene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	32		ug/l	6.2	1.8	2.5
p-Isopropyltoluene	10		ug/l	6.2	1.8	2.5
Naphthalene	83		ug/l	6.2	1.8	2.5

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02 D  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	38		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	2.6	J	ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	220		ug/l	6.2	1.8	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
p-Diethylbenzene	7.2		ug/l	5.0	1.8	2.5
p-Ethyltoluene	72		ug/l	5.0	1.8	2.5
1,2,4,5-Tetramethylbenzene	9.3		ug/l	5.0	1.4	2.5
Ethyl ether	ND		ug/l	6.2	1.8	2.5
trans-1,4-Dichloro-2-butene	ND		ug/l	6.2	1.8	2.5

## Tentatively Identified Compounds

Total TIC Compounds	883	J	ug/l	2.5
n-Hexane	63.0	NJ	ug/l	2.5
Unknown	47.7	J	ug/l	2.5
Unknown Cycloalkane	47.6	J	ug/l	2.5
Unknown	44.4	J	ug/l	2.5
Unknown Cyclohexane	39.5	J	ug/l	2.5
Cyclohexane, methyl-	239	NJ	ug/l	2.5
Cyclohexane	162	NJ	ug/l	2.5
Cyclopentane, Methyl-	140	NJ	ug/l	2.5
Pentane, 2-methyl-	60.7	NJ	ug/l	2.5
Unknown	38.6	J	ug/l	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	100		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 17:54  
 Analyst: MV

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	0.42	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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	13		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



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-03

Date Collected: 05/04/22 12:20

Client ID: MW-4A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.19	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	51		ug/l	2.5	0.70	1
o-Xylene	12		ug/l	2.5	0.70	1
Xylenes, Total	63		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.3	J	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-03**Date Collected:** 05/04/22 12:20**Client ID:** MW-4A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

## Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	108		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04  
 Client ID: MW-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 18:18  
 Analyst: MV

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	5.6		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	0.48	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-04**Date Collected:** 05/04/22 13:15**Client ID:** MW-5A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-04**Date Collected:** 05/04/22 13:15**Client ID:** MW-5A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

## Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	112		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05  
 Client ID: WP-11  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 19:04  
 Analyst: MV

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	0.49	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.43	J	ug/l	0.50	0.16	1
Toluene	0.97	J	ug/l	2.5	0.70	1
Ethylbenzene	5.3		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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-05**Date Collected:** 05/04/22 12:30**Client ID:** WP-11**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	17		ug/l	2.5	0.70	1
o-Xylene	7.3		ug/l	2.5	0.70	1
Xylenes, Total	24		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	0.83	J	ug/l	2.5	0.70	1
sec-Butylbenzene	0.91	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	2.3	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	1.5	J	ug/l	2.5	0.70	1
Naphthalene	3.0		ug/l	2.5	0.70	1



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-05

Date Collected: 05/04/22 12:30

Client ID: WP-11

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	2.6		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	6.8		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	21		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	7.2		ug/l	2.0	0.70	1
p-Ethyltoluene	18		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	1.4	J	ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

## Tentatively Identified Compounds

Total TIC Compounds	81.7	J	ug/l	1
Unknown Benzene	7.75	J	ug/l	1
Unknown	7.36	J	ug/l	1
Unknown Benzene	6.77	J	ug/l	1
Cyclohexane, ethyl-	5.43	NJ	ug/l	1
Unknown Benzene	4.68	J	ug/l	1
Unknown Aromatic	7.93	J	ug/l	1
Unknown Cyclohexane	7.96	J	ug/l	1
Unknown	10.2	J	ug/l	1
Unknown Aromatic	7.57	J	ug/l	1
Cyclohexane, methyl-	16.0	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	107		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06  
 Client ID: WP-12  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 18:41  
 Analyst: MV

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	0.35	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-06**Date Collected:** 05/04/22 13:20**Client ID:** WP-12**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	0.74	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	0.74	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-06**Date Collected:** 05/04/22 13:20**Client ID:** WP-12**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	0.89	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	2.0	J	ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	0.84	J	ug/l	2.0	0.70	1
p-Ethyltoluene	2.1		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

## Tentatively Identified Compounds

Total TIC Compounds	20.1	J	ug/l	1
Cyclopentane, Methyl-	2.16	NJ	ug/l	1
Unknown	1.32	J	ug/l	1
Pentane, 2-methyl-	1.30	NJ	ug/l	1
Unknown Cyclohexane	1.67	J	ug/l	1
Unknown	2.56	J	ug/l	1
Cyclohexane, methyl-	4.88	NJ	ug/l	1
Unknown	1.37	J	ug/l	1
Unknown	1.65	J	ug/l	1
Unknown Cyclopentane	1.45	J	ug/l	1
Unknown Cyclohexane	1.74	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 17:31  
 Analyst: MV

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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.0	J	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-07**Date Collected:** 05/04/22 11:00**Client ID:** FIELD BLANK**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

## Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	114		70-130



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09 D  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/18/22 21:06  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	ND		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
1,3-Dichloropropene, Total	ND		ug/l	2.5	0.72	5
1,1-Dichloropropene	ND		ug/l	12	3.5	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	4.1		ug/l	2.5	0.80	5
Toluene	27		ug/l	12	3.5	5
Ethylbenzene	250		ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	ND		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	ND		ug/l	12	3.5	5

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09 D  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	730		ug/l	12	3.5	5
o-Xylene	210		ug/l	12	3.5	5
Xylenes, Total	940		ug/l	12	3.5	5
cis-1,2-Dichloroethene	ND		ug/l	12	3.5	5
1,2-Dichloroethene, Total	ND		ug/l	12	3.5	5
Dibromomethane	ND		ug/l	25	5.0	5
1,2,3-Trichloropropane	ND		ug/l	12	3.5	5
Acrylonitrile	ND		ug/l	25	7.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
Vinyl acetate	ND		ug/l	25	5.0	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
2,2-Dichloropropane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,3-Dichloropropane	ND		ug/l	12	3.5	5
1,1,1,2-Tetrachloroethane	ND		ug/l	12	3.5	5
Bromobenzene	ND		ug/l	12	3.5	5
n-Butylbenzene	12		ug/l	12	3.5	5
sec-Butylbenzene	11	J	ug/l	12	3.5	5
tert-Butylbenzene	ND		ug/l	12	3.5	5
o-Chlorotoluene	ND		ug/l	12	3.5	5
p-Chlorotoluene	ND		ug/l	12	3.5	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Hexachlorobutadiene	ND		ug/l	12	3.5	5
Isopropylbenzene	55		ug/l	12	3.5	5
p-Isopropyltoluene	21		ug/l	12	3.5	5
Naphthalene	65		ug/l	12	3.5	5

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09 D  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	70		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
1,3,5-Trimethylbenzene	130		ug/l	12	3.5	5
1,2,4-Trimethylbenzene	380		ug/l	12	3.5	5
1,4-Dioxane	ND		ug/l	1200	300	5
p-Diethylbenzene	90		ug/l	10	3.5	5
p-Ethyltoluene	380		ug/l	10	3.5	5
1,2,4,5-Tetramethylbenzene	16		ug/l	10	2.7	5
Ethyl ether	ND		ug/l	12	3.5	5
trans-1,4-Dichloro-2-butene	ND		ug/l	12	3.5	5

## Tentatively Identified Compounds

Total TIC Compounds	1940	J	ug/l	5
n-Hexane	195	NJ	ug/l	5
Unknown Cyclopentane	95.2	J	ug/l	5
Unknown	95.3	J	ug/l	5
Heptane	109	NJ	ug/l	5
Cyclohexane	293	NJ	ug/l	5
Unknown Alkane	122	J	ug/l	5
Cyclohexane, methyl-	483	NJ	ug/l	5
Cyclopentane, Methyl-	303	NJ	ug/l	5
Unknown Benzene	134	J	ug/l	5
Unknown Cycloalkane	108	J	ug/l	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	86		70-130

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 12:04  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1639023-5					
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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 12:04  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1639023-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
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
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
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
Vinyl acetate	ND		ug/l	5.0	1.0
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
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/14/22 12:04  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1639023-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/14/22 12:04  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1639023-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	111		70-130



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/18/22 19:08  
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1640338-5					
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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/18/22 19:08  
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1640338-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
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
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
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
Vinyl acetate	ND		ug/l	5.0	1.0
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
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/18/22 19:08  
**Analyst:** TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1640338-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/18/22 19:08  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1640338-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1639023-3 WG1639023-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	98		99		70-130	1		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	94		96		70-130	2		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	99		99		70-130	0		20
Tetrachloroethene	110		120		70-130	9		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	150		160	Q	62-150	6		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	88		88		70-130	0		20
cis-1,3-Dichloropropene	92		96		70-130	4		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	80		87		54-136	8		20
1,1,1,2-Tetrachloroethane	84		85		67-130	1		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	92		93		64-130	1		20
Bromomethane	140	Q	130		39-139	7		20

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1639023-3 WG1639023-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	130		130		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	98		100		70-130	2		20
1,2-Dichlorobenzene	96		96		70-130	0		20
1,3-Dichlorobenzene	98		99		70-130	1		20
1,4-Dichlorobenzene	97		97		70-130	0		20
Methyl tert butyl ether	89		93		63-130	4		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	97		100		70-130	3		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	78		85		64-130	9		20
Acrylonitrile	95		96		70-130	1		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	67		94		58-148	34	Q	20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	82		94		63-138	14		20
Vinyl acetate	81		85		70-130	5		20
4-Methyl-2-pentanone	79		88		59-130	11		20
2-Hexanone	77		85		57-130	10		20

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1639023-3 WG1639023-4								
Bromochloromethane	100		100		70-130	0		20
2,2-Dichloropropane	92		93		63-133	1		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		99		64-130	1		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	97		95		70-130	2		20
p-Chlorotoluene	94		95		70-130	1		20
1,2-Dibromo-3-chloropropane	87		89		41-144	2		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	100		99		70-130	1		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	92		96		70-130	4		20
n-Propylbenzene	100		99		69-130	1		20
1,2,3-Trichlorobenzene	100		110		70-130	10		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		98		64-130	2		20
1,2,4-Trimethylbenzene	98		98		70-130	0		20
1,4-Dioxane	80		92		56-162	14		20
p-Diethylbenzene	100		100		70-130	0		20



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1639023-3 WG1639023-4								
p-Ethyltoluene	99		100		70-130	1		20
1,2,4,5-Tetramethylbenzene	97		96		70-130	1		20
Ethyl ether	120		130		59-134	8		20
trans-1,4-Dichloro-2-butene	79		79		70-130	0		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	109		110		70-130
Toluene-d8	102		105		70-130
4-Bromofluorobenzene	87		89		70-130
Dibromofluoromethane	106		108		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1640338-3 WG1640338-4								
Methylene chloride	100		97		70-130	3		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		96		70-130	3		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	98		99		70-130	1		20
Dibromochloromethane	84		88		63-130	5		20
1,1,2-Trichloroethane	86		91		70-130	6		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		98		75-130	2		20
Trichlorofluoromethane	100		99		62-150	1		20
1,2-Dichloroethane	89		92		70-130	3		20
1,1,1-Trichloroethane	100		97		67-130	3		20
Bromodichloromethane	92		94		67-130	2		20
trans-1,3-Dichloropropene	88		92		70-130	4		20
cis-1,3-Dichloropropene	95		98		70-130	3		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	76		83		54-136	9		20
1,1,2,2-Tetrachloroethane	83		90		67-130	8		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		110		64-130	0		20
Bromomethane	88		86		39-139	2		20

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1640338-3 WG1640338-4								
Vinyl chloride	110		100		55-140	10		20
Chloroethane	100		99		55-138	1		20
1,1-Dichloroethene	100		99		61-145	1		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	99		96		70-130	3		20
1,2-Dichlorobenzene	99		99		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	82		89		63-130	8		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Dibromomethane	87		89		70-130	2		20
1,2,3-Trichloropropane	83		90		64-130	8		20
Acrylonitrile	86		97		70-130	12		20
Styrene	110		105		70-130	5		20
Dichlorodifluoromethane	100		100		36-147	0		20
Acetone	91		100		58-148	9		20
Carbon disulfide	100		97		51-130	3		20
2-Butanone	77		89		63-138	14		20
Vinyl acetate	97		100		70-130	3		20
4-Methyl-2-pentanone	81		92		59-130	13		20
2-Hexanone	83		94		57-130	12		20

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1640338-3 WG1640338-4								
Bromochloromethane	97		96		70-130	1		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	85		90		70-130	6		20
1,3-Dichloropropane	88		92		70-130	4		20
1,1,1,2-Tetrachloroethane	89		90		64-130	1		20
Bromobenzene	95		94		70-130	1		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		100		70-130	10		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	80		84		41-144	5		20
Hexachlorobutadiene	91		90		63-130	1		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	86		91		70-130	6		20
n-Propylbenzene	110		100		69-130	10		20
1,2,3-Trichlorobenzene	87		90		70-130	3		20
1,2,4-Trichlorobenzene	90		92		70-130	2		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
1,4-Dioxane	78		88		56-162	12		20
p-Diethylbenzene	100		100		70-130	0		20

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1640338-3 WG1640338-4								
p-Ethyltoluene	110		100		70-130	10		20
1,2,4,5-Tetramethylbenzene	92		94		70-130	2		20
Ethyl ether	79		84		59-134	6		20
trans-1,4-Dichloro-2-butene	76		81		70-130	6		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	93		95		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	98		96		70-130

# SEMIVOLATILES

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 15:26  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-01**Date Collected:** 05/04/22 11:30**Client ID:** MW-7A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-01**Date Collected:** 05/04/22 11:30**Client ID:** MW-7A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	1610	J	ug/l			1
Unknown	26.8	J	ug/l			1
Indane	52.0	NJ	ug/l			1
Unknown Benzene	68.0	J	ug/l			1
Unknown Benzene	147	J	ug/l			1
Benzene, Propyl-	37.3	NJ	ug/l			1
Unknown Benzene	108	J	ug/l			1
Unknown Benzene	465	J	ug/l			1
Unknown Benzene	45.6	J	ug/l			1
Unknown Benzene	69.4	J	ug/l			1
Unknown Benzene	18.0	J	ug/l			1
Unknown Benzene	154	J	ug/l			1
Unknown Benzene	208	J	ug/l			1
Unknown Benzene	146	J	ug/l			1
Unknown Benzene	29.3	J	ug/l			1
Unknown	33.8	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	64		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 07:52  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.02	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	47		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	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.03	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	11		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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-01**Date Collected:** 05/04/22 11:30**Client ID:** MW-7A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	63		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	65		41-149

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 05/11/22 06:00

Analytical Date: 05/12/22 19:32

Analyst: DB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	64.0	J	ng/l	139	31.4	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	47			15-110		

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-01  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/20/22 08:50  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	8.57		ng/l	1.78	0.362	1
Perfluoropentanoic Acid (PFPeA)	31.6		ng/l	1.78	0.352	1
Perfluorobutanesulfonic Acid (PFBS)	3.10		ng/l	1.78	0.211	1
Perfluorohexanoic Acid (PFHxA)	25.9		ng/l	1.78	0.291	1
Perfluoroheptanoic Acid (PFHpA)	15.3		ng/l	1.78	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	6.53		ng/l	1.78	0.334	1
Perfluorooctanoic Acid (PFOA)	44.8		ng/l	1.78	0.209	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.22	J	ng/l	1.78	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	0.611	1
Perfluorononanoic Acid (PFNA)	1.24	J	ng/l	1.78	0.277	1
Perfluorooctanesulfonic Acid (PFOS)	8.20		ng/l	1.78	0.447	1
Perfluorodecanoic Acid (PFDA)	0.909	J	ng/l	1.78	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.575	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.231	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.870	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.515	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	0.714	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.330	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.290	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.220	1
PFOA/PFOS, Total	53.0		ng/l	1.78	0.209	1

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	104		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	113		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	194	Q	14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	104		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	79		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73		22-136



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 15:48  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-02**Date Collected:** 05/04/22 14:00**Client ID:** MW-9A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-02**Date Collected:** 05/04/22 14:00**Client ID:** MW-9A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	519	J	ug/l			1
Unknown Benzene	19.0	J	ug/l			1
Unknown Benzene	126	J	ug/l			1
Unknown	11.0	J	ug/l			1
Unknown	12.7	J	ug/l			1
Unknown	12.7	J	ug/l			1
Unknown Benzene	8.29	J	ug/l			1
Unknown Benzene	68.6	J	ug/l			1
Unknown	17.6	J	ug/l			1
Unknown Benzene	44.4	J	ug/l			1
Benzene, Propyl-	23.5	NJ	ug/l			1
Indane	40.6	NJ	ug/l			1
Unknown	7.74	J	ug/l			1
Unknown Benzene	10.9	J	ug/l			1
Unknown Benzene	7.89	J	ug/l			1
Unknown Benzene	108	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	65		41-149

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 08:08  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	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	49		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.08	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	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	0.04	J	ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Phenanthrene	0.08	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	0.04	J	ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	15		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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02

Date Collected: 05/04/22 14:00

Client ID: MW-9A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	68		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	75		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02

Client ID: MW-9A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8270D-SIM

Analytical Date: 05/12/22 19:54

Analyst: DB

Extraction Method: EPA 3510C

Extraction Date: 05/11/22 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	47			15-110		

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/20/22 09:23  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.00		ng/l	1.92	0.392	1
Perfluoropentanoic Acid (PFPeA)	6.49		ng/l	1.92	0.381	1
Perfluorobutanesulfonic Acid (PFBS)	4.11		ng/l	1.92	0.229	1
Perfluorohexanoic Acid (PFHxA)	5.22		ng/l	1.92	0.315	1
Perfluoroheptanoic Acid (PFHpA)	3.48		ng/l	1.92	0.216	1
Perfluorohexanesulfonic Acid (PFHxS)	5.01		ng/l	1.92	0.362	1
Perfluorooctanoic Acid (PFOA)	21.4		ng/l	1.92	0.227	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.92	1.28	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.92	0.661	1
Perfluorononanoic Acid (PFNA)	0.969	JF	ng/l	1.92	0.300	1
Perfluorooctanesulfonic Acid (PFOS)	8.26		ng/l	1.92	0.484	1
Perfluorodecanoic Acid (PFDA)	0.412	J	ng/l	1.92	0.292	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.92	1.16	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.92	0.623	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.92	0.250	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.92	0.942	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.92	0.558	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.92	0.773	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.92	0.358	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.92	0.314	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.92	0.238	1
PFOA/PFOS, Total	29.7		ng/l	1.92	0.227	1



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-02

Date Collected: 05/04/22 14:00

Client ID: MW-9A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	134		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	87		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	74		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	82		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		22-136

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 16:11  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-03

Date Collected: 05/04/22 12:20

Client ID: MW-4A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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	1.1	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	0.78	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	18.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-03**Date Collected:** 05/04/22 12:20**Client ID:** MW-4A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	251	J	ug/l			1
Unknown	9.31	J	ug/l			1
Unknown	11.0	J	ug/l			1
Unknown	16.3	J	ug/l			1
Unknown Alkane	9.27	J	ug/l			1
Unknown Alcohol	18.1	J	ug/l			1
Unknown Alkane	4.94	J	ug/l			1
Unknown Alkane	18.3	J	ug/l			1
Unknown	14.3	J	ug/l			1
Unknown Alkane	13.9	J	ug/l			1
Unknown Alkane	20.5	J	ug/l			1
Unknown Alcohol	29.4	J	ug/l			1
Unknown Alkane	13.3	J	ug/l			1
Unknown Organic Acid	25.9	JB	ug/l			1
Unknown Organic Acid	33.4	JB	ug/l			1
Unknown	13.3	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	61		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 08:25  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

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	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	0.04	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	0.03	J	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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-03**Date Collected:** 05/04/22 12:20**Client ID:** MW-4A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	53		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	60		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03

Client ID: MW-4A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8270D-SIM

Analytical Date: 05/12/22 20:16

Analyst: DB

Extraction Method: EPA 3510C

Extraction Date: 05/11/22 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	184.		ng/l	182	41.1	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	49			15-110		



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/20/22 09:56  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	50.5		ng/l	1.83	0.373	1
Perfluoropentanoic Acid (PFPeA)	60.1		ng/l	1.83	0.362	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.83	0.217	1
Perfluorohexanoic Acid (PFHxA)	70.3		ng/l	1.83	0.300	1
Perfluoroheptanoic Acid (PFHpA)	73.5		ng/l	1.83	0.206	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.344	1
Perfluorooctanoic Acid (PFOA)	78.8		ng/l	1.83	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	112		ng/l	1.83	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.629	1
Perfluorononanoic Acid (PFNA)	69.7		ng/l	1.83	0.285	1
Perfluorooctanesulfonic Acid (PFOS)	4.99		ng/l	1.83	0.460	1
Perfluorodecanoic Acid (PFDA)	2.62		ng/l	1.83	0.278	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.592	1
Perfluoroundecanoic Acid (PFUnA)	4.04		ng/l	1.83	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.895	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.83	0.530	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.735	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.340	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.299	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.83	0.227	1
PFOA/PFOS, Total	83.8		ng/l	1.83	0.216	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-03**Date Collected:** 05/04/22 12:20**Client ID:** MW-4A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	31	Q	62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	57	Q	70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	33	Q	57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	57	Q	60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	87		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	81		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	323	Q	14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	108		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	82		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	70		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	391	Q	10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	108		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	43		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	135	Q	27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		22-136

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04  
 Client ID: MW-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 16:33  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-04**Date Collected:** 05/04/22 13:15**Client ID:** MW-5A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

## Tentatively Identified Compounds

Total TIC Compounds	29.9	J	ug/l	1
Unknown Alkane	3.64	J	ug/l	1
Unknown Alkane	1.85	J	ug/l	1
Unknown Organic Acid	3.78	JB	ug/l	1
Unknown Organic Acid	4.29	JB	ug/l	1
Unknown Alkane	4.44	J	ug/l	1
Unknown Alkane	4.65	J	ug/l	1
Unknown Alkane	3.74	J	ug/l	1
Unknown	1.49	J	ug/l	1
Unknown Alkane	2.04	J	ug/l	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04

Date Collected: 05/04/22 13:15

Client ID: MW-5A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	59		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04  
 Client ID: MW-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 08:41  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

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	0.07	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	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	0.05	J	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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-04**Date Collected:** 05/04/22 13:15**Client ID:** MW-5A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	45		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	62		41-149



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05  
 Client ID: WP-11  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 16:55  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-05**Date Collected:** 05/04/22 12:30**Client ID:** WP-11**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-05**Date Collected:** 05/04/22 12:30**Client ID:** WP-11**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	47.9	J	ug/l			1
Unknown Benzene	6.14	J	ug/l			1
Unknown	1.67	J	ug/l			1
Unknown Benzene	1.71	J	ug/l			1
Unknown Benzene	2.87	J	ug/l			1
Unknown	1.67	J	ug/l			1
Unknown	2.33	J	ug/l			1
Unknown Benzene	1.60	J	ug/l			1
Unknown Organic Acid	1.96	JB	ug/l			1
Unknown	1.93	J	ug/l			1
Unknown	2.36	J	ug/l			1
Unknown Benzene	1.67	J	ug/l			1
Unknown Benzene	3.05	J	ug/l			1
Unknown Benzene	3.20	J	ug/l			1
Unknown Benzene	5.93	J	ug/l			1
Unknown Benzene	9.85	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	58		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05  
 Client ID: WP-11  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 08:57  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

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	1.3		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	0.33		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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-05**Date Collected:** 05/04/22 12:30**Client ID:** WP-11**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	45		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	58		41-149

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06  
 Client ID: WP-12  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 17:18  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-06**Date Collected:** 05/04/22 13:20**Client ID:** WP-12**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-06**Date Collected:** 05/04/22 13:20**Client ID:** WP-12**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	119	J	ug/l	1
Unknown Alkane	6.54	J	ug/l	1
Unknown	2.36	J	ug/l	1
Unknown Alkane	15.1	J	ug/l	1
Unknown Alkane	18.6	J	ug/l	1
Unknown Organic Acid	9.45	JB	ug/l	1
Unknown Alkane	2.98	J	ug/l	1
Unknown Alkane	2.11	J	ug/l	1
Unknown Alkane	2.62	J	ug/l	1
Unknown Alkane	9.27	J	ug/l	1
Unknown	1.56	J	ug/l	1
Unknown Organic Acid	12.9	JB	ug/l	1
Unknown Alkane	15.3	J	ug/l	1
Unknown	20.2	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	46		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	49		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06  
 Client ID: WP-12  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 09:13  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-06**Date Collected:** 05/04/22 13:20**Client ID:** WP-12**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	47		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	49		41-149

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 17:40  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-07**Date Collected:** 05/04/22 11:00**Client ID:** FIELD BLANK**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

## Tentatively Identified Compounds

Total TIC Compounds	27.9	J	ug/l	1
Unknown	2.14	J	ug/l	1
Unknown	1.71	J	ug/l	1
Unknown	2.14	J	ug/l	1
Unknown Alkane	2.11	J	ug/l	1
Unknown Organic Acid	4.69	JB	ug/l	1
Unknown Alkane	3.31	J	ug/l	1
Unknown Alkane	3.89	J	ug/l	1
Unknown Alkane	3.64	J	ug/l	1
Unknown Organic Acid	4.22	JB	ug/l	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-07**Date Collected:** 05/04/22 11:00**Client ID:** FIELD BLANK**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	67		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 09:30  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

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	0.01	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-07**Date Collected:** 05/04/22 11:00**Client ID:** FIELD BLANK**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	53		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	61		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/12/22 20:37  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/22 06:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	31.4	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	52			15-110		

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/20/22 10:13  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.84	0.375	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.84	0.364	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.84	0.218	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.84	0.301	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.207	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.345	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.84	0.217	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	19.8		ng/l	1.84	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.632	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.286	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.463	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.279	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.595	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.239	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.900	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.533	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.738	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.342	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.300	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.228	1
PFOA/PFOS, Total	ND		ng/l	1.84	0.217	1

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-07

Date Collected: 05/04/22 11:00

Client ID: FIELD BLANK

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	126		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	103		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	108		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	112		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	90		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	123	Q	24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	103		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	92		22-136

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/09/22 18:03  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	2.3		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-09**Date Collected:** 05/05/22 12:15**Client ID:** MW-DUP-1**Date Received:** 05/05/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-09**Date Collected:** 05/05/22 12:15**Client ID:** MW-DUP-1**Date Received:** 05/05/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	1130	J	ug/l			1
Indane	41.5	NJ	ug/l			1
Unknown	23.4	J	ug/l			1
Unknown Benzene	127	J	ug/l			1
Benzene, Propyl-	32.7	NJ	ug/l			1
Unknown Benzene	91.1	J	ug/l			1
Unknown Benzene	116	J	ug/l			1
Unknown Benzene	59.0	J	ug/l			1
Unknown Benzene	353	J	ug/l			1
Unknown Benzene	18.0	J	ug/l			1
Unknown Benzene	26.3	J	ug/l			1
Unknown Benzene	46.4	J	ug/l			1
Unknown Benzene	17.1	J	ug/l			1
Unknown Benzene	107	J	ug/l			1
Unknown Benzene	59.9	J	ug/l			1
Unknown	15.9	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	63		41-149



**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/09/22 09:46  
 Analyst: AH

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 16:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.02	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	33		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	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	9.0		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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-09**Date Collected:** 05/05/22 12:15**Client ID:** MW-DUP-1**Date Received:** 05/05/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	45		10-120
4-Terphenyl-d14	62		41-149

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09

Date Collected: 05/05/22 12:15

Client ID: MW-DUP-1

Date Received: 05/05/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 05/11/22 06:00

Analytical Date: 05/12/22 20:59

Analyst: DB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			48		15-110	

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/08/22 11:44  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09 Batch: WG1635587-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
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
Fluoranthene	ND		ug/l	2.0	0.26
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
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/08/22 11:44  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09 Batch: WG1635587-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
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
2-Methylnaphthalene	ND		ug/l	2.0	0.45
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
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/08/22 11:44  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09 Batch: WG1635587-1					
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
Pentachlorophenol	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
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

#### Tentatively Identified Compounds

Total TIC Compounds	19.6	J	ug/l
Unknown Organic Acid	9.42	J	ug/l
Unknown Organic Acid	8.22	J	ug/l
Unknown	2.00	J	ug/l

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/08/22 11:44  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 05/06/22 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09 Batch: WG1635587-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	78		41-149



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/07/22 19:40  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07,09 Batch: WG1635588-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		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	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.01	J	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	ND		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	ND		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:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/07/22 19:40  
 Analyst: JJW

Extraction Method: EPA 3510C  
 Extraction Date: 05/06/22 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07,09 Batch: WG1635588-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	78		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 05/12/22 18:24  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 05/11/22 06:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-03,07,09 Batch: WG1636929-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	44		15-110

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/20/22 08:17  
**Analyst:** RS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03,07 Batch: WG1639295-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/20/22 08:17  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/17/22 10:45

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03,07 Batch: WG1639295-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	106		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	120		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	104		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	106		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	102		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	100		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	119		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	92		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	55		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	96		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	101		22-136

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635587-2 WG1635587-3								
Acenaphthene	66		66		37-111	0		30
1,2,4-Trichlorobenzene	60		55		39-98	9		30
Hexachlorobenzene	66		66		40-140	0		30
Bis(2-chloroethyl)ether	66		64		40-140	3		30
2-Chloronaphthalene	64		60		40-140	6		30
1,2-Dichlorobenzene	59		54		40-140	9		30
1,3-Dichlorobenzene	58		54		40-140	7		30
1,4-Dichlorobenzene	60		54		36-97	11		30
3,3'-Dichlorobenzidine	57		62		40-140	8		30
2,4-Dinitrotoluene	80		81		48-143	1		30
2,6-Dinitrotoluene	74		79		40-140	7		30
Fluoranthene	72		70		40-140	3		30
4-Chlorophenyl phenyl ether	67		65		40-140	3		30
4-Bromophenyl phenyl ether	66		66		40-140	0		30
Bis(2-chloroisopropyl)ether	64		61		40-140	5		30
Bis(2-chloroethoxy)methane	67		65		40-140	3		30
Hexachlorobutadiene	58		54		40-140	7		30
Hexachlorocyclopentadiene	54		52		40-140	4		30
Hexachloroethane	57		49		40-140	15		30
Isophorone	62		59		40-140	5		30
Naphthalene	66		62		40-140	6		30
Nitrobenzene	71		70		40-140	1		30
NDPA/DPA	69		72		40-140	4		30

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635587-2 WG1635587-3								
n-Nitrosodi-n-propylamine	66		65		29-132	2		30
Bis(2-ethylhexyl)phthalate	72		78		40-140	8		30
Butyl benzyl phthalate	72		72		40-140	0		30
Di-n-butylphthalate	70		70		40-140	0		30
Di-n-octylphthalate	71		77		40-140	8		30
Diethyl phthalate	70		70		40-140	0		30
Dimethyl phthalate	68		66		40-140	3		30
Benzo(a)anthracene	71		74		40-140	4		30
Benzo(a)pyrene	74		77		40-140	4		30
Benzo(b)fluoranthene	74		75		40-140	1		30
Benzo(k)fluoranthene	74		76		40-140	3		30
Chrysene	73		76		40-140	4		30
Acenaphthylene	66		64		45-123	3		30
Anthracene	70		71		40-140	1		30
Benzo(ghi)perylene	76		74		40-140	3		30
Fluorene	68		68		40-140	0		30
Phenanthrene	69		69		40-140	0		30
Dibenzo(a,h)anthracene	77		77		40-140	0		30
Indeno(1,2,3-cd)pyrene	78		77		40-140	1		30
Pyrene	70		71		26-127	1		30
Biphenyl	69		65		40-140	6		30
4-Chloroaniline	58		63		40-140	8		30
2-Nitroaniline	82		80		52-143	2		30



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635587-2 WG1635587-3								
3-Nitroaniline	78		79		25-145	1		30
4-Nitroaniline	78		81		51-143	4		30
Dibenzofuran	70		69		40-140	1		30
2-Methylnaphthalene	64		62		40-140	3		30
1,2,4,5-Tetrachlorobenzene	61		59		2-134	3		30
Acetophenone	65		64		39-129	2		30
2,4,6-Trichlorophenol	69		70		30-130	1		30
p-Chloro-m-cresol	76		69		23-97	10		30
2-Chlorophenol	69		66		27-123	4		30
2,4-Dichlorophenol	68		67		30-130	1		30
2,4-Dimethylphenol	66		64		30-130	3		30
2-Nitrophenol	80		77		30-130	4		30
4-Nitrophenol	73		79		10-80	8		30
2,4-Dinitrophenol	83		98		20-130	17		30
4,6-Dinitro-o-cresol	92		94		20-164	2		30
Pentachlorophenol	67		74		9-103	10		30
Phenol	49		50		12-110	2		30
2-Methylphenol	65		66		30-130	2		30
3-Methylphenol/4-Methylphenol	67		66		30-130	2		30
2,4,5-Trichlorophenol	72		69		30-130	4		30
Benzoic Acid	48		65		10-164	30		30
Benzyl Alcohol	63		64		26-116	2		30
Carbazole	74		73		55-144	1		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635587-2 WG1635587-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	64		62		21-120
Phenol-d6	49		50		10-120
Nitrobenzene-d5	69		67		23-120
2-Fluorobiphenyl	65		64		15-120
2,4,6-Tribromophenol	70		75		10-120
4-Terphenyl-d14	71		69		41-149

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635588-2 WG1635588-3								
Acenaphthene	79		79		40-140	0		40
2-Chloronaphthalene	71		72		40-140	1		40
Fluoranthene	78		78		40-140	0		40
Hexachlorobutadiene	62		62		40-140	0		40
Naphthalene	72		73		40-140	1		40
Benzo(a)anthracene	80		81		40-140	1		40
Benzo(a)pyrene	72		74		40-140	3		40
Benzo(b)fluoranthene	77		80		40-140	4		40
Benzo(k)fluoranthene	84		85		40-140	1		40
Chrysene	78		84		40-140	7		40
Acenaphthylene	68		67		40-140	1		40
Anthracene	79		78		40-140	1		40
Benzo(ghi)perylene	86		85		40-140	1		40
Fluorene	79		80		40-140	1		40
Phenanthrene	78		80		40-140	3		40
Dibenzo(a,h)anthracene	90		90		40-140	0		40
Indeno(1,2,3-cd)pyrene	89		92		40-140	3		40
Pyrene	80		80		40-140	0		40
2-Methylnaphthalene	71		71		40-140	0		40
Pentachlorophenol	83		82		40-140	1		40
Hexachlorobenzene	82		87		40-140	6		40
Hexachloroethane	65		68		40-140	5		40

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1635588-2 WG1635588-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	66		67		21-120
Phenol-d6	55		57		10-120
Nitrobenzene-d5	80		78		23-120
2-Fluorobiphenyl	67		68		15-120
2,4,6-Tribromophenol	91		93		10-120
4-Terphenyl-d14	73		70		41-149

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-03,07,09 Batch: WG1636929-2 WG1636929-3								
1,4-Dioxane	125		130		40-140	4		30

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,4-Dioxane-d8	49		48		15-110

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 Batch: WG1639295-2								
Perfluorobutanoic Acid (PFBA)	94		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	93		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	92		-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	94		-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	94		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	108		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	95		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	100		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	103		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	104		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	108		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	87		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	104		-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	99		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	110		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	88		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	95		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	97		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	95		-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	101		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	96		-		59-182	-		30

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 Batch: WG1639295-2

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	106				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	118				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107				70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	106				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	105				62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102				62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	99				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42				10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	100				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	96				22-136



# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 QC Batch ID: WG1639295-3 QC Sample: L2223459-01 Client ID: MW-7A												
Perfluorobutanoic Acid (PFBA)	8.57	38.4	44.2	93		-	-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	31.6	38.4	66.8	92		-	-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	3.10	34.1	34.8	93		-	-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	25.9	38.4	62.2	94		-	-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	15.3	38.4	52.0	96		-	-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	6.53	35.1	44.1	107		-	-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	44.8	38.4	84.2	102		-	-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.22J	36.6	38.0	101		-	-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	36.7	38.6	105		-	-		61-179	-		30
Perfluorononanoic Acid (PFNA)	1.24J	38.4	40.1	101		-	-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	8.20	35.7	46.7	108		-	-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	0.909J	38.4	35.8	91		-	-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	36.9	44.3	120		-	-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	38.4	39.3	102		-	-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	38.4	41.4	108		-	-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	37.1	28.6	77		-	-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	ND	38.4	40.9	106		-	-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	38.4	39.4	102		-	-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	ND	38.4	38.7	101		-	-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	ND	38.4	37.7	98		-	-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	ND	38.4	38.6	100		-	-		59-182	-		30

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 QC Batch ID: WG1639295-3 QC Sample: L2223459-01 Client ID: MW-7A												

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>MS Qualifier</b>	<b>MSD % Recovery</b>	<b>MSD Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120				10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	176	Q			14-147
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	81				27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	85				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	75				55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85				62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107				71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	71				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	71				22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	88				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102				62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	22				10-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102				69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86				62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	83				59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				70-131

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 QC Batch ID: WG1639295-4 QC Sample: L2223459-02 Client ID: MW-9A						
Perfluorobutanoic Acid (PFBA)	5.00	5.14	ng/l	3		30
Perfluoropentanoic Acid (PFPeA)	6.49	6.66	ng/l	3		30
Perfluorobutanesulfonic Acid (PFBS)	4.11	4.04	ng/l	2		30
Perfluorohexanoic Acid (PFHxA)	5.22	5.34	ng/l	2		30
Perfluoroheptanoic Acid (PFHpA)	3.48	3.63	ng/l	4		30
Perfluorohexanesulfonic Acid (PFHxS)	5.01	5.40	ng/l	7		30
Perfluorooctanoic Acid (PFOA)	21.4	24.1	ng/l	12		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	0.969JF	0.970JF	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	8.26	8.14	ng/l	1		30
Perfluorodecanoic Acid (PFDA)	0.412J	0.481J	ng/l	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	ND	ng/l	NC		30

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07 QC Batch ID: WG1639295-4 QC Sample: L2223459-02 Client ID: MW-9A						
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		85		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		113		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		99		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81		77		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		85		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		104		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		84		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	134		127		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		81		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		102		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		83		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123		120		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	87		89		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	74		76		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		19		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	82		87		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74		77		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		81		22-136

# PCBS

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01  
 Client ID: MW-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:00  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	77		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	70		30-150	B

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:17  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	83		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	65		30-150	B



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:25  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	69		30-150	B

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04  
 Client ID: MW-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:33  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	79		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	88		30-150	B

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05  
 Client ID: WP-11  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:42  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	72		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06  
 Client ID: WP-12  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:50  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	78		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	82		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 13:58  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	85		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	87		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 12:19  
 Analyst: JM

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

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	89		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	62		30-150	B

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 05/19/22 11:29  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/18/22 16:22  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/19/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/19/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-07,09 Batch: WG1640120-1						
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	73		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	67		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-07,09 Batch: WG1640120-2 WG1640120-3									
Aroclor 1016	80		64		40-140	22		50	A
Aroclor 1260	78		65		40-140	19		50	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	83		75		30-150	A
Decachlorobiphenyl	87		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		67		30-150	B
Decachlorobiphenyl	83		70		30-150	B



# PESTICIDES

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8081B

Extraction Date: 05/09/22 21:18

Analytical Date: 05/10/22 22:22

Analyst: AR

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	66		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	57		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-02  
 Client ID: MW-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 22:34  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-02**Date Collected:** 05/04/22 14:00**Client ID:** MW-9A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	42		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03  
 Client ID: MW-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 22:47  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-03**Date Collected:** 05/04/22 12:20**Client ID:** MW-4A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	58		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	42		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04  
 Client ID: MW-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 23:00  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-04**Date Collected:** 05/04/22 13:15**Client ID:** MW-5A**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	63		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05  
 Client ID: WP-11  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 23:12  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-05**Date Collected:** 05/04/22 12:30**Client ID:** WP-11**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	74		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	62		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06  
 Client ID: WP-12  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 23:25  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06

Date Collected: 05/04/22 13:20

Client ID: WP-12

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	56		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07  
 Client ID: FIELD BLANK  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/04/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 23:37  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-07**Date Collected:** 05/04/22 11:00**Client ID:** FIELD BLANK**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	62		30-150	B

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09  
 Client ID: MW-DUP-1  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/05/22 12:15  
 Date Received: 05/05/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 05/12/22 05:50  
 Analyst: AKM

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/22 07:47

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:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-09**Date Collected:** 05/05/22 12:15**Client ID:** MW-DUP-1**Date Received:** 05/05/22**Sample Location:** 60 MCLEAN AVE YONKERS NY**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	59		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	44		30-150	B

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 17:33  
**Analyst:** AR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/09/22 21:18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1636383-1						
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:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
 Analytical Date: 05/10/22 17:33  
 Analyst: AR

Extraction Method: EPA 3510C  
 Extraction Date: 05/09/22 21:18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1636383-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	67		30-150	B

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/12/22 06:01  
**Analyst:** AKM

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/22 07:47

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 09 Batch: WG1637021-1						
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:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
 Analytical Date: 05/12/22 06:01  
 Analyst: AKM

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/22 07:47

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 09 Batch: WG1637021-1						

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	66		30-150	B
Decachlorobiphenyl	52		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1636383-2 WG1636383-3									
Delta-BHC	64		70		30-150	10		20	A
Lindane	71		78		30-150	9		20	A
Alpha-BHC	74		82		30-150	9		20	A
Beta-BHC	67		75		30-150	11		20	A
Heptachlor	68		76		30-150	11		20	A
Aldrin	67		75		30-150	11		20	A
Heptachlor epoxide	70		78		30-150	11		20	A
Endrin	69		77		30-150	12		20	A
Endrin aldehyde	64		73		30-150	14		20	A
Endrin ketone	71		82		30-150	15		20	A
Dieldrin	74		84		30-150	12		20	A
4,4'-DDE	73		85		30-150	14		20	A
4,4'-DDD	83		94		30-150	12		20	A
4,4'-DDT	69		81		30-150	15		20	A
Endosulfan I	64		72		30-150	12		20	A
Endosulfan II	70		80		30-150	13		20	A
Endosulfan sulfate	70		80		30-150	13		20	A
Methoxychlor	85		97		30-150	13		20	A
cis-Chlordane	59		67		30-150	12		20	A
trans-Chlordane	76		85		30-150	11		20	A

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1636383-2 WG1636383-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	65		70		30-150	A
Decachlorobiphenyl	61		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		72		30-150	B
Decachlorobiphenyl	61		64		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 09 Batch: WG1637021-2 WG1637021-3									
Delta-BHC	67		67		30-150	0		20	A
Lindane	75		74		30-150	2		20	A
Alpha-BHC	88		79		30-150	10		20	A
Beta-BHC	80		77		30-150	3		20	A
Heptachlor	72		72		30-150	0		20	A
Aldrin	74		71		30-150	5		20	A
Heptachlor epoxide	67		69		30-150	2		20	A
Endrin	67		69		30-150	3		20	A
Endrin aldehyde	55		55		30-150	0		20	A
Endrin ketone	64		65		30-150	2		20	A
Dieldrin	69		72		30-150	4		20	A
4,4'-DDE	68		69		30-150	1		20	A
4,4'-DDD	70		73		30-150	4		20	A
4,4'-DDT	68		70		30-150	3		20	A
Endosulfan I	66		66		30-150	0		20	A
Endosulfan II	65		67		30-150	2		20	A
Endosulfan sulfate	61		62		30-150	3		20	A
Methoxychlor	68		69		30-150	1		20	A
cis-Chlordane	63		63		30-150	1		20	A
trans-Chlordane	79		76		30-150	3		20	A



# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 09 Batch: WG1637021-2 WG1637021-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		62		30-150	A
Decachlorobiphenyl	53		55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		66		30-150	B
Decachlorobiphenyl	52		52		30-150	B

## METALS

Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.105		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Barium, Total	0.1325		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Calcium, Total	51.6		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Chromium, Total	0.00047	J	mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00244		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Copper, Total	0.00086	J	mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Iron, Total	1.54		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Lead, Total	0.00092	J	mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Magnesium, Total	14.3		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Manganese, Total	1.783		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00500	0.00228	1	05/25/22 17:01	05/26/22 07:43	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00326		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Potassium, Total	7.76		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Sodium, Total	245.		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV
Zinc, Total	0.03409		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:33	EPA 3005A	1,6020B	SV

## General Chemistry - Westborough Lab

Iron, Ferric	0.65		mg/l	0.50	0.50	1		05/26/22 15:33	NA	107,-	
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Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-01

Date Collected: 05/04/22 11:30

Client ID: MW-7A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00376	J	mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.1345		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Calcium, Dissolved	51.2		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Chromium, Dissolved	0.00020	J	mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00250		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Iron, Dissolved	1.38		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Lead, Dissolved	0.00047	J	mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	14.4		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Manganese, Dissolved	1.803		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:30	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00332		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Potassium, Dissolved	7.82		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Sodium, Dissolved	255.		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Thallium, Dissolved	0.00025	J	mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 10:52	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-02

Date Collected: 05/04/22 14:00

Client ID: MW-9A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	2.70		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Arsenic, Total	0.00086		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Barium, Total	0.08924		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Calcium, Total	39.4		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Chromium, Total	0.00549		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00379		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Copper, Total	0.00732		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Iron, Total	8.56		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Lead, Total	0.00326		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Magnesium, Total	12.5		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Manganese, Total	0.7852		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 07:47	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00645		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Potassium, Total	5.30		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Sodium, Total	183.		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Vanadium, Total	0.00679		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV
Zinc, Total	0.01764		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:38	EPA 3005A	1,6020B	SV

## General Chemistry - Westborough Lab

Iron, Ferric	6.4		mg/l	0.50	0.50	1		05/26/22 15:38	NA	107,-	
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Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-02

Date Collected: 05/04/22 14:00

Client ID: MW-9A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	0.00030	J	mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.06701		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Calcium, Dissolved	38.6		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00149		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Iron, Dissolved	2.79		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	11.4		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.6428		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:33	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00152	J	mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Potassium, Dissolved	4.91		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Sodium, Dissolved	184.		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Thallium, Dissolved	0.00016	J	mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 10:57	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-03

Date Collected: 05/04/22 12:20

Client ID: MW-4A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.0226		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Antimony, Total	0.00057	J	mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Arsenic, Total	0.00150		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Barium, Total	0.03978		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Calcium, Total	442.		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Chromium, Total	0.00055	J	mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00189		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Copper, Total	0.00130		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Iron, Total	13.0		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Lead, Total	0.00202		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Magnesium, Total	104.		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Manganese, Total	0.5132		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 07:57	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00198	J	mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Potassium, Total	555.		mg/l	0.500	0.154	5	05/25/22 17:02	05/26/22 18:00	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Sodium, Total	894.		mg/l	0.500	0.146	5	05/25/22 17:02	05/26/22 18:00	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Zinc, Total	0.04678		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 19:10	EPA 3005A	1,6020B	SV
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00612	J	mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Antimony, Dissolved	0.00074	J	mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	0.00067		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.02342		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-03

Date Collected: 05/04/22 12:20

Client ID: MW-4A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Calcium, Dissolved	464.		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Chromium, Dissolved	0.00018	J	mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00174		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Iron, Dissolved	0.0829		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	112.		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.5207		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:36	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00214		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Potassium, Dissolved	555.		mg/l	0.500	0.154	5	05/25/22 20:38	05/26/22 11:51	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Sodium, Dissolved	884.		mg/l	0.500	0.146	5	05/25/22 20:38	05/26/22 11:51	EPA 3005A	1,6020B	SV
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV
Zinc, Dissolved	0.01837		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:02	EPA 3005A	1,6020B	SV





Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-04

Date Collected: 05/04/22 13:15

Client ID: MW-5A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.0200		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Barium, Total	0.03751		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Calcium, Total	29.6		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Chromium, Total	0.00044	J	mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Copper, Total	0.00202		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Iron, Total	0.0712		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Magnesium, Total	11.9		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Manganese, Total	0.00150		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 08:00	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00227		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Potassium, Total	4.61		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Sodium, Total	51.7		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Zinc, Total	0.00428	J	mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:48	EPA 3005A	1,6020B	SV
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0123		mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.03869		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-04

Date Collected: 05/04/22 13:15

Client ID: MW-5A

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Calcium, Dissolved	29.5		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Chromium, Dissolved	0.00028	J	mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00016	J	mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Copper, Dissolved	0.00372		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	11.6		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.00139		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:40	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00231		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Potassium, Dissolved	4.61		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Sodium, Dissolved	51.6		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV
Zinc, Dissolved	0.00553	J	mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:06	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-05

Date Collected: 05/04/22 12:30

Client ID: WP-11

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.0664		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Barium, Total	0.05663		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Calcium, Total	42.5		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Chromium, Total	0.00139		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00023	J	mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Copper, Total	0.00087	J	mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Iron, Total	1.11		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Magnesium, Total	15.0		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Manganese, Total	0.03910		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 08:03	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00098	J	mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Potassium, Total	4.53		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Sodium, Total	140.		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:53	EPA 3005A	1,6020B	SV
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.05574		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-05

Date Collected: 05/04/22 12:30

Client ID: WP-11

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Calcium, Dissolved	39.7		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00020	J	mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Iron, Dissolved	0.571		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	14.0		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.03446		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:53	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00068	J	mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Potassium, Dissolved	4.15		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Sodium, Dissolved	134.		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Thallium, Dissolved	0.00025	J	mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:28	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-06

Date Collected: 05/04/22 13:20

Client ID: WP-12

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.0592		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Barium, Total	0.05096		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Calcium, Total	42.5		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Chromium, Total	0.00214		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Copper, Total	0.00077	J	mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Iron, Total	0.267		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Magnesium, Total	15.1		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Manganese, Total	0.00328		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 08:07	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00073	J	mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Potassium, Total	4.63		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Sodium, Total	127.		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:57	EPA 3005A	1,6020B	SV
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0230		mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.05018		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-06

Date Collected: 05/04/22 13:20

Client ID: WP-12

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Calcium, Dissolved	41.4		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Chromium, Dissolved	0.00062	J	mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Copper, Dissolved	0.00051	J	mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Iron, Dissolved	0.111		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	14.5		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.00270		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:56	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Potassium, Dissolved	4.46		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Sodium, Dissolved	123.		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Thallium, Dissolved	0.00016	J	mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV
Zinc, Dissolved	0.00493	J	mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:32	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-07

Date Collected: 05/04/22 11:00

Client ID: FIELD BLANK

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Barium, Total	0.00032	J	mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Calcium, Total	ND		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Iron, Total	ND		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 08:10	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Potassium, Total	ND		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Sodium, Total	ND		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Thallium, Total	0.00029	J	mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 15:13	EPA 3005A	1,6020B	SV

## Dissolved Metals - Mansfield Lab

Aluminum, Dissolved	0.00908	J	mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.00029	J	mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV





**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-07

Date Collected: 05/04/22 11:00

Client ID: FIELD BLANK

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Iron, Dissolved	0.0371	J	mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Manganese, Dissolved	0.00237		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 08:00	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Sodium, Dissolved	0.0662	J	mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:41	EPA 3005A	1,6020B	SV





Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-09

Date Collected: 05/05/22 12:15

Client ID: MW-DUP-1

Date Received: 05/05/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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	0.446		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Barium, Total	0.1489		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Calcium, Total	54.3		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Chromium, Total	0.00134		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00253		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Copper, Total	0.00150		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Iron, Total	1.99		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Lead, Total	0.00102		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Magnesium, Total	15.9		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Manganese, Total	1.457		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00100	0.00045	1	05/25/22 17:01	05/26/22 08:13	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00431		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Potassium, Total	6.79		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Sodium, Total	270.		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Thallium, Total	0.00030	J	mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 16:25	EPA 3005A	1,6020B	SV
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00860	J	mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Barium, Dissolved	0.1406		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**SAMPLE RESULTS**

Lab ID: L2223459-09

Date Collected: 05/05/22 12:15

Client ID: MW-DUP-1

Date Received: 05/05/22

Sample Location: 60 MCLEAN AVE YONKERS NY

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
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Calcium, Dissolved	50.9		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Cobalt, Dissolved	0.00222		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Iron, Dissolved	0.957		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Magnesium, Dissolved	15.4		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Manganese, Dissolved	1.369		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:20	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	0.00351		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Potassium, Dissolved	6.63		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Sodium, Dissolved	277.		mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 11:46	EPA 3005A	1,6020B	SV



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## 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): 01-07,09 Batch: WG1642418-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Barium, Total	ND		mg/l	0.00050	0.00017	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Calcium, Total	ND		mg/l	0.100	0.0394	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Iron, Total	ND		mg/l	0.0500	0.0191	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Potassium, Total	ND		mg/l	0.100	0.0309	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Sodium, Total	ND		mg/l	0.100	0.0293	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/25/22 17:02	05/26/22 14:01	1,6020B	SV

### 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): 01-07,09 Batch: WG1642704-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	05/25/22 17:01	05/26/22 07:20	1,7470A	DMB



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-07,09 Batch: WG1642946-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Antimony, Dissolved	0.00047	J	mg/l	0.00400	0.00042	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Chromium, Dissolved	0.00022	J	mg/l	0.00100	0.00017	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Sodium, Dissolved	0.0311	J	mg/l	0.100	0.0293	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	05/25/22 20:38	05/26/22 10:10	1,6020B	SV

### Prep Information

Digestion Method: EPA 3005A



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-07,09 Batch: WG1643008-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	05/25/22 22:55	05/26/22 07:13	1,7470A	DMB

### Prep Information

Digestion Method: EPA 7470A

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1642418-2								
Aluminum, Total	94		-		80-120	-		
Antimony, Total	84		-		80-120	-		
Arsenic, Total	95		-		80-120	-		
Barium, Total	95		-		80-120	-		
Beryllium, Total	109		-		80-120	-		
Cadmium, Total	99		-		80-120	-		
Calcium, Total	94		-		80-120	-		
Chromium, Total	91		-		80-120	-		
Cobalt, Total	88		-		80-120	-		
Copper, Total	88		-		80-120	-		
Iron, Total	98		-		80-120	-		
Lead, Total	99		-		80-120	-		
Magnesium, Total	102		-		80-120	-		
Manganese, Total	92		-		80-120	-		
Nickel, Total	89		-		80-120	-		
Potassium, Total	97		-		80-120	-		
Selenium, Total	104		-		80-120	-		
Silver, Total	98		-		80-120	-		
Sodium, Total	100		-		80-120	-		
Thallium, Total	100		-		80-120	-		
Vanadium, Total	90		-		80-120	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1642418-2					
Zinc, Total	88	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1642704-2					
Mercury, Total	96	-	80-120	-	

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1642946-2					
Aluminum, Dissolved	100	-	80-120	-	
Antimony, Dissolved	84	-	80-120	-	
Arsenic, Dissolved	107	-	80-120	-	
Barium, Dissolved	102	-	80-120	-	
Beryllium, Dissolved	103	-	80-120	-	
Cadmium, Dissolved	105	-	80-120	-	
Calcium, Dissolved	102	-	80-120	-	
Chromium, Dissolved	99	-	80-120	-	
Cobalt, Dissolved	96	-	80-120	-	
Copper, Dissolved	98	-	80-120	-	
Iron, Dissolved	96	-	80-120	-	
Lead, Dissolved	106	-	80-120	-	
Magnesium, Dissolved	108	-	80-120	-	
Manganese, Dissolved	101	-	80-120	-	
Nickel, Dissolved	99	-	80-120	-	
Potassium, Dissolved	106	-	80-120	-	
Selenium, Dissolved	103	-	80-120	-	
Silver, Dissolved	104	-	80-120	-	
Sodium, Dissolved	106	-	80-120	-	
Thallium, Dissolved	104	-	80-120	-	
Vanadium, Dissolved	100	-	80-120	-	



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1642946-2					
Zinc, Dissolved	95	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 Batch: WG1643008-2					
Mercury, Dissolved	103	-	80-120	-	

# Matrix Spike Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

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): 01-07,09 QC Batch ID: WG1642418-3 WG1642418-4 QC Sample: L2223759-02 Client ID: MS Sample												
Aluminum, Total	0.0174	2	1.92	95		1.92	95		75-125	0		20
Antimony, Total	ND	0.5	0.4521	90		0.4299	86		75-125	5		20
Arsenic, Total	0.00046J	0.12	0.1168	97		0.1138	95		75-125	3		20
Barium, Total	0.08160	2	2.010	96		1.964	94		75-125	2		20
Beryllium, Total	ND	0.05	0.04512	90		0.04723	94		75-125	5		20
Cadmium, Total	ND	0.053	0.05057	95		0.05132	97		75-125	1		20
Calcium, Total	191	10	192	10	Q	190	0	Q	75-125	1		20
Chromium, Total	0.00026J	0.2	0.1845	92		0.1852	93		75-125	0		20
Cobalt, Total	0.00092	0.5	0.4386	88		0.4404	88		75-125	0		20
Copper, Total	0.00233	0.25	0.2276	90		0.2233	88		75-125	2		20
Iron, Total	1.96	1	2.91	95		2.80	84		75-125	4		20
Lead, Total	0.00241	0.53	0.5174	97		0.5146	97		75-125	1		20
Magnesium, Total	34.3	10	43.1	88		42.3	80		75-125	2		20
Manganese, Total	0.5672	0.5	1.012	89		1.005	88		75-125	1		20
Nickel, Total	0.00113J	0.5	0.4530	91		0.4337	87		75-125	4		20
Potassium, Total	3.27	10	12.8	95		12.9	96		75-125	1		20
Selenium, Total	ND	0.12	0.120	100		0.122	102		75-125	2		20
Silver, Total	ND	0.05	0.04896	98		0.04863	97		75-125	1		20
Sodium, Total	89.3	10	91.3	20	Q	90.8	15	Q	75-125	1		20
Thallium, Total	ND	0.12	0.1164	97		0.1164	97		75-125	0		20
Vanadium, Total	ND	0.5	0.4660	93		0.4573	91		75-125	2		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

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): 01-07,09    QC Batch ID: WG1642418-3    WG1642418-4    QC Sample: L2223759-02    Client ID: MS Sample									
Zinc, Total	0.01455	0.5	0.4585	89	0.4538	88	75-125	1	20

# Matrix Spike Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

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): 01-07,09    QC Batch ID: WG1642418-7    WG1642418-8    QC Sample: L2223766-01    Client ID: MS Sample										
Aluminum, Total	9.26	2	11.8	127	Q	11.2	97	75-125	5	20
Antimony, Total	ND	0.5	0.4272	85		0.4146	83	75-125	3	20
Arsenic, Total	0.0054	0.12	0.1245	99		0.1182	94	75-125	5	20
Barium, Total	0.0562	2	2.011	98		1.971	96	75-125	2	20
Beryllium, Total	0.0003J	0.05	0.04710	94		0.04540	91	75-125	4	20
Cadmium, Total	ND	0.053	0.05341	101		0.05217	98	75-125	2	20
Calcium, Total	260	10	275	150	Q	262	20	Q 75-125	5	20
Chromium, Total	0.0949	0.2	0.2808	93		0.2608	83	75-125	7	20
Cobalt, Total	0.0105	0.5	0.4672	91		0.4464	87	75-125	5	20
Copper, Total	0.0459	0.25	0.2796	94		0.2657	88	75-125	5	20
Iron, Total	18.6	1	19.9	130	Q	19.1	50	Q 75-125	4	20
Lead, Total	0.0101	0.53	0.5355	99		0.5210	96	75-125	3	20
Magnesium, Total	97.6	10	113	154	Q	109	114	75-125	4	20
Manganese, Total	0.4237	0.5	0.9209	99		0.8723	90	75-125	5	20
Nickel, Total	0.0584	0.5	0.5100	90		0.4868	86	75-125	5	20
Potassium, Total	13.4	10	23.6	102		22.1	87	75-125	7	20
Selenium, Total	0.007	0.12	0.130	102		0.132	104	75-125	2	20
Silver, Total	ND	0.05	0.05099	102		0.04863	97	75-125	5	20
Sodium, Total	276	10	295	190	Q	285	90	75-125	3	20
Thallium, Total	0.0002J	0.12	0.1176	98		0.1146	96	75-125	3	20
Vanadium, Total	0.0169	0.5	0.4910	95		0.4632	89	75-125	6	20

# Matrix Spike Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

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): 01-07,09 QC Batch ID: WG1642418-7 WG1642418-8 QC Sample: L2223766-01 Client ID: MS Sample									
Zinc, Total	0.0429	0.5	0.5019	92	0.4746	86	75-125	6	20
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642704-3 QC Sample: L2222560-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00460	92	-	-	75-125	-	20

# Matrix Spike Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642946-3 QC Sample: L2223459-01 Client ID: MW-7A									
Aluminum, Dissolved	0.00376J	2	2.42	121	-	-	75-125	-	20
Antimony, Dissolved	ND	0.5	0.5689	114	-	-	75-125	-	20
Arsenic, Dissolved	ND	0.12	0.1501	125	-	-	75-125	-	20
Barium, Dissolved	0.1345	2	2.522	119	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05820	116	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.053	0.06459	122	-	-	75-125	-	20
Calcium, Dissolved	51.2	10	72.0	208	Q	-	75-125	-	20
Chromium, Dissolved	0.00020J	0.2	0.2340	117	-	-	75-125	-	20
Cobalt, Dissolved	0.00250	0.5	0.5735	114	-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2911	116	-	-	75-125	-	20
Iron, Dissolved	1.38	1	2.98	160	Q	-	75-125	-	20
Lead, Dissolved	0.00047J	0.53	0.6432	121	-	-	75-125	-	20
Magnesium, Dissolved	14.4	10	29.7	153	Q	-	75-125	-	20
Manganese, Dissolved	1.803	0.5	2.821	204	Q	-	75-125	-	20
Nickel, Dissolved	0.00332	0.5	0.5717	114	-	-	75-125	-	20
Potassium, Dissolved	7.82	10	21.1	133	Q	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.149	124	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.06148	123	-	-	75-125	-	20
Sodium, Dissolved	255.	10	308	530	Q	-	75-125	-	20
Thallium, Dissolved	0.00025J	0.12	0.1448	121	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5778	116	-	-	75-125	-	20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642946-3 QC Sample: L2223459-01 Client ID: MW-7A									
Zinc, Dissolved	ND	0.5	0.5621	112	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1643008-3 QC Sample: L2223459-09 Client ID: MW-DUP-1									
Mercury, Dissolved	ND	0.005	0.00467	93	-	-	75-125	-	20

**Lab Duplicate Analysis**  
*Batch Quality Control***Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642704-4 QC Sample: L2222560-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20



# **Lab Duplicate Analysis** *Batch Quality Control*

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642946-4 QC Sample: L2223459-01 Client ID: MW-7A					
Aluminum, Dissolved	0.00376J	0.00663J	mg/l	NC	20
Antimony, Dissolved	ND	0.00067J	mg/l	NC	20
Arsenic, Dissolved	ND	ND	mg/l	NC	20
Barium, Dissolved	0.1345	0.1309	mg/l	3	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	51.2	50.6	mg/l	1	20
Chromium, Dissolved	0.00020J	ND	mg/l	NC	20
Cobalt, Dissolved	0.00250	0.00245	mg/l	2	20
Copper, Dissolved	ND	0.00104	mg/l	NC	20
Iron, Dissolved	1.38	1.38	mg/l	0	20
Lead, Dissolved	0.00047J	0.00053J	mg/l	NC	20
Magnesium, Dissolved	14.4	14.0	mg/l	3	20
Manganese, Dissolved	1.803	1.813	mg/l	1	20
Nickel, Dissolved	0.00332	0.00317	mg/l	5	20
Potassium, Dissolved	7.82	7.50	mg/l	4	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	0.00018J	mg/l	NC	20
Sodium, Dissolved	255.	247	mg/l	3	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642946-4 QC Sample: L2223459-01 Client ID: MW-7A					
Thallium, Dissolved	0.00025J	0.00073J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	0.00415J	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1643008-4 QC Sample: L2223459-09 Client ID: MW-DUP-1					
Mercury, Dissolved	ND	ND	mg/l	NC	20

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2223459  
**Report Date:** 05/27/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642418-6 QC Sample: L2223759-02 Client ID: DUP Sample						
Barium, Total	0.08160	0.08319	mg/l	2		20
Iron, Total	1.96	1.99	mg/l	2		20
Manganese, Total	0.5672	0.5552	mg/l	2		20
Potassium, Total	3.27	3.10	mg/l	5		20
Sodium, Total	89.3	84.5	mg/l	5		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07,09 QC Batch ID: WG1642946-6 QC Sample: L2223459-01 Client ID: MW-7A						
Barium, Dissolved	0.1345	0.1385	mg/l	3		20
Calcium, Dissolved	51.2	54.4	mg/l	6		20
Iron, Dissolved	1.38	1.43	mg/l	4		20
Magnesium, Dissolved	14.4	15.3	mg/l	6		20
Manganese, Dissolved	1.803	1.933	mg/l	7		20
Potassium, Dissolved	7.82	8.18	mg/l	5		20
Sodium, Dissolved	255.	267.	mg/l	5		20

# **INORGANICS & MISCELLANEOUS**

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-01

Client ID: MW-7A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:30

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:13	1,9010C/9012B	CS
Nitrogen, Nitrite	ND		mg/l	0.050	0.013	1	-	05/05/22 05:37	121,4500NO3-F	KA
Nitrogen, Nitrate	2.07		mg/l	0.100	0.022	1	-	05/05/22 05:43	121,4500NO3-F	KA
Sulfide	ND		mg/l	0.10	0.10	1	05/09/22 08:45	05/09/22 12:18	121,4500S2-D	CL
Sulfate	33.		mg/l	10	1.4	1	05/18/22 14:31	05/18/22 14:31	1,9038	MC
Chromium, Hexavalent	ND		mg/l	0.050	0.015	5	05/05/22 09:55	05/05/22 10:18	1,7196A	CL
Iron, Ferrous	0.89		mg/l	0.50	0.056	1	-	05/05/22 09:05	121,3500FE-B	CL



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-02

Client ID: MW-9A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 14:00

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:16	1,9010C/9012B	CS
Nitrogen, Nitrite	0.019	J	mg/l	0.050	0.013	1	-	05/05/22 05:39	121,4500NO3-F	KA
Nitrogen, Nitrate	2.45		mg/l	0.100	0.022	1	-	05/05/22 05:39	121,4500NO3-F	KA
Sulfide	ND		mg/l	0.10	0.10	1	05/09/22 08:45	05/09/22 12:18	121,4500S2-D	CL
Sulfate	26.		mg/l	10	1.4	1	05/18/22 14:31	05/18/22 14:31	1,9038	MC
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:19	1,7196A	CL
Iron, Ferrous	2.2		mg/l	0.50	0.056	1	-	05/05/22 09:07	121,3500FE-B	CL



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-03

Client ID: MW-4A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:20

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.021		mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:19	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:19	1,7196A	CL



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-04

Client ID: MW-5A

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:15

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:20	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:20	1,7196A	CL





Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-05

Client ID: WP-11

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 12:30

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.001	J	mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:21	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:21	1,7196A	CL



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-06

Client ID: WP-12

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 13:20

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:21	1,7196A	CL



Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

## SAMPLE RESULTS

Lab ID: L2223459-07

Client ID: FIELD BLANK

Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00

Date Received: 05/04/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:22	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:22	1,7196A	CL



**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2223459**Report Date:** 05/27/22**SAMPLE RESULTS****Lab ID:** L2223459-09**Client ID:** MW-DUP-1**Sample Location:** 60 MCLEAN AVE YONKERS NY**Date Collected:** 05/05/22 12:15**Date Received:** 05/05/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/18/22 13:45	05/19/22 09:57	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/06/22 09:00	05/06/22 09:14	1,7196A	KA



Project Name: 60 MCLEAN AVE

Lab Number: L2223459

Project Number: 15514

Report Date: 05/27/22

### 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): 01-02 Batch: WG1634631-1										
Nitrogen, Nitrite	ND		mg/l	0.050	0.013	1	-	05/05/22 03:25	121,4500NO3-F	KA
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1634633-1										
Nitrogen, Nitrate	ND		mg/l	0.100	0.022	1	-	05/05/22 03:34	121,4500NO3-F	KA
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1634763-1										
Iron, Ferrous	ND		mg/l	0.50	0.056	1	-	05/05/22 09:01	121,3500FE-B	CL
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1634826-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/05/22 09:55	05/05/22 10:16	1,7196A	CL
General Chemistry - Westborough Lab for sample(s): 09 Batch: WG1635307-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/06/22 09:00	05/06/22 09:13	1,7196A	KA
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1636114-1										
Sulfide	ND		mg/l	0.10	0.10	1	05/09/22 08:45	05/09/22 12:15	121,4500S2-D	CL
General Chemistry - Westborough Lab for sample(s): 01-05,07 Batch: WG1639413-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/17/22 14:45	05/18/22 09:09	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 09 Batch: WG1639913-1										
Cyanide, Total	0.001	J	mg/l	0.005	0.001	1	05/18/22 13:45	05/19/22 09:53	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1640042-1										
Sulfate	ND		mg/l	10	1.4	1	05/18/22 14:31	05/18/22 14:31	1,9038	MC

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1634631-2								
Nitrogen, Nitrite	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1634633-2								
Nitrogen, Nitrate	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1634763-2								
Iron, Ferrous	105		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1634826-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 09 Batch: WG1635307-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1636114-2								
Sulfide	85		-		75-125	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1639413-2 WG1639413-3								
Cyanide, Total	97		98		85-115	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2223459

**Report Date:** 05/27/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 09 Batch: WG1639913-2 WG1639913-3					
Cyanide, Total	95	97	85-115	2	20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1640042-2					
Sulfate	105	-	90-110	-	

# **Matrix Spike Analysis** **Batch Quality Control**

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1634631-4		QC Sample: L2223422-01		Client ID: MS Sample				
Nitrogen, Nitrite	ND	4	4.07	102		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1634633-4		QC Sample: L2223422-01		Client ID: MS Sample				
Nitrogen, Nitrate	ND	4	3.96	99		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1634763-4		QC Sample: L2223459-01		Client ID: MW-7A				
Iron, Ferrous	0.89	1	1.9	102		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07				QC Batch ID: WG1634826-4		QC Sample: L2223459-01		Client ID: MW-7A				
Chromium, Hexavalent	ND	0.1	0.100	100		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 09				QC Batch ID: WG1635307-4		QC Sample: L2223459-09		Client ID: MW-DUP-1				
Chromium, Hexavalent	ND	0.1	0.099	99		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1636114-4		QC Sample: L2223276-02		Client ID: MS Sample				
Sulfide	ND	0.44	0.30	68	Q	-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05,07				QC Batch ID: WG1639413-4		WG1639413-5		QC Sample: L2223459-01		Client ID: MW-7A		
Cyanide, Total	0.002J	0.2	0.179	90		0.184	92		80-120	3		20
General Chemistry - Westborough Lab Associated sample(s): 09				QC Batch ID: WG1639913-4		WG1639913-5		QC Sample: L2224211-18		Client ID: MS Sample		
Cyanide, Total	ND	0.2	0.199	100		0.198	99		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1640042-4		QC Sample: L2223459-01		Client ID: MW-7A				
Sulfate	33.	40	73	100		-	-		55-147	-		14



# Lab Duplicate Analysis

*Batch Quality Control*

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2223459

Report Date: 05/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID: WG1634631-3	QC Sample: L2223422-01	Client ID: DUP	Sample	
Nitrogen, Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID: WG1634633-3	QC Sample: L2223422-01	Client ID: DUP	Sample	
Nitrogen, Nitrate	ND	ND	mg/l	NC		17
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID: WG1634763-3	QC Sample: L2223375-03	Client ID: DUP	Sample	
Iron, Ferrous	ND	0.060J	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-07	QC Batch ID: WG1634826-3	QC Sample: L2223459-04	Client ID: MW-5A		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 09	QC Batch ID: WG1635307-3	QC Sample: L2223459-09	Client ID: MW-DUP-1		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID: WG1636114-3	QC Sample: L2223276-01	Client ID: DUP	Sample	
Sulfide	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID: WG1640042-3	QC Sample: L2223459-01	Client ID: MW-7A		
Sulfate	33.	34	mg/l	3		14

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2223459**Project Number:** 15514**Report Date:** 05/27/22**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
A1	Absent
B	Absent
B1	Absent
C	Absent
C1	Absent
D	Absent
E	Absent
F	Absent
G	Absent
H	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2223459-01A	Vial HCl preserved	A	NA		5.2	Y	Absent		NYTCL-8260(14)
L2223459-01B	Vial HCl preserved	A	NA		5.2	Y	Absent		NYTCL-8260(14)
L2223459-01C	Vial HCl preserved	A	NA		5.2	Y	Absent		NYTCL-8260(14)
L2223459-01D	Amber 120ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2223459-01E	Amber 120ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8082-LVI(365)
L2223459-01F	Amber 120ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2223459-01G	Amber 120ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8081(7)
L2223459-01H	Plastic 250ml unpreserved	A	NA		5.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-01I	Plastic 250ml unpreserved	A	NA		5.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-01J	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-01K	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-01L	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-01M	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-01N	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	5.2	Y	Absent		SULFIDE-4500(7)
L2223459-01O	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	5.2	Y	Absent		SULFIDE-4500(7)
L2223459-01P	Plastic 250ml NaOH preserved	A	>12	>12	5.2	Y	Absent		TCN-9010(14)
L2223459-01Q	Plastic 250ml unpreserved	A	7	7	5.2	Y	Absent		-
L2223459-01R	Plastic 250ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		TL-6020T(180),SE-6020T(180),FE-6020T(180),BA-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),MG-6020T(180),AL-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2223459-01S	Plastic 950ml unpreserved	A	7	7	5.2	Y	Absent		HEXCR-7196(1),SO4-9038(28),NO3-4500(2),NO2-4500NO3(2),FERROUS(1)
L2223459-01T	Amber 1000ml unpreserved	A	7	7	5.2	Y	Absent		HOLD-8151(7)
L2223459-01U	Amber 1000ml unpreserved	A	7	7	5.2	Y	Absent		HOLD-8151(7)
L2223459-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		5.2	Y	Absent		CU-6020S(180),K-6020S(180),V-6020S(180),SE-6020S(180),MN-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),FE-6020S(180),CR-6020S(180),CA-6020S(180),NI-6020S(180),TL-6020S(180),BA-6020S(180),NA-6020S(180),PB-6020S(180),AS-6020S(180),AG-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L2223459-02A	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-02B	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-02C	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-02D	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8082-LVI(365)
L2223459-02E	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8082-LVI(365)
L2223459-02F	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8081(7)
L2223459-02G	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8081(7)
L2223459-02H	Plastic 250ml unpreserved	D	NA		3.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-02I	Plastic 250ml unpreserved	D	NA		3.6	Y	Absent		A2-NY-537-ISOTOPE(14)

\*Values in parentheses indicate holding time in days

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# **Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-02J	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-02K	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-02L	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-02M	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-02N	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.6	Y	Absent		SULFIDE-4500(7)
L2223459-02O	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.6	Y	Absent		SULFIDE-4500(7)
L2223459-02P	Plastic 250ml NaOH preserved	D	>12	>12	3.6	Y	Absent		TCN-9010(14)
L2223459-02Q	Plastic 250ml unpreserved	D	7	7	3.6	Y	Absent		-
L2223459-02R	Plastic 250ml HNO3 preserved	D	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),CA-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)
L2223459-02S	Plastic 950ml unpreserved	D	7	7	3.6	Y	Absent		HEXCR-7196(1),SO4-9038(28),NO3-4500(2),NO2-4500NO3(2),FERROUS(1)
L2223459-02T	Amber 1000ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-8151(7)
L2223459-02U	Amber 1000ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-8151(7)
L2223459-02X	Plastic 120ml HNO3 preserved Filtrates	D	NA		3.6	Y	Absent		K-6020S(180),SE-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),CR-6020S(180),CA-6020S(180),FE-6020S(180),PB-6020S(180),NA-6020S(180),BA-6020S(180),NI-6020S(180),TL-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L2223459-03A	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)
L2223459-03B	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)
L2223459-03C	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)
L2223459-03D	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8082-LVI(365)
L2223459-03E	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8082-LVI(365)
L2223459-03F	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8081(7)

\*Values in parentheses indicate holding time in days

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-03G	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8081(7)
L2223459-03H	Plastic 250ml unpreserved	F	NA		2.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-03I	Plastic 250ml unpreserved	F	NA		2.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-03J	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-03K	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-03L	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-03M	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-03N	Plastic 250ml Zn Acetate/NaOH preserved	F	>9	>9	2.9	Y	Absent		HOLD-WETCHEM()
L2223459-03O	Plastic 250ml Zn Acetate/NaOH preserved	F	>9	>9	2.9	Y	Absent		HOLD-WETCHEM()
L2223459-03P	Plastic 250ml NaOH preserved	F	>12	>12	2.9	Y	Absent		TCN-9010(14)
L2223459-03Q	Plastic 250ml unpreserved	F	7	7	2.9	Y	Absent		-
L2223459-03R	Plastic 250ml HNO3 preserved	F	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),NI-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),HG-T(28),CD-6020T(180),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L2223459-03S	Plastic 950ml unpreserved	F	7	7	2.9	Y	Absent		HEXCR-7196(1)
L2223459-03T	Plastic 950ml unpreserved	F	7	7	2.9	Y	Absent		HEXCR-7196(1)
L2223459-03U	Amber 1000ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-8151(7)
L2223459-03V	Amber 1000ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-8151(7)
L2223459-03X	Plastic 120ml HNO3 preserved Filtrates	F	NA		2.9	Y	Absent		K-6020S(180),V-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),MG-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),FE-6020S(180),CR-6020S(180),CA-6020S(180),NA-6020S(180),NI-6020S(180),TL-6020S(180),BA-6020S(180),PB-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L2223459-04A	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)
L2223459-04B	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)
L2223459-04C	Vial HCl preserved	F	NA		2.9	Y	Absent		NYTCL-8260(14)

\*Values in parentheses indicate holding time in days

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-04D	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8081(7)
L2223459-04E	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8081(7)
L2223459-04F	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8082-LVI(365)
L2223459-04G	Amber 120ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8082-LVI(365)
L2223459-04H	Plastic 250ml unpreserved	F	NA		2.9	Y	Absent		HOLD-537(14)
L2223459-04I	Plastic 250ml unpreserved	F	NA		2.9	Y	Absent		HOLD-537(14)
L2223459-04J	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-04K	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-04L	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-1,4DIOX(7)
L2223459-04M	Amber 250ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-1,4DIOX(7)
L2223459-04N	Plastic 250ml Zn Acetate/NaOH preserved	F	>9	>9	2.9	Y	Absent		HOLD-WETCHEM()
L2223459-04O	Plastic 250ml Zn Acetate/NaOH preserved	F	>9	>9	2.9	Y	Absent		HOLD-WETCHEM()
L2223459-04P	Plastic 250ml NaOH preserved	F	>12	>12	2.9	Y	Absent		TCN-9010(14)
L2223459-04Q	Plastic 250ml unpreserved	F	7	7	2.9	Y	Absent		-
L2223459-04R	Plastic 250ml HNO3 preserved	F	<2	<2	2.9	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),HG-T(28),AG-6020T(180),CO-6020T(180)
L2223459-04S	Plastic 950ml unpreserved	F	7	7	2.9	Y	Absent		HEXCR-7196(1)
L2223459-04T	Plastic 950ml unpreserved	F	7	7	2.9	Y	Absent		HEXCR-7196(1)
L2223459-04U	Amber 1000ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-8151(7)
L2223459-04V	Amber 1000ml unpreserved	F	7	7	2.9	Y	Absent		HOLD-8151(7)
L2223459-04X	Plastic 120ml HNO3 preserved Filtrates	F	NA		2.9	Y	Absent		K-6020S(180),V-6020S(180),SE-6020S(180),CU-6020S(180),MN-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),MG-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),NA-6020S(180),BA-6020S(180),TL-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),CD-6020S(180),HG-S(28),AL-6020S(180)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-05A	Vial HCl preserved	E	NA		5.4	Y	Absent		NYTCL-8260(14)
L2223459-05B	Vial HCl preserved	E	NA		5.4	Y	Absent		NYTCL-8260(14)
L2223459-05C	Vial HCl preserved	E	NA		5.4	Y	Absent		NYTCL-8260(14)
L2223459-05D	Amber 120ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2223459-05E	Amber 120ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8081(7)
L2223459-05F	Amber 120ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2223459-05G	Amber 120ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8082-LVI(365)
L2223459-05H	Amber 250ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-05I	Amber 250ml unpreserved	E	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-05J	Amber 250ml unpreserved	E	7	7	5.4	Y	Absent		HOLD-1,4DIOX(7)
L2223459-05K	Amber 250ml unpreserved	E	7	7	5.4	Y	Absent		HOLD-1,4DIOX(7)
L2223459-05L	Plastic 250ml Zn Acetate/NaOH preserved	E	>9	>9	5.4	Y	Absent		HOLD-WETCHEM()
L2223459-05M	Plastic 250ml Zn Acetate/NaOH preserved	E	>9	>9	5.4	Y	Absent		HOLD-WETCHEM()
L2223459-05N	Plastic 250ml NaOH preserved	E	>12	>12	5.4	Y	Absent		TCN-9010(14)
L2223459-05O	Plastic 250ml unpreserved	E	7	7	5.4	Y	Absent		-
L2223459-05P	Plastic 250ml HNO3 preserved	E	<2	<2	5.4	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),NI-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),AL-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),MG-6020T(180),CO-6020T(180)
L2223459-05Q	Plastic 950ml unpreserved	E	7	7	5.4	Y	Absent		HEXCR-7196(1)
L2223459-05R	Plastic 950ml unpreserved	E	7	7	5.4	Y	Absent		HEXCR-7196(1)
L2223459-05S	Amber 1000ml unpreserved	E	7	7	5.4	Y	Absent		HOLD-8151(7)
L2223459-05T	Amber 1000ml unpreserved	E	7	7	5.4	Y	Absent		HOLD-8151(7)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-05X	Plastic 120ml HNO3 preserved Filtrates	E	NA		5.4	Y	Absent		V-6020S(180),SE-6020S(180),CU-6020S(180),K-6020S(180),MN-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),BE-6020S(180),CR-6020S(180),FE-6020S(180),CA-6020S(180),BA-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),TL-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L2223459-06A	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-06B	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-06C	Vial HCl preserved	D	NA		3.6	Y	Absent		NYTCL-8260(14)
L2223459-06D	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8081(7)
L2223459-06E	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8081(7)
L2223459-06F	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8082-LVI(365)
L2223459-06G	Amber 120ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8082-LVI(365)
L2223459-06H	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-06I	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-06J	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-1,4DIOX(7)
L2223459-06K	Amber 250ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-1,4DIOX(7)
L2223459-06L	Plastic 250ml unpreserved split	D	7	7	3.6	Y	Absent		HEXCR-7196(1)
L2223459-06M	Plastic 250ml unpreserved	D	7	7	3.6	Y	Absent		-
L2223459-06N	Plastic 250ml HNO3 preserved	D	<2	<2	3.6	Y	Absent		FE-6020T(180),SE-6020T(180),BA-6020T(180),TL-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),SB-6020T(180),AS-6020T(180),V-6020T(180),HG-T(28),AG-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L2223459-06O	Amber 1000ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-8151(7)
L2223459-06P	Amber 1000ml unpreserved	D	7	7	3.6	Y	Absent		HOLD-8151(7)



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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-06X	Plastic 120ml HNO3 preserved Filtrates	D	NA		3.6	Y	Absent		CU-6020S(180),SE-6020S(180),V-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),CA-6020S(180),NA-6020S(180),TL-6020S(180),PB-6020S(180),BA-6020S(180),NI-6020S(180),AG-6020S(180),SB-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2223459-07A	Vial HCl preserved	G	NA		4.3	Y	Absent		NYTCL-8260(14)
L2223459-07B	Vial HCl preserved	G	NA		4.3	Y	Absent		NYTCL-8260(14)
L2223459-07C	Vial HCl preserved	G	NA		4.3	Y	Absent		NYTCL-8260(14)
L2223459-07D	Amber 120ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2223459-07E	Amber 120ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8081(7)
L2223459-07F	Amber 120ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)
L2223459-07G	Amber 120ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8082-LVI(365)
L2223459-07H	Amber 250ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-07I	Amber 250ml unpreserved	G	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-07J	Amber 250ml unpreserved	G	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-07K	Amber 250ml unpreserved	G	7	7	4.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-07L	Plastic 250ml Zn Acetate/NaOH preserved	G	>9	>9	4.3	Y	Absent		HOLD-WETCHEM()
L2223459-07M	Plastic 250ml Zn Acetate/NaOH preserved	G	>9	>9	4.3	Y	Absent		HOLD-WETCHEM()
L2223459-07N	Plastic 250ml NaOH preserved	G	>12	>12	4.3	Y	Absent		TCN-9010(14)
L2223459-07O	Plastic 250ml unpreserved	G	7	7	4.3	Y	Absent		-
L2223459-07P	Plastic 250ml HNO3 preserved	G	<2	<2	4.3	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),AG-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),AL-6020T(180),CO-6020T(180)
L2223459-07Q	Plastic 950ml unpreserved	G	7	7	4.3	Y	Absent		HEXCR-7196(1)
L2223459-07R	Plastic 950ml unpreserved	G	7	7	4.3	Y	Absent		HEXCR-7196(1)
L2223459-07S	Amber 1000ml unpreserved	G	7	7	4.3	Y	Absent		HOLD-8151(7)

\*Values in parentheses indicate holding time in days

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-07T	Amber 1000ml unpreserved	G	7	7	4.3	Y	Absent		HOLD-8151(7)
L2223459-07U	Plastic 250ml unpreserved	G	NA		4.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223459-07X	Plastic 120ml HNO3 preserved Filtrates	G	NA		4.3	Y	Absent		K-6020S(180),SE-6020S(180),CU-6020S(180),V-6020S(180),MN-6020S(180),ZN-6020S(180),MG-6020S(180),BE-6020S(180),CO-6020S(180),CR-6020S(180),CA-6020S(180),FE-6020S(180),NA-6020S(180),TL-6020S(180),NI-6020S(180),BA-6020S(180),PB-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),CD-6020S(180),AL-6020S(180),HG-S(28)
L2223459-08A	Vial HCl preserved	G	NA		4.3	Y	Absent		ARCHIVE()
L2223459-08B	Vial HCl preserved	G	NA		4.3	Y	Absent		ARCHIVE()
L2223459-09A	Vial HCl preserved	C1	NA		4.2	Y	Absent		NYTCL-8260(14)
L2223459-09B	Vial HCl preserved	C1	NA		4.2	Y	Absent		NYTCL-8260(14)
L2223459-09C	Vial HCl preserved	C1	NA		4.2	Y	Absent		NYTCL-8260(14)
L2223459-09D	Amber 120ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8082-LVI(365)
L2223459-09E	Amber 120ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8082-LVI(365)
L2223459-09F	Amber 120ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8081(7)
L2223459-09G	Amber 120ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8081(7)
L2223459-09H	Plastic 250ml unpreserved	C1	7	7	4.2	Y	Absent		-
L2223459-09I	Plastic 250ml HNO3 preserved	C1	<2	<2	4.2	Y	Absent		TL-6020T(180),SE-6020T(180),BA-6020T(180),FE-6020T(180),K-6020T(180),CR-6020T(180),CA-6020T(180),NI-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AG-6020T(180),CD-6020T(180),MG-6020T(180),HG-T(28),AL-6020T(180),CO-6020T(180)
L2223459-09J	Plastic 250ml NaOH preserved	C1	>12	>12	4.2	Y	Absent		TCN-9010(14)
L2223459-09K	Plastic 250ml Zn Acetate/NaOH preserved	C1	>9	>9	4.2	Y	Absent		HOLD-WETCHEM()
L2223459-09L	Plastic 250ml Zn Acetate/NaOH preserved	C1	>9	>9	4.2	Y	Absent		HOLD-WETCHEM()
L2223459-09M	Amber 250ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223459-09N	Amber 250ml unpreserved	C1	7	7	4.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223459-09O	Amber 250ml unpreserved	C1	7	7	4.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-09P	Amber 250ml unpreserved	C1	7	7	4.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223459-09Q	Plastic 950ml unpreserved	C1	7	7	4.2	Y	Absent		HEXCR-7196(1)
L2223459-09R	Plastic 950ml unpreserved	C1	7	7	4.2	Y	Absent		HEXCR-7196(1)
L2223459-09S	Amber 1000ml unpreserved	C1	7	7	4.2	Y	Absent		HOLD-8151(7)
L2223459-09T	Amber 1000ml unpreserved	C1	7	7	4.2	Y	Absent		HOLD-8151(7)
L2223459-09W	Plastic 120ml HNO3 preserved Filtrates	C1	NA		4.2	Y	Absent		K-6020S(180),SE-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),MG-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),FE-6020S(180),CA-6020S(180),CR-6020S(180),PB-6020S(180),TL-6020S(180),NA-6020S(180),BA-6020S(180),NI-6020S(180),AS-6020S(180),AG-6020S(180),SB-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L2223459-10A	Vial HCl preserved	B1	N/A	N/A	3.7	Y	Absent		ARCHIVE()
L2223459-10B	Vial HCl preserved	B1	N/A	N/A	3.7	Y	Absent		ARCHIVE()
L2223459-10C	Vial HCl preserved	B1	N/A	N/A	3.7	Y	Absent		ARCHIVE()
L2223459-10D	Amber 120ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10E	Amber 120ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10F	Amber 120ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10G	Amber 120ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10H	Plastic 250ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10I	Plastic 250ml HNO3 preserved	B1	<2	<2	3.7	Y	Absent		ARCHIVE()
L2223459-10J	Plastic 250ml NaOH preserved	B1	>12	>12	3.7	Y	Absent		ARCHIVE()
L2223459-10K	Plastic 250ml Zn Acetate/NaOH preserved	B1	>9	>9	3.7	Y	Absent		ARCHIVE()
L2223459-10L	Plastic 250ml Zn Acetate/NaOH preserved	B1	>9	>9	3.7	Y	Absent		ARCHIVE()
L2223459-10M	Amber 250ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10N	Amber 250ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10O	Amber 250ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10P	Amber 250ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10Q	Plastic 950ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()

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<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2223459-10R	Plastic 950ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10S	Amber 1000ml unpreserved	B1	7	7	3.7	Y	Absent		ARCHIVE()
L2223459-10T	Amber 1000ml unpreserved	C1	7	7	4.2	Y	Absent		ARCHIVE()
L2223459-11A	Vial HCl preserved	A1	N/A	N/A	2.2	Y	Absent		ARCHIVE()
L2223459-11B	Vial HCl preserved	A1	N/A	N/A	2.2	Y	Absent		ARCHIVE()
L2223459-11C	Vial HCl preserved	A1	N/A	N/A	2.2	Y	Absent		ARCHIVE()
L2223459-11D	Amber 120ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11E	Amber 120ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11F	Amber 120ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11G	Amber 120ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11H	Plastic 250ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11I	Plastic 250ml HNO3 preserved	A1	<2	<2	2.2	Y	Absent		ARCHIVE()
L2223459-11J	Plastic 250ml NaOH preserved	A1	>12	>12	2.2	Y	Absent		ARCHIVE()
L2223459-11K	Plastic 250ml Zn Acetate/NaOH preserved	A1	>9	>9	2.2	Y	Absent		ARCHIVE()
L2223459-11L	Plastic 250ml Zn Acetate/NaOH preserved	A1	>9	>9	2.2	Y	Absent		ARCHIVE()
L2223459-11M	Amber 250ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11N	Amber 250ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11O	Amber 250ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11P	Amber 250ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11Q	Plastic 950ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11R	Plastic 950ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11S	Amber 1000ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()
L2223459-11T	Amber 1000ml unpreserved	A1	7	7	2.2	Y	Absent		ARCHIVE()

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## 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	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	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
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	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	PFEEESA	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

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## GLOSSARY

### Acronyms

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

Report Format: DU Report with 'J' Qualifiers



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### Footnotes

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

### Terms

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

**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'.

**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.

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.)

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- 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.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

**Data Qualifiers**

- 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:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2223459  
**Report Date:** 05/27/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## 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.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **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), **EPA 600/4-81-045:** PCB-Oil.**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.






<b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		<b>Service Centers</b> 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		Date Rec'd In Lab <b>05/04/22</b>		ALPHA Job # <b>L2223459</b>	
		<b>Project Information</b> Project Name: <b>60 MCLEAN AVE</b> Project Location: <b>NY</b> Project # <b>L2223459</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #			
<b>Client Information</b> Client: <b>Alpha Analytical</b> Address: <b>8 Walkup Drive</b> <b>Westborough, MA</b> Phone: <b>508-898-9220</b> Fax: <b>subreports@alphalab.com</b> Email: <b>subreports@alphalab.com</b>		<b>Project Manager:</b> <b>Heather Hayden hhayden@alphalab.com</b> <b>ALPHAQuote #:</b> <b>Q2022426.0002</b> <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input checked="" type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:			
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments:		<b>ANALYSIS</b> Phenol Hydroxylase (PHL) Benzyl Succinate Synthase Iron Reducing Bacteria		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)					
<b>ALPHA Lab ID (Lab Use Only)</b> <b>23459-01</b> <b>-02</b>		<b>Sample ID</b> <b>MW-7A</b> <b>MW-9A</b>		<b>Collection</b> Date    Time <b>5/4</b> <b>11:30</b> <b>5/4</b> <b>14:00</b>		<b>Sample Matrix</b> <b>GW</b> <b>GW</b>		<b>Sampler's Initials</b>  	
<b>Preservative Code:</b> A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> I/E = Zn Ac/NaOH O = Other		<b>Container Code</b> P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		<b>Westboro: Certification No: MA935</b> <b>Mansfield: Certification No: MA015</b>		<b>Container Type</b>  <b>Preservative</b> 		Please print clearly, legibly and completely. Samples cannot 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.	
Relinquished By: <b>CHURN</b>		Date/Time: <b>5/4/22 1030</b>		Received By:		Date/Time:			
Form No: 01-25 (rev. 30-Sept-2013)									

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		<b>Service Centers</b> 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 <u>05/04/22</u>		ALPHA Job # <u>L2223459</u>	
<b>Client Information</b> Client: <u>IEC</u> Address: <u>170 Highland Ct</u> <u>Bronx, NY</u> Phone: <u>651 264 8000</u> Fax: _____ Email: <u>ccorralya@iecon.com</u>		<b>Project Information</b> Project Name: <u>CO nuclear</u> Project Location: <u>CO nuclear</u> Project # <u>15514</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO # _____		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>Other project specific requirements/comments:</b>  		<b>ANALYSIS</b> <u>Analysis to be finalized in email</u>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:	
<b>Please specify Metals or TAL.</b>  		<b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		<b>Sample Matrix</b> Date Time Matrix Initials		<b>Sample Specific Comments</b>		<b>Total Bottles</b>	
ALPHA Lab ID (Lab Use Only)		Sample ID		Date Time Matrix Initials		Date Time Matrix Initials		Date Time Matrix Initials	
<u>22459-03</u>		<u>mw-4A</u>		<u>5-4-22 1205 GW CS</u>		<u>5-4-22 1205 GW CS</u>		<u>5-4-22 1205 GW CS</u>	
<u>-04</u>		<u>mw-5A</u>		<u>↓ 1315 GW CE</u>		<u>↓ 1315 GW CE</u>		<u>↓ 1315 GW CE</u>	
<u>-05</u>		<u>wp-11</u>		<u>↓ 1230 GW ALK</u>		<u>↓ 1230 GW ALK</u>		<u>↓ 1230 GW ALK</u>	
<u>-06</u>		<u>wp-12</u>		<u>↓ 1320 GW ALK</u>		<u>↓ 1320 GW ALK</u>		<u>↓ 1320 GW ALK</u>	
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		Preservative	
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1500</u>		Received By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1500</u>		Relinquished By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1630</u>		Received By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1630</u>	
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: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1500</u>		Received By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1500</u>		Relinquished By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1630</u>		Received By: <u>Paul Marzella</u> Date/Time: <u>5-4-22 1630</u>	



ALPHA Job #  
L2223459

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.)

 <b>NEW YORK CHAIN OF CUSTODY</b>		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitely 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 5/5/22		ALPHA Job # 2223459						
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		<b>Project Information</b> Project Name: Project Location: 60 McLean Ave Yonkers NY Project # (Use Project name as Project #) <input type="checkbox"/> Project Manager: Chris Connolly ALPHAQuote #: Turn-Around Time Standard <input type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #						
<b>Client Information</b> Client: IEC Address: 1500 PAGE AVE Yonkers NY Phone: Fax: Email: C Connolly, E Imbert		These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: MW-MS From MW-9A MW MSO		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:								
<b>ALPHA Lab ID (Lab Use Only)</b>		<b>Sample ID</b>		<b>Collection</b> Date Time		<b>Sample Matrix</b>		<b>Sampler's Initials</b>		<b>ANALYSIS</b> TEL VOC's + TEL's TEL 300's + TEL's TEL Pest / PCB's TAL metals mercury cyanide, + new Chromium 1-4 Oxygen		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles
23459-10		MW-MS		5-5-22 1250		GL		CS		X X X X X				
11		MW-MS O-1		5-5-22 1310		GL		CS		X X X X X				
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		Preservative		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: [Signature] Date/Time: 5/5/22 16:00		Received By: [Signature] Date/Time: 5/5/22 16:00		Relinquished By: [Signature] Date/Time: 5/5/22 17:45		Received By: [Signature] Date/Time: 5/5/22 17:30		Relinquished By: [Signature] Date/Time: 5/5/22 21:30		Received By: [Signature] Date/Time: 5/5/22 21:30				





10515 Research Drive  
Knoxville, TN 37932  
Phone: (865) 573-8188  
Fax: (865) 573-8133



**Client:** Heather Hayden  
Alpha Analytical, Inc.  
35 Whitney Rd, #5  
Mahwah, NJ 07430

**Phone:** 201-299-4429

**Fax:**

**Identifier:** 013TE

**Date Rec:** 05/05/2022

**Report Date:** 05/13/2022

**Client Project #:** L2223459

**Client Project Name:** 60 Mclean Ave

**Purchase Order #:**

**Test results provided for:** CENSUS

**Reviewed By:**

A handwritten signature in black ink that reads 'Charles Slater'.

NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Results relate only to the items tested and the sample(s) as received by the laboratory.



**MICROBIAL INSIGHTS, INC.**

10515 Research Dr., Knoxville, TN 37932  
 Tel. (865) 573-8188 Fax. (865) 573-8133

**CENSUS**

**Client:**      **Alpha Analytical, Inc.**  
**Project:**     60 Mclean Ave

**MI Project Number:**    **013TE**  
**Date Received:**        05/05/2022

**Sample Information**

<b>Client Sample ID:</b>	<b>MW-7A</b>	<b>MW-9A</b>
Sample Date:	05/04/2022	05/04/2022
Units:	cells/mL	cells/mL
Analyst/Reviewer:	LC/CS	LC/CS

**Functional Genes**

Phenol Hydroxylase	PHE	<b>7.70E+00</b>	<b>3.30E+00 (J)</b>
Benzyl Succinate Synthase	bssA	<b>1.86E+01</b>	<b>2.24E+01</b>

**Phylogenetic Group**

Iron Reducing Bacteria (other)	IRB	<b>6.19E+01</b>	<b>1.11E+02</b>
--------------------------------	-----	-----------------	-----------------

**Legend:**

NA = Not Analyzed    NS = Not Sampled    J = Estimated gene copies below PQL but above LQL    I = Inhibited  
 < = Result not detected

## Quality Assurance/Quality Control Data

Samples Received 5/5/2022

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
PHE	05/05/2022	05/11/2022	0 °C	105%	non-detect	non-detect
bssA	05/05/2022	05/11/2022	0 °C	100%	non-detect	non-detect
IRB	05/05/2022	05/11/2022	0 °C	103%	non-detect	non-detect



## ANALYTICAL REPORT

Lab Number:	L2123311
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Greg Mendez-Chicas
Phone:	(631) 269-8800
Project Name:	60 MCLEAN AVE
Project Number:	15514
Report Date:	05/13/21

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2123311-01	WP-11	WATER	YONKERS, NY	05/05/21 08:45	05/05/21
L2123311-02	WP-12	WATER	YONKERS, NY	05/05/21 10:10	05/05/21
L2123311-03	WP-13	WATER	YONKERS, NY	05/05/21 11:05	05/05/21
L2123311-04	WP-14	WATER	YONKERS, NY	05/05/21 10:40	05/05/21
L2123311-05	WP-15	WATER	YONKERS, NY	05/05/21 09:15	05/05/21

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### 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.

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**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Case Narrative (continued)**

Report Submission

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

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

Authorized Signature: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 05/13/21

# ORGANICS

# **VOLATILES**



**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-01  
 Client ID: WP-11  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 08:45  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/08/21 21:47  
 Analyst: NLK

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	0.50		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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	4.0		ug/l	0.50	0.16	1
Toluene	23		ug/l	2.5	0.70	1
Ethylbenzene	54		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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS****Lab ID:** L2123311-01**Date Collected:** 05/05/21 08:45**Client ID:** WP-11**Date Received:** 05/05/21**Sample Location:** YONKERS, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	130		ug/l	2.5	0.70	1
o-Xylene	66		ug/l	2.5	0.70	1
Xylenes, Total	200		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.8	J	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	6.8		ug/l	2.5	0.70	1
sec-Butylbenzene	6.5		ug/l	2.5	0.70	1
tert-Butylbenzene	0.86	J	ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	16		ug/l	2.5	0.70	1
p-Isopropyltoluene	11		ug/l	2.5	0.70	1
Naphthalene	26		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS****Lab ID:** L2123311-01**Date Collected:** 05/05/21 08:45**Client ID:** WP-11**Date Received:** 05/05/21**Sample Location:** YONKERS, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	19		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	39		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	120		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	54		ug/l	2.0	0.70	1
p-Ethyltoluene	97		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	10		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	120		70-130
4-Bromofluorobenzene	121		70-130
Dibromofluoromethane	93		70-130

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-02  
 Client ID: WP-12  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 10:10  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 23:55  
 Analyst: PD

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	0.38	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS**

**Lab ID:** L2123311-02  
**Client ID:** WP-12  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:10  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	1.2	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.2	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-02  
**Client ID:** WP-12  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:10  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	1.2	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	3.4		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.3	J	ug/l	2.0	0.70	1
p-Ethyltoluene	3.5		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-03  
 Client ID: WP-13  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 11:05  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 23:34  
 Analyst: PD

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	0.74		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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS**

**Lab ID:** L2123311-03  
**Client ID:** WP-13  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 11:05  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	1.4	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.4	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS****Lab ID:** L2123311-03**Date Collected:** 05/05/21 11:05**Client ID:** WP-13**Date Received:** 05/05/21**Sample Location:** YONKERS, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-04  
 Client ID: WP-14  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 10:40  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 23:14  
 Analyst: PD

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	0.41	J	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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

Project Name: 60 MCLEAN AVE

Lab Number: L2123311

Project Number: 15514

Report Date: 05/13/21

## SAMPLE RESULTS

Lab ID: L2123311-04  
 Client ID: WP-14  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 10:40  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-04  
**Client ID:** WP-14  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:40  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	111		70-130

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-05  
 Client ID: WP-15  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 09:15  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 22:53  
 Analyst: PD

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	0.75		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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS**

**Lab ID:** L2123311-05  
**Client ID:** WP-15  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 09:15  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-05  
**Client ID:** WP-15  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 09:15  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.0	J	ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	111		70-130

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 18:01  
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1496318-5					
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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
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



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 18:01  
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1496318-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
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
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
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
Vinyl acetate	ND		ug/l	5.0	1.0
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
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/07/21 18:01  
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1496318-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	107		70-130

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/08/21 12:47  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1496478-5					
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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/08/21 12:47  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1496478-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
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
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	2.0	J	ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
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
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/08/21 12:47  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1496478-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1496318-3 WG1496318-4								
Methylene chloride	100		98		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	92		90		63-132	2		20
1,2-Dichloropropane	120		120		70-130	0		20
Dibromochloromethane	95		100		63-130	5		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
Chlorobenzene	120		110		75-130	9		20
Trichlorofluoromethane	84		80		62-150	5		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	88		91		67-130	3		20
trans-1,3-Dichloropropene	88		91		70-130	3		20
cis-1,3-Dichloropropene	88		92		70-130	4		20
1,1-Dichloropropene	100		98		70-130	2		20
Bromoform	78		92		54-136	16		20
1,1,2,2-Tetrachloroethane	86		98		67-130	13		20
Benzene	100		100		70-130	0		20
Toluene	120		110		70-130	9		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	77		74		64-130	4		20
Bromomethane	91		94		39-139	3		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2123311

Report Date: 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1496318-3 WG1496318-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	100		96		61-145	4		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	81		87		63-130	7		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	82		92		64-130	11		20
Acrylonitrile	110		120		70-130	9		20
Styrene	110		105		70-130	5		20
Dichlorodifluoromethane	71		68		36-147	4		20
Acetone	81		82		58-148	1		20
Carbon disulfide	93		91		51-130	2		20
2-Butanone	100		110		63-138	10		20
Vinyl acetate	98		100		70-130	2		20
4-Methyl-2-pentanone	120		130		59-130	8		20
2-Hexanone	96		110		57-130	14		20

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1496318-3 WG1496318-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	98		99		63-133	1		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		110		70-130	10		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	94		96		70-130	2		20
tert-Butylbenzene	95		96		70-130	1		20
o-Chlorotoluene	96		98		70-130	2		20
p-Chlorotoluene	94		96		70-130	2		20
1,2-Dibromo-3-chloropropane	79		85		41-144	7		20
Hexachlorobutadiene	110		120		63-130	9		20
Isopropylbenzene	90		93		70-130	3		20
p-Isopropyltoluene	97		98		70-130	1		20
Naphthalene	74		83		70-130	11		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	95		100		70-130	5		20
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	92		92		64-130	0		20
1,2,4-Trimethylbenzene	91		95		70-130	4		20
1,4-Dioxane	78		84		56-162	7		20
p-Diethylbenzene	94		95		70-130	1		20



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1496318-3 WG1496318-4								
p-Ethyltoluene	92		95		70-130	3		20
1,2,4,5-Tetramethylbenzene	87		90		70-130	3		20
Ethyl ether	92		95		59-134	3		20
trans-1,4-Dichloro-2-butene	69	Q	79		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	111		111		70-130
4-Bromofluorobenzene	86		88		70-130
Dibromofluoromethane	105		104		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1496478-3 WG1496478-4								
Methylene chloride	100		120		70-130	18		20
1,1-Dichloroethane	110		130		70-130	17		20
Chloroform	110		120		70-130	9		20
Carbon tetrachloride	91		98		63-132	7		20
1,2-Dichloropropane	110		130		70-130	17		20
Dibromochloromethane	93		100		63-130	7		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	100		120		70-130	18		20
1,1,1-Trichloroethane	100		120		67-130	18		20
Bromodichloromethane	100		110		67-130	10		20
trans-1,3-Dichloropropene	78		84		70-130	7		20
cis-1,3-Dichloropropene	91		99		70-130	8		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	81		91		54-136	12		20
1,1,1,2-Tetrachloroethane	93		110		67-130	17		20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	95		100		64-130	5		20
Bromomethane	71		72		39-139	1		20

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVE

Project Number: 15514

Lab Number: L2123311

Report Date: 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1496478-3 WG1496478-4								
Vinyl chloride	91		98		55-140	7		20
Chloroethane	86		92		55-138	7		20
1,1-Dichloroethene	100		120		61-145	18		20
trans-1,2-Dichloroethene	100		120		70-130	18		20
Trichloroethene	99		110		70-130	11		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		110		70-130	10		20
Methyl tert butyl ether	72		90		63-130	22	Q	20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	105		110		70-130	5		20
cis-1,2-Dichloroethene	110		120		70-130	9		20
Dibromomethane	100		120		70-130	18		20
1,2,3-Trichloropropane	89		110		64-130	21	Q	20
Acrylonitrile	120		140	Q	70-130	15		20
Styrene	105		115		70-130	9		20
Dichlorodifluoromethane	64		70		36-147	9		20
Acetone	180	Q	180	Q	58-148	0		20
Carbon disulfide	100		120		51-130	18		20
2-Butanone	90		100		63-138	11		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	100		120		59-130	18		20
2-Hexanone	95		120		57-130	23	Q	20

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1496478-3 WG1496478-4								
Bromochloromethane	110		130		70-130	17		20
2,2-Dichloropropane	63		74		63-133	16		20
1,2-Dibromoethane	97		110		70-130	13		20
1,3-Dichloropropane	98		110		70-130	12		20
1,1,1,2-Tetrachloroethane	99		100		64-130	1		20
Bromobenzene	100		110		70-130	10		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	80		97		41-144	19		20
Hexachlorobutadiene	110		120		63-130	9		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		110		70-130	10		20
Naphthalene	76		100		70-130	27	Q	20
n-Propylbenzene	100		110		69-130	10		20
1,2,3-Trichlorobenzene	84		110		70-130	27	Q	20
1,2,4-Trichlorobenzene	100		120		70-130	18		20
1,3,5-Trimethylbenzene	100		110		64-130	10		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	96		128		56-162	29	Q	20
p-Diethylbenzene	100		110		70-130	10		20

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1496478-3 WG1496478-4								
p-Ethyltoluene	100		110		70-130	10		20
1,2,4,5-Tetramethylbenzene	100		110		70-130	10		20
Ethyl ether	90		110		59-134	20		20
trans-1,4-Dichloro-2-butene	48	Q	57	Q	70-130	17		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	104		111		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	104		107		70-130

# SEMIVOLATILES

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-01  
 Client ID: WP-11  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 08:45  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/11/21 21:03  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-01  
**Client ID:** WP-11  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 08:45  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	90		41-149



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-01  
**Client ID:** WP-11  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 08:45  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/11/21 16:27  
**Analyst:** ALS

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:49

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	12		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	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	5.0		ug/l	0.10	0.02	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-01  
**Client ID:** WP-11  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 08:45  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	88		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-02  
 Client ID: WP-12  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 10:10  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/13/21 06:10  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-02  
**Client ID:** WP-12  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:10  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	82		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-02  
**Client ID:** WP-12  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:10  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/13/21 07:44  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:49

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	0.02	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-02

Date Collected: 05/05/21 10:10

Client ID: WP-12

Date Received: 05/05/21

Sample Location: YONKERS, NY

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	53		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	92		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-03  
 Client ID: WP-13  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 11:05  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/13/21 08:32  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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	2.0	J	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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-03  
**Client ID:** WP-13  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 11:05  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	79		41-149



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-03  
**Client ID:** WP-13  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 11:05  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/13/21 07:24  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:49

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	0.10	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	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	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	0.02	J	ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.02	J	ug/l	0.10	0.02	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-03  
**Client ID:** WP-13  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 11:05  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	88		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-04  
 Client ID: WP-14  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 10:40  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/13/21 03:24  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-04  
**Client ID:** WP-14  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:40  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	87		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-04  
**Client ID:** WP-14  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:40  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/13/21 02:12  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:49

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
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-04  
**Client ID:** WP-14  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 10:40  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	90		41-149

**Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21**SAMPLE RESULTS**

Lab ID: L2123311-05  
 Client ID: WP-15  
 Sample Location: YONKERS, NY

Date Collected: 05/05/21 09:15  
 Date Received: 05/05/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/13/21 03:47  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/11/21 03:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-05  
**Client ID:** WP-15  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 09:15  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	85		41-149



**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-05  
**Client ID:** WP-15  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 09:15  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/13/21 02:31  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:51

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
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**SAMPLE RESULTS**

**Lab ID:** L2123311-05  
**Client ID:** WP-15  
**Sample Location:** YONKERS, NY

**Date Collected:** 05/05/21 09:15  
**Date Received:** 05/05/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	86		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/11/21 15:23  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1497011-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
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

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/11/21 15:23  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1497011-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	93		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/11/21 15:08  
**Analyst:** ALS

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/11/21 03:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1497012-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		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	0.02	J	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	0.02	J	ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	0.01	J	ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 05/11/21 15:08  
Analyst: ALS

Extraction Method: EPA 3510C  
Extraction Date: 05/11/21 03:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1497012-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	95		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	88		41-149

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1497011-2 WG1497011-3								
1,2,4-Trichlorobenzene	75		79		39-98	5		30
Bis(2-chloroethyl)ether	81		91		40-140	12		30
1,2-Dichlorobenzene	74		82		40-140	10		30
1,3-Dichlorobenzene	70		77		40-140	10		30
1,4-Dichlorobenzene	71		76		36-97	7		30
3,3'-Dichlorobenzidine	56		56		40-140	0		30
2,4-Dinitrotoluene	97		94		48-143	3		30
2,6-Dinitrotoluene	102		98		40-140	4		30
4-Chlorophenyl phenyl ether	77		78		40-140	1		30
4-Bromophenyl phenyl ether	82		78		40-140	5		30
Bis(2-chloroisopropyl)ether	126		131		40-140	4		30
Bis(2-chloroethoxy)methane	87		88		40-140	1		30
Hexachlorocyclopentadiene	74		76		40-140	3		30
Isophorone	92		93		40-140	1		30
Nitrobenzene	100		107		40-140	7		30
NDPA/DPA	88		86		40-140	2		30
n-Nitrosodi-n-propylamine	101		102		29-132	1		30
Bis(2-ethylhexyl)phthalate	110		102		40-140	8		30
Butyl benzyl phthalate	110		101		40-140	9		30
Di-n-butylphthalate	96		91		40-140	5		30
Di-n-octylphthalate	110		106		40-140	4		30
Diethyl phthalate	92		88		40-140	4		30
Dimethyl phthalate	88		83		40-140	6		30

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1497011-2 WG1497011-3								
Biphenyl	78		79		40-140	1		30
4-Chloroaniline	60		55		40-140	9		30
2-Nitroaniline	99		98		52-143	1		30
3-Nitroaniline	73		72		25-145	1		30
4-Nitroaniline	82		76		51-143	8		30
Dibenzofuran	78		82		40-140	5		30
1,2,4,5-Tetrachlorobenzene	71		73		2-134	3		30
Acetophenone	85		89		39-129	5		30
Benzyl Alcohol	88		93		26-116	6		30
Carbazole	86		85		55-144	1		30

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	78		87		21-120
Phenol-d6	70		72		10-120
Nitrobenzene-d5	110		115		23-120
2-Fluorobiphenyl	78		78		15-120
2,4,6-Tribromophenol	103		103		10-120
4-Terphenyl-d14	87		83		41-149



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVE

**Project Number:** 15514

**Lab Number:** L2123311

**Report Date:** 05/13/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1497012-2 WG1497012-3								
Acenaphthene	91		85		40-140	7		40
2-Chloronaphthalene	90		82		40-140	9		40
Fluoranthene	93		92		40-140	1		40
Hexachlorobutadiene	85		74		40-140	14		40
Naphthalene	85		76		40-140	11		40
Benzo(a)anthracene	99		99		40-140	0		40
Benzo(a)pyrene	102		102		40-140	0		40
Benzo(b)fluoranthene	101		100		40-140	1		40
Benzo(k)fluoranthene	98		98		40-140	0		40
Chrysene	100		99		40-140	1		40
Acenaphthylene	92		84		40-140	9		40
Anthracene	98		96		40-140	2		40
Benzo(ghi)perylene	109		109		40-140	0		40
Fluorene	93		89		40-140	4		40
Phenanthrene	95		94		40-140	1		40
Dibenzo(a,h)anthracene	110		111		40-140	1		40
Indeno(1,2,3-cd)pyrene	109		111		40-140	2		40
Pyrene	93		92		40-140	1		40
2-Methylnaphthalene	91		83		40-140	9		40
Hexachlorobenzene	95		91		40-140	4		40
Hexachloroethane	77		70		40-140	10		40

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVE**Project Number:** 15514**Lab Number:** L2123311**Report Date:** 05/13/21

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1497012-2 WG1497012-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	62		55		21-120
Phenol-d6	51		43		10-120
Nitrobenzene-d5	78		69		23-120
2-Fluorobiphenyl	87		80		15-120
2,4,6-Tribromophenol	102		95		10-120
4-Terphenyl-d14	91		88		41-149

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

Serial\_No:05132115:07  
**Lab Number:** L2123311  
**Report Date:** 05/13/21

### 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(*)
L2123311-01A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-01B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-01C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-01D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-01E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-02A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-02B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-02C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-02D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-02E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-03A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-03B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-03C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-03D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-03E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-04A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-04B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-04C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-04D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-04E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-05A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-05B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)
L2123311-05C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260(14)

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

Serial\_No:05132115:07  
**Lab Number:** L2123311  
**Report Date:** 05/13/21

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2123311-05D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2123311-05E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

## 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:** 60 MCLEAN AVE  
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**Lab Number:** L2123311  
**Report Date:** 05/13/21

### 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.

**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'.

**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 at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

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.)

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- 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.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** 60 MCLEAN AVE**Lab Number:** L2123311**Project Number:** 15514**Report Date:** 05/13/21**Data Qualifiers**

- 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.

Report Format: DU Report with 'J' Qualifiers

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**Project Name:** 60 MCLEAN AVE  
**Project Number:** 15514

**Lab Number:** L2123311  
**Report Date:** 05/13/21

## REFERENCES

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

## 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.





**Alpha Analytical, Inc.**

ID No.:17873

Facility: **Company-wide**

Revision 19

Department: **Quality Assurance**

Published Date: 4/2/2021 1:14:23 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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## Certification Information

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**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

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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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **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), **EPA 600/4-81-045:** PCB-Oil.**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**


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





## ANALYTICAL REPORT

Lab Number:	L2223093
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	60 MCLEAN AVENUE
Project Number:	15514
Report Date:	05/31/22

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-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2223093-01	SB-7 (0-2)	SOIL	60 MCLEAN AVENUE	05/02/22 08:30	05/03/22
L2223093-02	SB-7 (7-9)	SOIL	60 MCLEAN AVENUE	05/02/22 08:40	05/03/22
L2223093-03	SB-6 (0-2)	SOIL	60 MCLEAN AVENUE	05/02/22 09:00	05/03/22
L2223093-04	SB-6 (7-9)	SOIL	60 MCLEAN AVENUE	05/02/22 09:15	05/03/22
L2223093-05	SB-9 (0-4)	SOIL	60 MCLEAN AVENUE	05/02/22 09:45	05/03/22
L2223093-06	SB-8B (0-3)	SOIL	60 MCLEAN AVENUE	05/02/22 09:30	05/03/22
L2223093-07	SB-12 (0-4)	SOIL	60 MCLEAN AVENUE	05/02/22 11:30	05/03/22
L2223093-08	SB-10A (0-3)	SOIL	60 MCLEAN AVENUE	05/02/22 10:30	05/03/22
L2223093-09	SB-10B (0-3)	SOIL	60 MCLEAN AVENUE	05/02/22 11:00	05/03/22
L2223093-10	SB-16 (0-4)	SOIL	60 MCLEAN AVENUE	05/02/22 12:00	05/03/22
L2223093-11	SB-17 (2-4)	SOIL	60 MCLEAN AVENUE	05/02/22 12:20	05/03/22
L2223093-12	SB-17 (0-2)	SOIL	60 MCLEAN AVENUE	05/02/22 12:15	05/03/22
L2223093-13	SB-19 (0-2)	SOIL	60 MCLEAN AVENUE	05/02/22 12:30	05/03/22
L2223093-14	SB-19 (7-9)	SOIL	60 MCLEAN AVENUE	05/02/22 12:45	05/03/22
L2223093-15	SB-DUP-1		60 MCLEAN AVENUE	05/03/22 08:00	05/03/22
L2223093-16	SB-18 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 08:20	05/03/22
L2223093-17	SB-18 (7-9)	SOIL	60 MCLEAN AVENUE	05/03/22 08:30	05/03/22
L2223093-18	SB-11 (0-4)	SOIL	60 MCLEAN AVENUE	05/03/22 10:00	05/03/22
L2223093-19	SB-DUP-2	SOIL	60 MCLEAN AVENUE	05/03/22 11:00	05/03/22
L2223093-20	SB-1 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 10:35	05/03/22
L2223093-21	SB-2 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 11:15	05/03/22
L2223093-22	FIELD BLANK-1	WATER	60 MCLEAN AVENUE	05/03/22 13:00	05/03/22
L2223093-23	FIELD BLANK-2	WATER	60 MCLEAN AVENUE	05/03/22 13:30	05/03/22
L2223093-24	TRIP BLANK 1	WATER	60 MCLEAN AVENUE	05/03/22 00:00	05/03/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2223093-25	SB-3 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 12:40	05/03/22
L2223093-26	SB-4 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 12:50	05/03/22
L2223093-27	SB-5 (0-2)	SOIL	60 MCLEAN AVENUE	05/03/22 12:30	05/03/22
L2223093-28	TRIP BLANK 2	WATER	60 MCLEAN AVENUE	05/03/22 00:00	05/03/22

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### 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.

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**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Case Narrative (continued)

#### Report Submission

May 31, 2022: This final report includes the results of all requested analyses.

May 25, 2022: This is a preliminary report.

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

#### Sample Receipt

L2223093-15: A sample identified as "SB-DUP-1" was listed on the Chain of Custody, but not received. This was verified by the client.

L2223093-16: The collection date and time on the chain of custody was 03-MAY-22 08:20; however, the collection date/time on the container label was 03-MAY-22 08:00. At the client's request, the collection date/time is reported as 03-MAY-22 08:20.

L2223093-17: The collection date and time on the chain of custody was 03-MAY-22 08:30; however, the collection date/time on the container label was 03-MAY-22 08:10. At the client's request, the collection date/time is reported as 03-MAY-22 08:30.

L2223093-19: Sample containers for PFAs were received for the "SB-DUP-2" sample, but were not listed on the chain of custody. At the client's request, the analysis was performed.

L2223093-22: Sample containers for PFAs, Herbicides, and 1,4 Dioxane were received for the "FIELD BLANK-1" sample, but were not listed on the chain of custody. At the client's request, the analyses were performed.

L2223093-23: Sample containers for Herbicides and 1,4 Dioxane were received for the "FIELD BLANK-2" sample, but were not listed on the chain of custody. At the client's request, the analyses were performed.

L2223093-25: The collection date and time on the chain of custody was 03-MAY-22 12:40; however, the collection date/time on the container label was 03-MAY-22 11:50. At the client's request, the collection date/time is reported as 03-MAY-22 12:40.

L2223093-26: The collection date and time on the chain of custody was 03-MAY-22 12:50; however, the



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### Case Narrative (continued)

collection date/time on the container label was 03-MAY-22 11:40. At the client's request, the collection date/time is reported as 03-MAY-22 12:50.

L2223093-27: Sample containers for PFAS were received for the "SB-5 (0-2)" sample, but were not listed on the chain of custody. At the client's request, the analysis was performed.

#### Volatile Organics

L2223093-13: The sample was received in appropriate containers (vials) for the Volatile Organics by EPA Method 5035/8260 Low-Level analysis; however, the initial analysis failed with low internal standards and the second Low-Level vial was disposed of due to laboratory error. With the client's authorization, a sample aliquot was taken from an unpreserved container (jar) and preserved appropriately. Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

#### Semivolatile Organics

L2223093-06: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (4%) and 2,4,6-tribromophenol (1%); however, re-extraction achieved similar results: 2-fluorophenol (7%) and 2,4,6-tribromophenol (1%). The results of both extractions are reported.

The WG1635274-2/-3 LCS/LCSD recoveries, associated with L2223093-22 and -23, are below the acceptance criteria for 4-chloroaniline (7%/7%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

#### Semivolatile Organics by SIM

The WG1635276-1 Method Blank, associated with L2223093-22 and -23, has a concentration above the reporting limit for naphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".



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### Case Narrative (continued)

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2223093-14, -19, -27, and WG1636990-3/-4: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

L2223093-14, -19, and -27: The MeOH fraction of the extraction is reported for perfluorooctanesulfonamide (fosa) due to better extraction efficiency of the perfluoro[13c8]octanesulfonamide (m8fosa) Extracted Internal Standard.

The WG1636990-4 MSD recovery, performed on L2223093-27, is outside the acceptance criteria for perfluorotridecanoic acid (pftrda) (151%).

#### Pesticides

L2223093-06D: The sample has elevated detection limits due to the dilution required by the sample matrix.

L2223093-06D: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

#### Total Metals

L2223093-20: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

L2223093-23: The Field Blank has a result for barium present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1639550-3 MS recoveries, performed on L2223093-01, are outside the acceptance criteria for beryllium (74%), cadmium (72%), lead (74%), nickel (73%), and zinc (74%). A post digestion spike was performed and yielded unacceptable recoveries for beryllium (71%), cadmium (63%), lead (65%), nickel (63%), and zinc (64%). The serial dilution recoveries were not applicable; therefore, these elements fail the matrix test and the results reported in the native sample should be considered estimated.

The WG1639550-3 MS recovery, performed on L2223093-01, is outside the acceptance criteria for chromium

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### Case Narrative (continued)

(74%). A post digestion spike was performed and yielded an unacceptable recovery of 67%. The serial dilution recovery was not acceptable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

The WG1639565-3/-4 MS/MSD recoveries, performed on L2223093-26, are outside the acceptance criteria for arsenic (71%/67%), beryllium (66%/63%), cadmium (63%/58%), lead (59%/54%), nickel (56%/52%), selenium (57%/52%), silver (68%/64%), and zinc (59%/51%). A post digestion spike was performed and yielded unacceptable recoveries for arsenic (72%), beryllium (66%), cadmium (64%), lead (58%), nickel (59%), selenium (57%), silver (63%), and zinc (61%). The serial dilution recoveries were not applicable; therefore, these elements fail the matrix test and the results reported in the native sample should be considered estimated.

The WG1639565-3/-4 MS/MSD recoveries, performed on L2223093-26, are outside the acceptance criteria for barium (64%/64%), chromium (57%/51%), copper (52%/67%), and manganese (66%/67%). A post digestion spike was performed and yielded unacceptable recoveries for barium (67%), chromium (56%), copper (64%), and manganese (53%). The serial dilution recoveries were not acceptable; therefore, these elements fail the matrix test and the results reported in the native sample should be considered estimated.

The WG1639565-9/-10 MS/MSD recoveries, performed on L2223093-27, are outside the acceptance criteria for arsenic (70%/71%), beryllium (64%/65%), cadmium (70%/70%), copper (67%/67%), lead (60%/60%), nickel (60%/62%), selenium (62%/62%), and zinc (64%/66%). A post digestion spike was performed and yielded unacceptable recoveries for arsenic (69%), beryllium (63%), cadmium (68%), copper (63%), lead (57%), nickel (58%), selenium (63%), and zinc (58%). The serial dilution recoveries were not applicable; therefore, these elements fail the matrix test and the results reported in the native sample should be considered estimated.

The WG1639565-9/-10 MSD recoveries, performed on L2223093-27, are outside the acceptance criteria for barium (65%/67%) and chromium (60%/67%). A post digestion spike was performed and yielded unacceptable recoveries for barium (63%) and chromium (55%). The serial dilution recoveries were not acceptable; therefore, these elements fail the matrix test and the results reported in the native sample should be considered estimated.

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The WG1639565-9/-10 MS/MSD recoveries for manganese (72%/60%), performed on L2223093-27, do not apply because the sample concentration is greater than four times the spike amount added.

The WG1639571-4 MSD recovery, performed on L2223093-26, is outside the acceptance criteria for mercury (143%). A post digestion spike was performed and was within acceptance criteria.

The WG1639571-5/-6 MS/MSD recoveries, performed on L2223093-27, are outside the acceptance criteria for mercury (130%/123%). A post digestion spike was performed and was within acceptance criteria.

The WG1639550-6 serial dilution analysis, associated with L2223093-01, had a %D above the acceptance criteria for barium (62%), chromium (34%), copper (32%), and manganese (27%).

The WG1639565-12 serial dilution analysis, associated with L2223093-27, had a %D above the acceptance criteria for barium (33%), chromium (34%), and manganese (35%).

The WG1639565-6 serial dilution analysis, associated with L2223093-26, had a %D above the acceptance criteria for barium (34%), chromium (36%), copper (29%), and manganese (37%).

#### Hexavalent Chromium

The WG1634981-2 LCS recovery for chromium, hexavalent (70%), associated with L2223093-01 through -10, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1634982-2 LCS recovery for chromium, hexavalent (70%), associated with L2223093-11 through -14, -16 through -20, and -26, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1634982-5 MS/MSD RPD for chromium, hexavalent (32%), performed on L2223093-26, is above the acceptance criteria.

The WG1634983-5 MS/MSD RPD, performed on L2223093-27, is above the acceptance criteria for chromium, hexavalent (40%).

#### Cyanide, Total

The WG1638806-2/-3 LCS/LCSD recoveries for cyanide, total (59%/76%), associated with L2223093-05, -06,

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and -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

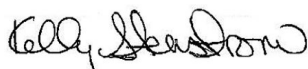
The WG1638810-2/-3 LCS/LCSD recoveries for cyanide, total (71%/76%), associated with L2223093-07 and -09 through -14, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1639289-2 LCS recovery for cyanide, total (42%), associated with L2223093-16, -17, -18, -19, -20, -21, -25, and -27, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported. The LCS/LCSD RPD is above the acceptance criteria for cyanide, total (67%).

The WG1639292-2 LCS recovery for cyanide, total (42%), associated with L2223093-26, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported. The LCS/LCSD RPD is above the acceptance criteria for cyanide, total (67%).

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: 05/31/22

# ORGANICS

# **VOLATILES**

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/09/22 22:40  
**Analyst:** NLK  
**Percent Solids:** 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	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
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.20	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Vinyl chloride	ND		ug/kg	1.2	0.39	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	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
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	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Acetone	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.6	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.2	0.20	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	94	41.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-02  
 Client ID: SB-7 (7-9)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 08:40  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 05/09/22 23:00  
 Analyst: NLK  
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
Acetone	ND		ug/kg	9.8	4.7	1
2-Butanone	ND		ug/kg	9.8	2.2	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
n-Propylbenzene	ND		ug/kg	0.98	0.17	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-02  
**Client ID:** SB-7 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	78	34.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/09/22 23:19  
**Analyst:** NLK  
**Percent Solids:** 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	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	0.30	J	ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.38	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
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	1.0	J	ug/kg	2.3	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

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**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	91	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/09/22 23:39  
**Analyst:** NLK  
**Percent Solids:** 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
Tetrachloroethene	ND		ug/kg	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
Acetone	ND		ug/kg	11	5.3	1
2-Butanone	ND		ug/kg	11	2.4	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	88	39.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/09/22 23:58  
**Analyst:** NLK  
**Percent Solids:** 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	0.57		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	90	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	106		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 00:18  
**Analyst:** NLK  
**Percent Solids:** 39%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	38	17.	1
1,1-Dichloroethane	ND		ug/kg	7.6	1.1	1
Chloroform	ND		ug/kg	11	1.1	1
Carbon tetrachloride	ND		ug/kg	7.6	1.8	1
Tetrachloroethene	ND		ug/kg	3.8	1.5	1
Chlorobenzene	ND		ug/kg	3.8	0.97	1
1,2-Dichloroethane	ND		ug/kg	7.6	2.0	1
1,1,1-Trichloroethane	ND		ug/kg	3.8	1.3	1
Benzene	ND		ug/kg	3.8	1.3	1
Toluene	ND		ug/kg	7.6	4.1	1
Ethylbenzene	ND		ug/kg	7.6	1.1	1
Vinyl chloride	ND		ug/kg	7.6	2.5	1
1,1-Dichloroethene	ND		ug/kg	7.6	1.8	1
trans-1,2-Dichloroethene	ND		ug/kg	11	1.0	1
Trichloroethene	ND		ug/kg	3.8	1.0	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.3	1
Methyl tert butyl ether	ND		ug/kg	15	1.5	1
p/m-Xylene	ND		ug/kg	15	4.3	1
o-Xylene	ND		ug/kg	7.6	2.2	1
cis-1,2-Dichloroethene	ND		ug/kg	7.6	1.3	1
Acetone	210		ug/kg	76	37.	1
2-Butanone	ND		ug/kg	76	17.	1
n-Butylbenzene	ND		ug/kg	7.6	1.3	1
sec-Butylbenzene	ND		ug/kg	7.6	1.1	1
tert-Butylbenzene	ND		ug/kg	15	0.90	1
n-Propylbenzene	ND		ug/kg	7.6	1.3	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.5	1
1,2,4-Trimethylbenzene	4.9	J	ug/kg	15	2.5	1
1,4-Dioxane	ND		ug/kg	610	270	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 00:37  
**Analyst:** NLK  
**Percent Solids:** 84%

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	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.13	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
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	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
Acetone	ND		ug/kg	9.6	4.6	1
2-Butanone	ND		ug/kg	9.6	2.1	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
n-Propylbenzene	ND		ug/kg	0.96	0.16	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	76	34.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 00:57  
**Analyst:** NLK  
**Percent Solids:** 100%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	9.5	4.4	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.28	1
Chloroform	ND		ug/kg	2.8	0.27	1
Carbon tetrachloride	ND		ug/kg	1.9	0.44	1
Tetrachloroethene	ND		ug/kg	0.95	0.37	1
Chlorobenzene	ND		ug/kg	0.95	0.24	1
1,2-Dichloroethane	ND		ug/kg	1.9	0.49	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.32	1
Benzene	ND		ug/kg	0.95	0.32	1
Toluene	ND		ug/kg	1.9	1.0	1
Ethylbenzene	ND		ug/kg	1.9	0.27	1
Vinyl chloride	ND		ug/kg	1.9	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.9	0.45	1
trans-1,2-Dichloroethene	ND		ug/kg	2.8	0.26	1
Trichloroethene	ND		ug/kg	0.95	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	3.8	0.27	1
1,3-Dichlorobenzene	ND		ug/kg	3.8	0.28	1
1,4-Dichlorobenzene	ND		ug/kg	3.8	0.32	1
Methyl tert butyl ether	ND		ug/kg	3.8	0.38	1
p/m-Xylene	ND		ug/kg	3.8	1.1	1
o-Xylene	ND		ug/kg	1.9	0.55	1
cis-1,2-Dichloroethene	ND		ug/kg	1.9	0.33	1
Acetone	ND		ug/kg	19	9.1	1
2-Butanone	ND		ug/kg	19	4.2	1
n-Butylbenzene	ND		ug/kg	1.9	0.32	1
sec-Butylbenzene	ND		ug/kg	1.9	0.28	1
tert-Butylbenzene	ND		ug/kg	3.8	0.22	1
n-Propylbenzene	ND		ug/kg	1.9	0.32	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	3.8	0.37	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.8	0.64	1
1,4-Dioxane	ND		ug/kg	150	67.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 01:16  
**Analyst:** NLK  
**Percent Solids:** 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	0.16	J	ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
Acetone	12		ug/kg	10	5.0	1
2-Butanone	ND		ug/kg	10	2.3	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
n-Propylbenzene	ND		ug/kg	1.0	0.18	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	84	37.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	109		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 01:35  
**Analyst:** NLK  
**Percent Solids:** 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Benzene	ND		ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
Acetone	ND		ug/kg	10	4.9	1
2-Butanone	ND		ug/kg	10	2.2	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	81	36.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 01:55  
**Analyst:** NLK  
**Percent Solids:** 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.5	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
Tetrachloroethene	ND		ug/kg	0.65	0.25	1
Chlorobenzene	ND		ug/kg	0.65	0.16	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.65	0.22	1
Benzene	ND		ug/kg	0.65	0.22	1
Toluene	ND		ug/kg	1.3	0.70	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Vinyl chloride	ND		ug/kg	1.3	0.43	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	ND		ug/kg	0.65	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
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	0.73	1
o-Xylene	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
Acetone	ND		ug/kg	13	6.2	1
2-Butanone	ND		ug/kg	13	2.9	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.15	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.43	1
1,4-Dioxane	ND		ug/kg	100	46.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 02:14  
**Analyst:** NLK  
**Percent Solids:** 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.2	3.7	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.24	1
Chloroform	ND		ug/kg	2.4	0.23	1
Carbon tetrachloride	ND		ug/kg	1.6	0.38	1
Tetrachloroethene	ND		ug/kg	0.82	0.32	1
Chlorobenzene	ND		ug/kg	0.82	0.21	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.42	1
1,1,1-Trichloroethane	ND		ug/kg	0.82	0.27	1
Benzene	ND		ug/kg	0.82	0.27	1
Toluene	ND		ug/kg	1.6	0.89	1
Ethylbenzene	ND		ug/kg	1.6	0.23	1
Vinyl chloride	ND		ug/kg	1.6	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	0.22	1
Trichloroethene	ND		ug/kg	0.82	0.22	1
1,2-Dichlorobenzene	ND		ug/kg	3.3	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	3.3	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	3.3	0.28	1
Methyl tert butyl ether	ND		ug/kg	3.3	0.33	1
p/m-Xylene	ND		ug/kg	3.3	0.92	1
o-Xylene	ND		ug/kg	1.6	0.48	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.28	1
Acetone	ND		ug/kg	16	7.9	1
2-Butanone	ND		ug/kg	16	3.6	1
n-Butylbenzene	ND		ug/kg	1.6	0.27	1
sec-Butylbenzene	ND		ug/kg	1.6	0.24	1
tert-Butylbenzene	ND		ug/kg	3.3	0.19	1
n-Propylbenzene	ND		ug/kg	1.6	0.28	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	3.3	0.32	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.3	0.54	1
1,4-Dioxane	ND		ug/kg	130	57.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 12:16  
**Analyst:** JC  
**Percent Solids:** 85%

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	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	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	0.20	J	ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.38	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
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	0.68	J	ug/kg	2.3	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	91	40.	1

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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 02:53  
**Analyst:** NLK  
**Percent Solids:** 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
Acetone	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.4	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	87	38.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-16  
 Client ID: SB-18 (0-2)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 08:20  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 03:13  
 Analyst: NLK  
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.18	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	0.72	J	ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	2.0	J	ug/kg	2.2	0.63	1
o-Xylene	0.56	J	ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	0.38	J	ug/kg	1.1	0.19	1
sec-Butylbenzene	0.63	J	ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	1.0	J	ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-16  
**Client ID:** SB-18 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	1.8	J	ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	3.0		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	90	39.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	100		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 03:32  
**Analyst:** NLK  
**Percent Solids:** 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Benzene	0.20	J	ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	2.4		ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	4.9		ug/kg	2.2	0.63	1
o-Xylene	0.52	J	ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	0.58	J	ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	0.77	J	ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	1.8	J	ug/kg	2.2	0.38	1
1,4-Dioxane	ND		ug/kg	90	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 03:51  
**Analyst:** NLK  
**Percent Solids:** 99%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
Tetrachloroethene	0.78		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
Acetone	ND		ug/kg	9.8	4.7	1
2-Butanone	ND		ug/kg	9.8	2.2	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
n-Propylbenzene	ND		ug/kg	0.98	0.17	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	78	34.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	104		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 04:11  
**Analyst:** NLK  
**Percent Solids:** 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.4	3.4	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.21	1
Chloroform	ND		ug/kg	2.2	0.21	1
Carbon tetrachloride	ND		ug/kg	1.5	0.34	1
Tetrachloroethene	ND		ug/kg	0.74	0.29	1
Chlorobenzene	ND		ug/kg	0.74	0.19	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.74	0.24	1
Benzene	ND		ug/kg	0.74	0.24	1
Toluene	ND		ug/kg	1.5	0.80	1
Ethylbenzene	ND		ug/kg	1.5	0.21	1
Vinyl chloride	ND		ug/kg	1.5	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1
Trichloroethene	ND		ug/kg	0.74	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.30	1
p/m-Xylene	ND		ug/kg	2.9	0.82	1
o-Xylene	ND		ug/kg	1.5	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.26	1
Acetone	ND		ug/kg	15	7.1	1
2-Butanone	ND		ug/kg	15	3.3	1
n-Butylbenzene	ND		ug/kg	1.5	0.24	1
sec-Butylbenzene	ND		ug/kg	1.5	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
n-Propylbenzene	ND		ug/kg	1.5	0.25	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	0.51	J	ug/kg	2.9	0.49	1
1,4-Dioxane	ND		ug/kg	120	52.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	107		70-130

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-20  
 Client ID: SB-1 (0-2)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 10:35  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 04:30  
 Analyst: NLK  
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
Tetrachloroethene	ND		ug/kg	0.68	0.26	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Benzene	ND		ug/kg	0.68	0.22	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Vinyl chloride	ND		ug/kg	1.4	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1
Trichloroethene	ND		ug/kg	0.68	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
Acetone	ND		ug/kg	14	6.5	1
2-Butanone	ND		ug/kg	14	3.0	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.7	0.16	1
n-Propylbenzene	ND		ug/kg	1.4	0.23	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-20  
**Client ID:** SB-1 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:35  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	0.32	J	ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	1.0	J	ug/kg	2.7	0.45	1
1,4-Dioxane	ND		ug/kg	110	48.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 13:27  
**Analyst:** AJK  
**Percent Solids:** 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
Tetrachloroethene	ND		ug/kg	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
Acetone	ND		ug/kg	11	5.3	1
2-Butanone	ND		ug/kg	11	2.4	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	88	39.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	93		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/13/22 17:26  
**Analyst:** MV

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
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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
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
Vinyl chloride	ND		ug/l	1.0	0.07	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
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
Acetone	ND		ug/l	5.0	1.5	1
2-Butanone	ND		ug/l	5.0	1.9	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	106		70-130



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-23  
 Client ID: FIELD BLANK-2  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:30  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 05/13/22 17:52

Analyst: MV

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
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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
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
Vinyl chloride	ND		ug/l	1.0	0.07	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
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
Acetone	ND		ug/l	5.0	1.5	1
2-Butanone	ND		ug/l	5.0	1.9	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-24  
**Client ID:** TRIP BLANK 1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 00:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/13/22 18:19  
**Analyst:** MV

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
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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
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
Vinyl chloride	ND		ug/l	1.0	0.07	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
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
Acetone	ND		ug/l	5.0	1.5	1
2-Butanone	ND		ug/l	5.0	1.9	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-24  
**Client ID:** TRIP BLANK 1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 00:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 13:46  
**Analyst:** AJK  
**Percent Solids:** 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Benzene	ND		ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
Acetone	ND		ug/kg	10	4.9	1
2-Butanone	ND		ug/kg	10	2.2	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	81	36.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 14:06  
**Analyst:** AJK  
**Percent Solids:** 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
Acetone	ND		ug/kg	10	5.0	1
2-Butanone	ND		ug/kg	10	2.3	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
n-Propylbenzene	ND		ug/kg	1.0	0.18	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	83	36.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	91		70-130



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-27  
 Client ID: SB-5 (0-2)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 12:30  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 14:25  
 Analyst: AJK  
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
Acetone	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.4	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.18	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	86	38.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-28  
**Client ID:** TRIP BLANK 2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 00:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/13/22 18:45  
**Analyst:** MV

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
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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
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
Vinyl chloride	ND		ug/l	1.0	0.07	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
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
Acetone	ND		ug/l	5.0	1.5	1
2-Butanone	ND		ug/l	5.0	1.9	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-28  
**Client ID:** TRIP BLANK 2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 00:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	106		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/09/22 21:42  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-12,14,16-20 Batch: WG1636811-5					
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
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.0	0.34
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
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
Acetone	ND		ug/kg	10	4.8
2-Butanone	ND		ug/kg	10	2.2
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/09/22 21:42  
**Analyst:** AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-12,14,16-20 Batch: WG1636811-5					
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 11:14  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 21,25-27 Batch: WG1637092-5					
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
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.0	0.34
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
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
Acetone	ND		ug/kg	10	4.8
2-Butanone	ND		ug/kg	10	2.2
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 11:14  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 21,25-27 Batch: WG1637092-5					
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	89		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/11/22 08:36  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 13 Batch: WG1638217-5					
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
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.0	0.34
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
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
Acetone	ND		ug/kg	10	4.8
2-Butanone	ND		ug/kg	10	2.2
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 08:36  
**Analyst:** NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 13 Batch: WG1638217-5					
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/13/22 10:22  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 22-24,28 Batch: WG1638761-5					
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
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	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
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
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
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
Acetone	ND		ug/l	5.0	1.5
2-Butanone	ND		ug/l	5.0	1.9
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/13/22 10:22  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 22-24,28 Batch: WG1638761-5					
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	105		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-12,14,16-20 Batch: WG1636811-3 WG1636811-4								
Methylene chloride	101		96		70-130	5		30
1,1-Dichloroethane	97		92		70-130	5		30
Chloroform	95		90		70-130	5		30
Carbon tetrachloride	92		90		70-130	2		30
Tetrachloroethene	104		100		70-130	4		30
Chlorobenzene	100		98		70-130	2		30
1,2-Dichloroethane	92		90		70-130	2		30
1,1,1-Trichloroethane	97		93		70-130	4		30
Benzene	98		94		70-130	4		30
Toluene	98		94		70-130	4		30
Ethylbenzene	98		95		70-130	3		30
Vinyl chloride	91		86		67-130	6		30
1,1-Dichloroethene	95		90		65-135	5		30
trans-1,2-Dichloroethene	97		91		70-130	6		30
Trichloroethene	98		95		70-130	3		30
1,2-Dichlorobenzene	106		104		70-130	2		30
1,3-Dichlorobenzene	106		102		70-130	4		30
1,4-Dichlorobenzene	105		101		70-130	4		30
Methyl tert butyl ether	100		96		66-130	4		30
p/m-Xylene	103		100		70-130	3		30
o-Xylene	103		101		70-130	2		30
cis-1,2-Dichloroethene	96		93		70-130	3		30
Acetone	83		78		54-140	6		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-12,14,16-20 Batch: WG1636811-3 WG1636811-4								
2-Butanone	78		82		70-130	5		30
n-Butylbenzene	104		101		70-130	3		30
sec-Butylbenzene	105		101		70-130	4		30
tert-Butylbenzene	105		101		70-130	4		30
n-Propylbenzene	104		100		70-130	4		30
1,3,5-Trimethylbenzene	103		100		70-130	3		30
1,2,4-Trimethylbenzene	103		100		70-130	3		30
1,4-Dioxane	82		88		65-136	7		30

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

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 Batch: WG1637092-3 WG1637092-4								
Methylene chloride	98		89		70-130	10		30
1,1-Dichloroethane	107		95		70-130	12		30
Chloroform	104		92		70-130	12		30
Carbon tetrachloride	108		96		70-130	12		30
Tetrachloroethene	113		102		70-130	10		30
Chlorobenzene	107		98		70-130	9		30
1,2-Dichloroethane	105		98		70-130	7		30
1,1,1-Trichloroethane	111		98		70-130	12		30
Benzene	111		100		70-130	10		30
Toluene	111		100		70-130	10		30
Ethylbenzene	113		102		70-130	10		30
Vinyl chloride	114		97		67-130	16		30
1,1-Dichloroethene	102		90		65-135	13		30
trans-1,2-Dichloroethene	106		94		70-130	12		30
Trichloroethene	113		101		70-130	11		30
1,2-Dichlorobenzene	109		100		70-130	9		30
1,3-Dichlorobenzene	113		102		70-130	10		30
1,4-Dichlorobenzene	111		100		70-130	10		30
Methyl tert butyl ether	105		104		66-130	1		30
p/m-Xylene	110		100		70-130	10		30
o-Xylene	107		97		70-130	10		30
cis-1,2-Dichloroethene	101		90		70-130	12		30
Acetone	106		98		54-140	8		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 Batch: WG1637092-3 WG1637092-4								
2-Butanone	87		85		70-130	2		30
n-Butylbenzene	136	Q	118		70-130	14		30
sec-Butylbenzene	125		112		70-130	11		30
tert-Butylbenzene	119		106		70-130	12		30
n-Propylbenzene	126		111		70-130	13		30
1,3,5-Trimethylbenzene	124		110		70-130	12		30
1,2,4-Trimethylbenzene	124		111		70-130	11		30
1,4-Dioxane	92		89		65-136	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		98		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	110		109		70-130
Dibromofluoromethane	92		90		70-130



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 13 Batch: WG1638217-3 WG1638217-4								
Methylene chloride	87		89		70-130	2		30
1,1-Dichloroethane	81		85		70-130	5		30
Chloroform	80		85		70-130	6		30
Carbon tetrachloride	76		83		70-130	9		30
Tetrachloroethene	85		94		70-130	10		30
Chlorobenzene	86		89		70-130	3		30
1,2-Dichloroethane	83		83		70-130	0		30
1,1,1-Trichloroethane	79		86		70-130	8		30
Benzene	84		87		70-130	4		30
Toluene	81		86		70-130	6		30
Ethylbenzene	83		88		70-130	6		30
Vinyl chloride	70		57	Q	67-130	20		30
1,1-Dichloroethene	76		78		65-135	3		30
trans-1,2-Dichloroethene	80		85		70-130	6		30
Trichloroethene	83		90		70-130	8		30
1,2-Dichlorobenzene	94		92		70-130	2		30
1,3-Dichlorobenzene	90		91		70-130	1		30
1,4-Dichlorobenzene	91		91		70-130	0		30
Methyl tert butyl ether	93		92		66-130	1		30
p/m-Xylene	87		92		70-130	6		30
o-Xylene	89		92		70-130	3		30
cis-1,2-Dichloroethene	83		86		70-130	4		30
Acetone	76		81		54-140	6		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 13 Batch: WG1638217-3 WG1638217-4								
2-Butanone	82		82		70-130	0		30
n-Butylbenzene	83		88		70-130	6		30
sec-Butylbenzene	84		90		70-130	7		30
tert-Butylbenzene	86		90		70-130	5		30
n-Propylbenzene	85		90		70-130	6		30
1,3,5-Trimethylbenzene	86		90		70-130	5		30
1,2,4-Trimethylbenzene	88		89		70-130	1		30
1,4-Dioxane	84		100		65-136	17		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	100		96		70-130

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-24,28 Batch: WG1638761-3 WG1638761-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		95		70-130	5		20
Carbon tetrachloride	100		100		63-132	0		20
Tetrachloroethene	100		96		70-130	4		20
Chlorobenzene	100		100		75-130	0		20
1,2-Dichloroethane	100		98		70-130	2		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Benzene	100		98		70-130	2		20
Toluene	100		99		70-130	1		20
Ethylbenzene	100		96		70-130	4		20
Vinyl chloride	130		120		55-140	8		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	87		83		63-130	5		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		97		70-130	3		20
Acetone	78		64		58-148	20		20

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-24,28 Batch: WG1638761-3 WG1638761-4								
2-Butanone	74		79		63-138	7		20
n-Butylbenzene	99		96		53-136	3		20
sec-Butylbenzene	100		97		70-130	3		20
tert-Butylbenzene	99		98		70-130	1		20
n-Propylbenzene	97		97		69-130	0		20
1,3,5-Trimethylbenzene	98		95		64-130	3		20
1,2,4-Trimethylbenzene	96		93		70-130	3		20
1,4-Dioxane	92		84		56-162	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	102		100		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	100		99		70-130

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 QC Batch ID: WG1637092-6 WG1637092-7 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
Methylene chloride	ND	128	100	79		110	96		70-130	7		30
1,1-Dichloroethane	ND	128	110	86		120	105		70-130	7		30
Chloroform	ND	128	100	81		110	100		70-130	8		30
Carbon tetrachloride	ND	128	110	86		120	105		70-130	6		30
Tetrachloroethene	ND	128	99	77		100	92		70-130	5		30
Chlorobenzene	ND	128	93	72		97	86		70-130	5		30
1,2-Dichloroethane	ND	128	110	83		120	104		70-130	9		30
1,1,1-Trichloroethane	ND	128	110	89		120	108		70-130	7		30
Benzene	ND	128	110	88		120	108		70-130	7		30
Toluene	ND	128	100	81		110	98		70-130	6		30
Ethylbenzene	ND	128	97	75		100	88		70-130	3		30
Vinyl chloride	ND	128	120	95		130	114		67-130	5		30
1,1-Dichloroethene	ND	128	110	82		110	100		65-135	6		30
trans-1,2-Dichloroethene	ND	128	110	83		110	100		70-130	6		30
Trichloroethene	ND	128	110	85		120	103		70-130	6		30
1,2-Dichlorobenzene	ND	128	81	63	Q	82	73		70-130	1		30
1,3-Dichlorobenzene	ND	128	79	61	Q	80	71		70-130	1		30
1,4-Dichlorobenzene	ND	128	76	59	Q	77	68	Q	70-130	1		30
Methyl tert butyl ether	ND	128	120	94		130	117		66-130	9		30
p/m-Xylene	ND	257	180	70		190	83		70-130	3		30
o-Xylene	ND	257	180	71		190	84		70-130	3		30
cis-1,2-Dichloroethene	ND	128	100	79		110	97		70-130	8		30
Acetone	ND	128	110	83		120	108		54-140	14		30

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 QC Batch ID: WG1637092-6 WG1637092-7 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
2-Butanone	ND	128	88	68	Q	98	87		70-130	10		30
n-Butylbenzene	ND	128	79	62	Q	77	68	Q	70-130	3		30
sec-Butylbenzene	ND	128	90	70		87	78		70-130	3		30
tert-Butylbenzene	ND	128	94	73		93	83		70-130	1		30
n-Propylbenzene	ND	128	94	73		95	84		70-130	1		30
1,3,5-Trimethylbenzene	ND	128	94	73		95	84		70-130	1		30
1,2,4-Trimethylbenzene	ND	128	91	71		92	81		70-130	0		30
1,4-Dioxane	ND	6420	5500	85		6500	116		65-136	18		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
4-Bromofluorobenzene	111		111		70-130
Dibromofluoromethane	89		90		70-130
Toluene-d8	104		106		70-130

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 QC Batch ID: WG1637092-8 WG1637092-9 QC Sample: L2223093-26 Client ID: SB-4 (0-2)												
Methylene chloride	ND	83.5	66	79		98	77		70-130	39	Q	30
1,1-Dichloroethane	ND	83.5	73	88		110	83		70-130	36	Q	30
Chloroform	ND	83.5	70	84		100	79		70-130	35	Q	30
Carbon tetrachloride	ND	83.5	74	89		100	81		70-130	32	Q	30
Tetrachloroethene	ND	83.5	72	86		85	67	Q	70-130	16		30
Chlorobenzene	ND	83.5	67	80		81	64	Q	70-130	20		30
1,2-Dichloroethane	ND	83.5	71	85		100	80		70-130	35	Q	30
1,1,1-Trichloroethane	ND	83.5	77	92		110	85		70-130	34	Q	30
Benzene	ND	83.5	77	92		110	83		70-130	31	Q	30
Toluene	ND	83.5	73	87		92	73		70-130	23		30
Ethylbenzene	ND	83.5	72	86		82	64	Q	70-130	13		30
Vinyl chloride	ND	83.5	77	92		110	87		67-130	37	Q	30
1,1-Dichloroethene	ND	83.5	68	82		100	78		65-135	37	Q	30
trans-1,2-Dichloroethene	ND	83.5	66	78		100	78		70-130	41	Q	30
Trichloroethene	ND	83.5	72	87		99	78		70-130	31	Q	30
1,2-Dichlorobenzene	ND	83.5	63	75		69	54	Q	70-130	9		30
1,3-Dichlorobenzene	ND	83.5	61	72		64	50	Q	70-130	6		30
1,4-Dichlorobenzene	ND	83.5	58	69	Q	62	48	Q	70-130	6		30
Methyl tert butyl ether	ND	83.5	83	100		110	90		66-130	31	Q	30
p/m-Xylene	ND	167	140	81		150	59	Q	70-130	11		30
o-Xylene	ND	167	140	83		160	62	Q	70-130	13		30
cis-1,2-Dichloroethene	ND	83.5	65	78		98	77		70-130	40	Q	30
Acetone	ND	83.5	78	94		99	78		54-140	23		30

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 21,25-27 QC Batch ID: WG1637092-8 WG1637092-9 QC Sample: L2223093-26 Client ID: SB-4 (0-2)												
2-Butanone	ND	83.5	62	74		85	67	Q	70-130	31	Q	30
n-Butylbenzene	ND	83.5	66	79		57	45	Q	70-130	15		30
sec-Butylbenzene	ND	83.5	73	87		67	53	Q	70-130	9		30
tert-Butylbenzene	ND	83.5	74	88		72	57	Q	70-130	2		30
n-Propylbenzene	ND	83.5	74	88		70	55	Q	70-130	5		30
1,3,5-Trimethylbenzene	ND	83.5	75	89		72	57	Q	70-130	3		30
1,2,4-Trimethylbenzene	ND	83.5	73	87		71	56	Q	70-130	3		30
1,4-Dioxane	ND	4180	3800	90		5700	89		65-136	40	Q	30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	96		99		70-130
4-Bromofluorobenzene	111		109		70-130
Dibromofluoromethane	89		91		70-130
Toluene-d8	104		104		70-130



# SEMIVOLATILES

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 06:05  
**Analyst:** ALS  
**Percent Solids:** 96%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	17.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Fluoranthene	ND		ug/kg	100	19.	1
Naphthalene	ND		ug/kg	170	20.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	130	41.	1
Benzo(b)fluoranthene	ND		ug/kg	100	28.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	130	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	130	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	170	16.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	62		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-02  
**Client ID:** SB-7 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 05:42  
**Analyst:** ALS  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

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	100	19.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	170	21.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	170	16.	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	250	27.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-02  
**Client ID:** SB-7 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	70		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 04:57  
**Analyst:** ALS  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	65		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 04:12  
**Analyst:** ALS  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	69		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 07:35  
**Analyst:** ALS  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

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
Fluoranthene	ND		ug/kg	110	20.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	62		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 09:05  
**Analyst:** IM  
**Percent Solids:** 39%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	340	44.	1
Hexachlorobenzene	ND		ug/kg	250	47.	1
Fluoranthene	ND		ug/kg	250	49.	1
Naphthalene	ND		ug/kg	420	52.	1
Benzo(a)anthracene	ND		ug/kg	250	48.	1
Benzo(a)pyrene	ND		ug/kg	340	100	1
Benzo(b)fluoranthene	ND		ug/kg	250	71.	1
Benzo(k)fluoranthene	ND		ug/kg	250	68.	1
Chrysene	ND		ug/kg	250	44.	1
Acenaphthylene	ND		ug/kg	340	65.	1
Anthracene	ND		ug/kg	250	82.	1
Benzo(ghi)perylene	ND		ug/kg	340	50.	1
Fluorene	ND		ug/kg	420	41.	1
Phenanthrene	ND		ug/kg	250	51.	1
Dibenzo(a,h)anthracene	ND		ug/kg	250	49.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	340	59.	1
Pyrene	63	J	ug/kg	250	42.	1
Dibenzofuran	ND		ug/kg	420	40.	1
Pentachlorophenol	ND		ug/kg	340	93.	1
Phenol	ND		ug/kg	420	64.	1
2-Methylphenol	ND		ug/kg	420	66.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	610	66.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	4	Q	25-120
Phenol-d6	24		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	1	Q	10-136
4-Terphenyl-d14	54		18-120

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-06 RE

Date Collected: 05/02/22 09:30

Client ID: SB-8B (0-3)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 05/16/22 16:32

Analytical Date: 05/17/22 04:52

Analyst: SLR

Percent Solids: 39%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	340	44.	1
Hexachlorobenzene	ND		ug/kg	250	47.	1
Fluoranthene	ND		ug/kg	250	48.	1
Naphthalene	ND		ug/kg	420	52.	1
Benzo(a)anthracene	ND		ug/kg	250	48.	1
Benzo(a)pyrene	ND		ug/kg	340	100	1
Benzo(b)fluoranthene	ND		ug/kg	250	71.	1
Benzo(k)fluoranthene	ND		ug/kg	250	68.	1
Chrysene	ND		ug/kg	250	44.	1
Acenaphthylene	ND		ug/kg	340	65.	1
Anthracene	ND		ug/kg	250	82.	1
Benzo(ghi)perylene	ND		ug/kg	340	50.	1
Fluorene	ND		ug/kg	420	41.	1
Phenanthrene	ND		ug/kg	250	51.	1
Dibenzo(a,h)anthracene	ND		ug/kg	250	49.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	340	59.	1
Pyrene	48	J	ug/kg	250	42.	1
Dibenzofuran	ND		ug/kg	420	40.	1
Pentachlorophenol	ND		ug/kg	340	93.	1
Phenol	ND		ug/kg	420	64.	1
2-Methylphenol	ND		ug/kg	420	66.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	610	66.	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-06 RE

Date Collected: 05/02/22 09:30

Client ID: SB-8B (0-3)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	7	Q	25-120
Phenol-d6	34		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	1	Q	10-136
4-Terphenyl-d14	51		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 02:20  
**Analyst:** ALS  
**Percent Solids:** 84%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Fluoranthene	ND		ug/kg	120	22.	1
Naphthalene	ND		ug/kg	190	24.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Dibenzofuran	ND		ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	160	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	71		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 06:27  
**Analyst:** ALS  
**Percent Solids:** 100%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	17.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Fluoranthene	ND		ug/kg	100	19.	1
Naphthalene	ND		ug/kg	170	20.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	130	41.	1
Benzo(b)fluoranthene	ND		ug/kg	100	28.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	17.	1
Acenaphthylene	ND		ug/kg	130	26.	1
Anthracene	ND		ug/kg	100	32.	1
Benzo(ghi)perylene	ND		ug/kg	130	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.	1
Pyrene	ND		ug/kg	100	16.	1
Dibenzofuran	ND		ug/kg	170	16.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	65		10-136
4-Terphenyl-d14	79		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 09:27  
**Analyst:** ALS  
**Percent Solids:** 86%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	51	J	ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	840		ug/kg	110	22.	1
Naphthalene	56	J	ug/kg	190	23.	1
Benzo(a)anthracene	390		ug/kg	110	21.	1
Benzo(a)pyrene	390		ug/kg	150	46.	1
Benzo(b)fluoranthene	450		ug/kg	110	32.	1
Benzo(k)fluoranthene	130		ug/kg	110	30.	1
Chrysene	360		ug/kg	110	20.	1
Acenaphthylene	35	J	ug/kg	150	29.	1
Anthracene	140		ug/kg	110	37.	1
Benzo(ghi)perylene	190		ug/kg	150	22.	1
Fluorene	39	J	ug/kg	190	18.	1
Phenanthrene	600		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	46	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	26.	1
Pyrene	750		ug/kg	110	19.	1
Dibenzofuran	35	J	ug/kg	190	18.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	69		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 00:12  
**Analyst:** SG  
**Percent Solids:** 86%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.539	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.539	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.269	0.042	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.539	0.057	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.269	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.269	0.065	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.269	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.539	0.193	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.539	0.147	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.269	0.081	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.269	0.140	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.269	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.539	0.309	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.539	0.217	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.539	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.539	0.165	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.539	0.106	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.539	0.091	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.539	0.075	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.539	0.220	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.539	0.058	1
PFOA/PFOS, Total	ND		ng/g	0.269	0.045	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-09  
 Client ID: SB-10B (0-3)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 11:00  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	85		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	56		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	67		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	61		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	78		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 05:20  
**Analyst:** ALS  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

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
Fluoranthene	ND		ug/kg	110	20.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	69		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 04:35  
**Analyst:** ALS  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

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	100	20.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	180	21.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	180	16.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	60		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 07:57  
**Analyst:** ALS  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	63		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 02:42  
**Analyst:** ALS  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	ND		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Dibenzofuran	ND		ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	55		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 03:50  
**Analyst:** ALS  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

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	100	19.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	170	21.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	170	16.	1
Pentachlorophenol	ND		ug/kg	140	37.	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	63		18-120

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-14  
 Client ID: SB-19 (7-9)  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 12:45  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/12/22 00:29  
 Analyst: SG  
 Percent Solids: 95%

Extraction Method: ALPHA 23528  
 Extraction Date: 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.494	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.494	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.247	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.494	0.052	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.247	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.247	0.060	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.247	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.494	0.177	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.494	0.135	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.247	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.247	0.128	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.247	0.066	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.494	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.494	0.199	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.494	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.494	0.151	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.494	0.083	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.494	0.069	1
Perfluorotridecanoic Acid (PFTTrDA)	ND		ng/g	0.494	0.202	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.494	0.053	1
PFOA/PFOS, Total	ND		ng/g	0.247	0.041	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS****Lab ID:** L2223093-14**Date Collected:** 05/02/22 12:45**Client ID:** SB-19 (7-9)**Date Received:** 05/03/22**Sample Location:** 60 MCLEAN AVENUE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	73		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	76		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	72	Q	74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	76		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	84		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	78		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	49		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	75		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	79		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	45		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	17	Q	31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85		61-155
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	18	Q	34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	56		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/20/22 14:09  
**Analyst:** RS  
**Percent Solids:** 95%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.494	0.097	1
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			85		10-117	

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-16  
**Client ID:** SB-18 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 08:20  
**Analyst:** ALS  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	18.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-16  
**Client ID:** SB-18 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	51		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 03:27  
**Analyst:** ALS  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	53		18-120



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 03:05  
**Analyst:** ALS  
**Percent Solids:** 99%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	17.	1
Hexachlorobenzene	ND		ug/kg	98	18.	1
Fluoranthene	ND		ug/kg	98	19.	1
Naphthalene	ND		ug/kg	160	20.	1
Benzo(a)anthracene	ND		ug/kg	98	18.	1
Benzo(a)pyrene	ND		ug/kg	130	40.	1
Benzo(b)fluoranthene	ND		ug/kg	98	28.	1
Benzo(k)fluoranthene	ND		ug/kg	98	26.	1
Chrysene	ND		ug/kg	98	17.	1
Acenaphthylene	ND		ug/kg	130	25.	1
Anthracene	ND		ug/kg	98	32.	1
Benzo(ghi)perylene	ND		ug/kg	130	19.	1
Fluorene	ND		ug/kg	160	16.	1
Phenanthrene	ND		ug/kg	98	20.	1
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.	1
Pyrene	ND		ug/kg	98	16.	1
Dibenzofuran	ND		ug/kg	160	15.	1
Pentachlorophenol	ND		ug/kg	130	36.	1
Phenol	ND		ug/kg	160	25.	1
2-Methylphenol	ND		ug/kg	160	25.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	71		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 08:42  
**Analyst:** ALS  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	42		10-136
4-Terphenyl-d14	74		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 00:45  
**Analyst:** SG  
**Percent Solids:** 89%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.508	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.508	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.254	0.040	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.508	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.254	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.254	0.061	1
Perfluorooctanoic Acid (PFOA)	0.045	J	ng/g	0.254	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.508	0.182	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.508	0.139	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.254	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.254	0.132	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.254	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.508	0.291	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.508	0.205	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.508	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.508	0.155	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.508	0.086	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.508	0.071	1
Perfluorotridecanoic Acid (PFTTrDA)	ND		ng/g	0.508	0.208	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.508	0.055	1
PFOA/PFOS, Total	0.045	J	ng/g	0.254	0.043	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS****Lab ID:** L2223093-19**Date Collected:** 05/03/22 11:00**Client ID:** SB-DUP-2**Date Received:** 05/03/22**Sample Location:** 60 MCLEAN AVENUE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	56	Q	61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	64		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	78		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	67		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	73		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	77		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	50		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	55		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	38		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		61-155
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	33	Q	34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	52		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/20/22 14:16  
**Analyst:** RS  
**Percent Solids:** 89%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.508	0.100	1
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			77		10-117	

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-20  
**Client ID:** SB-1 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:35  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 06:50  
**Analyst:** ALS  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	ND		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Dibenzofuran	ND		ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-20  
**Client ID:** SB-1 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:35  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	25		25-120
Phenol-d6	53		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	17		10-136
4-Terphenyl-d14	54		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 07:12  
**Analyst:** ALS  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	73		18-120

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-22  
 Client ID: FIELD BLANK-1  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:00  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/08/22 18:51  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 05/07/22 04:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-22  
 Client ID: FIELD BLANK-1  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:00  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	79		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/08/22 13:42  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/07/22 04:43

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	0.04	J	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:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	100		15-120
2,4,6-Tribromophenol	137	Q	10-120
4-Terphenyl-d14	103		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/12/22 02:46  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/10/22 14:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	43			15-110		



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/13/22 05:15  
**Analyst:** RS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 10:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.78	0.364	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.78	0.353	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.78	0.212	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.78	0.292	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.78	0.201	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	0.335	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.78	0.210	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	1.19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	0.614	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	0.278	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.78	0.450	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	0.271	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.578	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.232	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.874	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.517	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	0.717	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.332	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.292	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.221	1
PFOA/PFOS, Total	ND		ng/l	1.78	0.210	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-22  
 Client ID: FIELD BLANK-1  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:00  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	125		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	68		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	81		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	88		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	47		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	92		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	92		22-136

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/08/22 19:13  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/07/22 04:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-23  
 Client ID: FIELD BLANK-2  
 Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:30  
 Date Received: 05/03/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	63		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/08/22 13:58  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/07/22 04:43

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:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	78		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/12/22 03:08  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/10/22 14:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	134	30.3	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	43			15-110		

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 05:40  
**Analyst:** JG  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 02:33

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	100	19.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	170	21.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	170	16.	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	56		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 01:02  
**Analyst:** SG  
**Percent Solids:** 94%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.487	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.487	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.243	0.038	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.487	0.051	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.243	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.243	0.059	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.243	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.487	0.175	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.487	0.133	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.243	0.073	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.243	0.126	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.243	0.065	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.487	0.279	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.487	0.196	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.487	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.487	0.149	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.487	0.095	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.487	0.082	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.487	0.068	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.487	0.199	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.487	0.053	1
PFOA/PFOS, Total	ND		ng/g	0.243	0.041	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS****Lab ID:** L2223093-25**Date Collected:** 05/03/22 12:40**Client ID:** SB-3 (0-2)**Date Received:** 05/03/22**Sample Location:** 60 MCLEAN AVENUE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	95		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	64		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	76		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	111		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	117		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	83		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 07:39  
**Analyst:** JG  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 02:33

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	100	19.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	170	21.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	170	16.	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

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS****Lab ID:** L2223093-26**Date Collected:** 05/03/22 12:50**Client ID:** SB-4 (0-2)**Date Received:** 05/03/22**Sample Location:** 60 MCLEAN AVENUE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	61		10-136
4-Terphenyl-d14	46		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 09:15  
**Analyst:** JG  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 02:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	240		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	110		ug/kg	110	21.	1
Benzo(a)pyrene	92	J	ug/kg	150	45.	1
Benzo(b)fluoranthene	120		ug/kg	110	31.	1
Benzo(k)fluoranthene	45	J	ug/kg	110	30.	1
Chrysene	160		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	63	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	210		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	66	J	ug/kg	150	26.	1
Pyrene	230		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	96		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	63		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 01:35  
**Analyst:** SG  
**Percent Solids:** 89%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.506	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.506	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.253	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.506	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.253	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.253	0.061	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.253	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.506	0.181	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.506	0.138	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.253	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.253	0.131	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.253	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.506	0.290	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.506	0.204	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.506	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.506	0.155	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.506	0.085	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.506	0.071	1
Perfluorotridecanoic Acid (PFTTrDA)	ND		ng/g	0.506	0.207	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.506	0.055	1
PFOA/PFOS, Total	ND		ng/g	0.253	0.042	1



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	86		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	62		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	66		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	22	Q	31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	111		61-155
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	27	Q	34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	109		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	58		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/20/22 14:24  
**Analyst:** RS  
**Percent Solids:** 89%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.506	0.099	1
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			83		10-117	

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/07/22 12:20  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 22-23 Batch: WG1635274-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
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
Fluoranthene	ND		ug/l	2.0	0.26
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
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/07/22 12:20  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 22-23 Batch: WG1635274-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
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
2-Methylnaphthalene	ND		ug/l	2.0	0.45
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
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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/07/22 12:20  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 22-23 Batch: WG1635274-1					
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
Pentachlorophenol	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
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	91		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/07/22 17:13  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 22-23 Batch: WG1635276-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.03	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.31		ug/l	0.10	0.05
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.01	J	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	0.02	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	0.07	J	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:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/07/22 17:13  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 22-23 Batch: WG1635276-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	84		41-149

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D  
 Analytical Date: 05/12/22 01:13  
 Analyst: ALS

Extraction Method: EPA 3546  
 Extraction Date: 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-14,16-21 Batch: WG1635635-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
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.
Dibenzofuran	ND		ug/kg	160	15.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/12/22 01:13  
 Analyst: ALS

Extraction Method: EPA 3546  
 Extraction Date: 05/07/22 04:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-14,16-21 Batch: WG1635635-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	68		10-136
4-Terphenyl-d14	75		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 01:40  
**Analyst:** JG

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 25-27 Batch: WG1635905-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
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.
Dibenzofuran	ND		ug/kg	160	16.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/12/22 01:40  
 Analyst: JG

Extraction Method: EPA 3546  
 Extraction Date: 05/09/22 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 25-27 Batch: WG1635905-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	72		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 05/11/22 17:26  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/10/22 14:04

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 22-23 Batch: WG1636586-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/11/22 21:59  
**Analyst:** SG

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 09,14,19,25,27 Batch: WG1636990-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.500	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.500	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.250	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.500	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.250	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.250	0.061
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.250	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.500	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.500	0.136
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.250	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.250	0.130
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.250	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.500	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.500	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.500	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.500	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.500	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.500	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.500	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.500	0.054
PFOA/PFOS, Total	ND		ng/g	0.250	0.042

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/11/22 21:59  
 Analyst: SG

Extraction Method: ALPHA 23528  
 Extraction Date: 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 09,14,19,25,27 Batch: WG1636990-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	95		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	85		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	58		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	56		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	40		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	68		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	105		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	62		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/13/22 08:27  
**Analyst:** MP

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 08:47

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 09,14,19,25,27 Batch: WG1636990-1					
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	92		10-117

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 23:10  
**Analyst:** RS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 10:15

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 22 Batch: WG1637024-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/12/22 23:10  
**Analyst:** RS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 10:15

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 22 Batch: WG1637024-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	96		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	114		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	82		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	88		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	85		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		22-136

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/17/22 10:54  
**Analyst:** RS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/11/22 10:15

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 22 Batch: WG1637024-1					
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	71		10-112

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/16/22 22:52  
**Analyst:** SLR

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/16/22 16:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1639053-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
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.
Dibenzofuran	ND		ug/kg	160	15.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/16/22 22:52  
 Analyst: SLR

Extraction Method: EPA 3546  
 Extraction Date: 05/16/22 16:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1639053-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	79		18-120

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-23 Batch: WG1635274-2 WG1635274-3								
Acenaphthene	65		62		37-111	5		30
1,2,4-Trichlorobenzene	59		58		39-98	2		30
Hexachlorobenzene	63		59		40-140	7		30
Bis(2-chloroethyl)ether	62		58		40-140	7		30
2-Chloronaphthalene	58		59		40-140	2		30
1,2-Dichlorobenzene	59		56		40-140	5		30
1,3-Dichlorobenzene	58		56		40-140	4		30
1,4-Dichlorobenzene	58		56		36-97	4		30
3,3'-Dichlorobenzidine	56		53		40-140	6		30
2,4-Dinitrotoluene	74		72		48-143	3		30
2,6-Dinitrotoluene	70		68		40-140	3		30
Fluoranthene	66		66		40-140	0		30
4-Chlorophenyl phenyl ether	66		61		40-140	8		30
4-Bromophenyl phenyl ether	61		59		40-140	3		30
Bis(2-chloroisopropyl)ether	59		56		40-140	5		30
Bis(2-chloroethoxy)methane	61		58		40-140	5		30
Hexachlorobutadiene	58		59		40-140	2		30
Hexachlorocyclopentadiene	46		46		40-140	0		30
Hexachloroethane	57		57		40-140	0		30
Isophorone	55		53		40-140	4		30
Naphthalene	61		62		40-140	2		30
Nitrobenzene	67		63		40-140	6		30
NDPA/DPA	65		62		40-140	5		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-23 Batch: WG1635274-2 WG1635274-3								
n-Nitrosodi-n-propylamine	59		58		29-132	2		30
Bis(2-ethylhexyl)phthalate	65		66		40-140	2		30
Butyl benzyl phthalate	63		61		40-140	3		30
Di-n-butylphthalate	62		64		40-140	3		30
Di-n-octylphthalate	65		64		40-140	2		30
Diethyl phthalate	65		62		40-140	5		30
Dimethyl phthalate	60		60		40-140	0		30
Benzo(a)anthracene	67		69		40-140	3		30
Benzo(a)pyrene	70		69		40-140	1		30
Benzo(b)fluoranthene	70		70		40-140	0		30
Benzo(k)fluoranthene	71		71		40-140	0		30
Chrysene	71		70		40-140	1		30
Acenaphthylene	58		58		45-123	0		30
Anthracene	65		64		40-140	2		30
Benzo(ghi)perylene	71		71		40-140	0		30
Fluorene	67		63		40-140	6		30
Phenanthrene	68		66		40-140	3		30
Dibenzo(a,h)anthracene	73		71		40-140	3		30
Indeno(1,2,3-cd)pyrene	73		72		40-140	1		30
Pyrene	67		65		26-127	3		30
Biphenyl	63		60		40-140	5		30
4-Chloroaniline	7	Q	7	Q	40-140	0		30
2-Nitroaniline	71		69		52-143	3		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-23 Batch: WG1635274-2 WG1635274-3								
3-Nitroaniline	20	Q	19	Q	25-145	5		30
4-Nitroaniline	54		54		51-143	0		30
Dibenzofuran	67		64		40-140	5		30
2-Methylnaphthalene	60		60		40-140	0		30
1,2,4,5-Tetrachlorobenzene	59		57		2-134	3		30
Acetophenone	60		60		39-129	0		30
2,4,6-Trichlorophenol	61		60		30-130	2		30
p-Chloro-m-cresol	64		62		23-97	3		30
2-Chlorophenol	62		60		27-123	3		30
2,4-Dichlorophenol	64		63		30-130	2		30
2,4-Dimethylphenol	63		56		30-130	12		30
2-Nitrophenol	69		67		30-130	3		30
4-Nitrophenol	64		61		10-80	5		30
2,4-Dinitrophenol	66		81		20-130	20		30
4,6-Dinitro-o-cresol	82		80		20-164	2		30
Pentachlorophenol	55		62		9-103	12		30
Phenol	45		42		12-110	7		30
2-Methylphenol	61		58		30-130	5		30
3-Methylphenol/4-Methylphenol	61		55		30-130	10		30
2,4,5-Trichlorophenol	61		62		30-130	2		30
Benzoic Acid	40		45		10-164	12		30
Benzyl Alcohol	55		54		26-116	2		30
Carbazole	70		69		55-144	1		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 22-23 Batch: WG1635274-2 WG1635274-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	55		52		21-120
Phenol-d6	45		40		10-120
Nitrobenzene-d5	71		65		23-120
2-Fluorobiphenyl	61		59		15-120
2,4,6-Tribromophenol	67		64		10-120
4-Terphenyl-d14	64		64		41-149



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 22-23 Batch: WG1635276-2 WG1635276-3								
Acenaphthene	82		80		40-140	2		40
2-Chloronaphthalene	76		72		40-140	5		40
Fluoranthene	80		77		40-140	4		40
Hexachlorobutadiene	75		73		40-140	3		40
Naphthalene	81		76		40-140	6		40
Benzo(a)anthracene	87		84		40-140	4		40
Benzo(a)pyrene	77		77		40-140	0		40
Benzo(b)fluoranthene	83		90		40-140	8		40
Benzo(k)fluoranthene	89		83		40-140	7		40
Chrysene	83		86		40-140	4		40
Acenaphthylene	69		64		40-140	8		40
Anthracene	82		82		40-140	0		40
Benzo(ghi)perylene	106		106		40-140	0		40
Fluorene	81		79		40-140	3		40
Phenanthrene	82		84		40-140	2		40
Dibenzo(a,h)anthracene	109		100		40-140	9		40
Indeno(1,2,3-cd)pyrene	110		101		40-140	9		40
Pyrene	80		78		40-140	3		40
2-Methylnaphthalene	76		73		40-140	4		40
Pentachlorophenol	72		62		40-140	15		40
Hexachlorobenzene	90		90		40-140	0		40
Hexachloroethane	78		76		40-140	3		40

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 22-23 Batch: WG1635276-2 WG1635276-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	65		61		21-120
Phenol-d6	52		49		10-120
Nitrobenzene-d5	83		77		23-120
2-Fluorobiphenyl	72		67		15-120
2,4,6-Tribromophenol	97		91		10-120
4-Terphenyl-d14	72		70		41-149

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-14,16-21 Batch: WG1635635-2 WG1635635-3								
Acenaphthene	64		63		31-137	2		50
Hexachlorobenzene	67		69		40-140	3		50
Fluoranthene	67		66		40-140	2		50
Naphthalene	59		60		40-140	2		50
Benzo(a)anthracene	68		68		40-140	0		50
Benzo(a)pyrene	70		66		40-140	6		50
Benzo(b)fluoranthene	69		64		40-140	8		50
Benzo(k)fluoranthene	66		64		40-140	3		50
Chrysene	65		64		40-140	2		50
Acenaphthylene	66		70		40-140	6		50
Anthracene	65		65		40-140	0		50
Benzo(ghi)perylene	67		64		40-140	5		50
Fluorene	66		67		40-140	2		50
Phenanthrene	64		63		40-140	2		50
Dibenzo(a,h)anthracene	67		66		40-140	2		50
Indeno(1,2,3-cd)pyrene	70		67		40-140	4		50
Pyrene	65		63		35-142	3		50
Dibenzofuran	66		65		40-140	2		50
Pentachlorophenol	54		58		17-109	7		50
Phenol	62		65		26-90	5		50
2-Methylphenol	63		67		30-130.	6		50
3-Methylphenol/4-Methylphenol	64		70		30-130	9		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-14,16-21 Batch: WG1635635-2 WG1635635-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	61		64		25-120
Phenol-d6	63		66		10-120
Nitrobenzene-d5	58		64		23-120
2-Fluorobiphenyl	64		67		30-120
2,4,6-Tribromophenol	72		75		10-136
4-Terphenyl-d14	66		64		18-120

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 25-27 Batch: WG1635905-2 WG1635905-3								
Acenaphthene	65		71		31-137	9		50
Hexachlorobenzene	61		68		40-140	11		50
Fluoranthene	67		74		40-140	10		50
Naphthalene	66		72		40-140	9		50
Benzo(a)anthracene	63		69		40-140	9		50
Benzo(a)pyrene	58		63		40-140	8		50
Benzo(b)fluoranthene	58		63		40-140	8		50
Benzo(k)fluoranthene	60		65		40-140	8		50
Chrysene	61		67		40-140	9		50
Acenaphthylene	68		76		40-140	11		50
Anthracene	64		70		40-140	9		50
Benzo(ghi)perylene	66		71		40-140	7		50
Fluorene	67		73		40-140	9		50
Phenanthrene	67		73		40-140	9		50
Dibenzo(a,h)anthracene	64		70		40-140	9		50
Indeno(1,2,3-cd)pyrene	70		76		40-140	8		50
Pyrene	66		73		35-142	10		50
Dibenzofuran	67		74		40-140	10		50
Pentachlorophenol	61		68		17-109	11		50
Phenol	74		82		26-90	10		50
2-Methylphenol	70		79		30-130	12		50
3-Methylphenol/4-Methylphenol	77		86		30-130	11		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 25-27 Batch: WG1635905-2 WG1635905-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	77		82		25-120
Phenol-d6	81		87		10-120
Nitrobenzene-d5	76		82		23-120
2-Fluorobiphenyl	71		77		30-120
2,4,6-Tribromophenol	72		78		10-136
4-Terphenyl-d14	63		67		18-120

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 22-23 Batch: WG1636586-2 WG1636586-3								
1,4-Dioxane	126		125		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	46		45		15-110

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 Batch: WG1636990-2								
Perfluorobutanoic Acid (PFBA)	96		-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	96		-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	100		-		72-128	-		30
Perfluorohexanoic Acid (PFHxA)	99		-		70-132	-		30
Perfluoroheptanoic Acid (PFHpA)	97		-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	106		-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	100		-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	101		-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	113		-		70-132	-		30
Perfluorononanoic Acid (PFNA)	105		-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	112		-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	102		-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	78		-		65-137	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	88		-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	88		-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	112		-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	104		-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	90		-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	101		-		69-135	-		30
Perfluorotridecanoic Acid (PFTrDA)	138		-		66-139	-		30
Perfluorotetradecanoic Acid (PFTA)	120		-		69-133	-		30



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 Batch: WG1636990-2								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	95				58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86				74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96				78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	59				20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89				72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88				79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	63				19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	85				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	109				61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	57				10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74				34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	109				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80				24-159

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 Batch: WG1636990-2								
Perfluorooctanesulfonamide (FOSA)	119		-		67-137	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	94				10-117

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 22 Batch: WG1637024-2								
Perfluorobutanoic Acid (PFBA)	94		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	92		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	90		-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	92		-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	93		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	105		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	100		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	96		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	100		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	97		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	110		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	92		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	122		-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	94		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	105		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	87		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	98		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	95		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	100		-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	106		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	100		-		59-182	-		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 22 Batch: WG1637024-2								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	96				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	114				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92				62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	86				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90				62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	94				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	49				10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	95				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93				22-136

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 22 Batch: WG1637024-2								
Perfluorooctanesulfonamide (FOSA)	119		-		46-170	-		30

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	67				10-112

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1639053-2 WG1639053-3								
Acenaphthene	57		84		31-137	38		50
Hexachlorobenzene	57		81		40-140	35		50
Fluoranthene	61		87		40-140	35		50
Naphthalene	56		83		40-140	39		50
Benzo(a)anthracene	60		86		40-140	36		50
Benzo(a)pyrene	55		77		40-140	33		50
Benzo(b)fluoranthene	55		77		40-140	33		50
Benzo(k)fluoranthene	53		78		40-140	38		50
Chrysene	57		82		40-140	36		50
Acenaphthylene	60		89		40-140	39		50
Anthracene	60		86		40-140	36		50
Benzo(ghi)perylene	59		86		40-140	37		50
Fluorene	59		87		40-140	38		50
Phenanthrene	60		86		40-140	36		50
Dibenzo(a,h)anthracene	56		84		40-140	40		50
Indeno(1,2,3-cd)pyrene	59		87		40-140	38		50
Pyrene	60		87		35-142	37		50
Dibenzofuran	59		88		40-140	39		50
Pentachlorophenol	37		62		17-109	51	Q	50
Phenol	64		94	Q	26-90	38		50
2-Methylphenol	61		91		30-130.	39		50
3-Methylphenol/4-Methylphenol	68		99		30-130	37		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1639053-2 WG1639053-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	61		89		25-120
Phenol-d6	65		95		10-120
Nitrobenzene-d5	57		85		23-120
2-Fluorobiphenyl	56		80		30-120
2,4,6-Tribromophenol	63		88		10-136
4-Terphenyl-d14	52		73		18-120

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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): 25-27 QC Batch ID: WG1635905-4 WG1635905-5 QC Sample: L2223093-26 Client ID: SB-4 (0-2)												
Acenaphthene	ND	1390	970	70		780	56		31-137	22		50
Hexachlorobenzene	ND	1390	870	63		680	49		40-140	25		50
Fluoranthene	ND	1390	1000	72		790	57		40-140	23		50
Naphthalene	ND	1390	1000	72		830	60		40-140	19		50
Benzo(a)anthracene	ND	1390	940	68		760	55		40-140	21		50
Benzo(a)pyrene	ND	1390	810	58		640	46		40-140	23		50
Benzo(b)fluoranthene	ND	1390	900	65		640	46		40-140	34		50
Benzo(k)fluoranthene	ND	1390	790	57		670	48		40-140	16		50
Chrysene	ND	1390	920	66		720	52		40-140	24		50
Acenaphthylene	ND	1390	990	71		830	60		40-140	18		50
Anthracene	ND	1390	930	67		760	55		40-140	20		50
Benzo(ghi)perylene	ND	1390	890	64		700	50		40-140	24		50
Fluorene	ND	1390	980	71		790	57		40-140	21		50
Phenanthrene	ND	1390	1000	72		820	59		40-140	20		50
Dibenzo(a,h)anthracene	ND	1390	890	64		700	50		40-140	24		50
Indeno(1,2,3-cd)pyrene	ND	1390	940	68		740	53		40-140	24		50
Pyrene	ND	1390	1000	72		780	56		35-142	25		50
Dibenzofuran	ND	1390	1000	72		790	57		40-140	23		50
Pentachlorophenol	ND	1390	920	66		730	53		17-109	23		50
Phenol	ND	1390	1200	87		970	70		26-90	21		50
2-Methylphenol	ND	1390	1100	79		900	65		30-130.	20		50
3-Methylphenol/4-Methylphenol	ND	1390	1200	87		980	71		30-130	20		50



**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 25-27 QC Batch ID: WG1635905-4 WG1635905-5 QC Sample: L2223093-26 Client ID: SB-4 (0-2)												

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol	76		62		10-136
2-Fluorobiphenyl	71		59		30-120
2-Fluorophenol	84		70		25-120
4-Terphenyl-d14	60		47		18-120
Nitrobenzene-d5	85		72		23-120
Phenol-d6	88		75		10-120

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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): 25-27 QC Batch ID: WG1635905-6 WG1635905-7 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
Acenaphthene	ND	1480	910	62		940	64		31-137	3		50
Hexachlorobenzene	ND	1480	730	49		800	54		40-140	9		50
Fluoranthene	240	1480	1200	65		1100	58		40-140	9		50
Naphthalene	ND	1480	960	65		980	66		40-140	2		50
Benzo(a)anthracene	110	1480	1000	68		930	63		40-140	7		50
Benzo(a)pyrene	92J	1480	810	55		780	53		40-140	4		50
Benzo(b)fluoranthene	120	1480	890	52		870	51		40-140	2		50
Benzo(k)fluoranthene	45J	1480	740	50		750	51		40-140	1		50
Chrysene	160	1480	980	56		930	52		40-140	5		50
Acenaphthylene	ND	1480	910	62		960	65		40-140	5		50
Anthracene	ND	1480	890	60		900	61		40-140	1		50
Benzo(ghi)perylene	63J	1480	830	56		850	58		40-140	2		50
Fluorene	ND	1480	910	62		950	64		40-140	4		50
Phenanthrene	210	1480	1200	67		1100	60		40-140	9		50
Dibenzo(a,h)anthracene	ND	1480	790	54		830	56		40-140	5		50
Indeno(1,2,3-cd)pyrene	66J	1480	880	60		910	62		40-140	3		50
Pyrene	230	1480	1200	66		1000	52		35-142	18		50
Dibenzofuran	ND	1480	920	62		950	64		40-140	3		50
Pentachlorophenol	ND	1480	780	53		810	55		17-109	4		50
Phenol	ND	1480	1100	75		1100	74		26-90	0		50
2-Methylphenol	ND	1480	1000	68		1100	74		30-130	10		50
3-Methylphenol/4-Methylphenol	ND	1480	1100	75		1200	81		30-130	9		50

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 25-27 QC Batch ID: WG1635905-6 WG1635905-7 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol	64		62		10-136
2-Fluorobiphenyl	60		60		30-120
2-Fluorophenol	76		76		25-120
4-Terphenyl-d14	47		46		18-120
Nitrobenzene-d5	79		80		23-120
Phenol-d6	80		82		10-120

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 QC Batch ID: WG1636990-3 WG1636990-4 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
Perfluorobutanoic Acid (PFBA)	ND	5.18	4.66	90		4.83	95		71-135	4		30
Perfluoropentanoic Acid (PFPeA)	ND	5.18	4.64	90		4.78	94		69-132	3		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.6	4.27	93		4.53	100		72-128	6		30
Perfluorohexanoic Acid (PFHxA)	ND	5.18	4.72	91		4.86	95		70-132	3		30
Perfluoroheptanoic Acid (PFHpA)	ND	5.18	4.71	91		4.89	96		71-131	4		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.74	4.69	99		4.86	104		67-130	4		30
Perfluorooctanoic Acid (PFOA)	ND	5.18	4.91	95		4.99	98		69-133	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	4.93	4.97	101		4.54	94		64-140	9		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	4.94	5.14	104		5.38	111		70-132	5		30
Perfluorononanoic Acid (PFNA)	ND	5.18	5.20	100		5.55	109		72-129	7		30
Perfluorooctanesulfonic Acid (PFOS)	ND	4.81	4.93	102		5.18	109		68-136	5		30
Perfluorodecanoic Acid (PFDA)	ND	5.18	4.85	94		5.10	100		69-133	5		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	4.98	3.63	73		4.55	93		65-137	22		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	5.18	4.69F	91		4.91F	96		63-144	5		30
Perfluoroundecanoic Acid (PFUnA)	ND	5.18	4.20	81		4.68	92		64-136	11		30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.01	5.17	103		5.05	102		59-134	2		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	5.18	3.95F	76		4.49F	88		61-139	13		30
Perfluorododecanoic Acid (PFDoA)	ND	5.18	4.69	91		4.99	98		69-135	6		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	5.18	7.03	136		7.72	151	Q	66-139	9		30
Perfluorotetradecanoic Acid (PFTA)	ND	5.18	5.68	110		6.18	121		69-133	8		30

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 QC Batch ID: WG1636990-3 WG1636990-4 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	74		64		19-175
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	63		62		20-154
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	<b>25</b>	Q	<b>22</b>	Q	34-137
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	<b>16</b>	Q	<b>20</b>	Q	31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		101		61-155
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		88		75-130
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		84		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		86		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		97		78-139
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	105		103		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	56		49		24-159
Perfluoro[13C4]Butanoic Acid (MPFBA)	82		81		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		87		58-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		92		79-136
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		89		75-130
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		82		72-140
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		86		74-139

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 QC Batch ID: WG1636990-5 WG1636990-6 QC Sample: L2224044-05 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	ND	5.36	4.70	88		4.84	91		71-135	3		30
Perfluoropentanoic Acid (PFPeA)	ND	5.36	4.77	89		4.90	92		69-132	3		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.76	4.59	96		4.76	100		72-128	4		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	5.03	4.27	85		4.33	87		62-145	1		30
Perfluorohexanoic Acid (PFHxA)	ND	5.36	4.82	90		5.60	105		70-132	15		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	5.05	4.49	89		4.73	94		73-123	5		30
Perfluoroheptanoic Acid (PFHpA)	ND	5.36	4.94	92		5.06	95		71-131	2		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.9	4.98	102		5.25	108		67-130	5		30
Perfluorooctanoic Acid (PFOA)	ND	5.36	5.10	95		5.49	103		69-133	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	5.1	5.27	103		5.16	102		64-140	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	5.11	5.51	108		5.70	112		70-132	3		30
Perfluorononanoic Acid (PFNA)	ND	5.36	5.73	107		5.98	112		72-129	4		30
Perfluorooctanesulfonic Acid (PFOS)	ND	4.97	5.06	102		5.46	110		68-136	8		30
Perfluorodecanoic Acid (PFDA)	ND	5.36	5.28	99		5.51	103		69-133	4		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	5.14	4.14	81		4.20	82		65-137	1		30
Perfluorononanesulfonic Acid (PFNS)	ND	5.16	5.32	103		5.60	109		69-125	5		30
Perfluoroundecanoic Acid (PFUnA)	ND	5.36	4.48	84		4.58	86		64-136	2		30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.18	5.80	112		5.44	106		59-134	6		30
Perfluorododecanoic Acid (PFDoA)	ND	5.36	5.08	95		5.09	95		69-135	0		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	5.36	5.96	111		6.56	123		66-139	10		30
Perfluorotetradecanoic Acid (PFTA)	ND	5.36	5.78	108		6.05	113		69-133	5		30

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 QC Batch ID: WG1636990-5 WG1636990-6 QC Sample: L2224044-05 Client ID: MS Sample												

Surrogate (Extracted Internal Standard)	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	72		75		19-175
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	62		60		14-167
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	64		68		20-154
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	9	Q	9	Q	34-137
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	8	Q	5	Q	31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	47	Q	40	Q	61-155
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	30	Q	25	Q	75-130
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	16	Q	13	Q	66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	15	Q	14	Q	71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		99		78-139
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	59		52	Q	54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	65		59		24-159
Perfluoro[13C4]Butanoic Acid (MPFBA)	17	Q	14	Q	61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	18	Q	15	Q	58-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		95		79-136
Perfluoro[13C8]Octanoic Acid (M8PFOA)	17	Q	15	Q	75-130
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	20	Q	17	Q	72-140
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		89		74-139

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09,14,19,25,27 QC Batch ID: WG1636990-5 WG1636990-6 QC Sample: L2224044-05 Client ID: MS Sample												
Perfluorooctanesulfonamide (FOSA)	ND	5.36	6.08	113		6.06	114		67-137	0		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	91		90		10-117



# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 22 QC Batch ID: WG1637024-3 WG1637024-4 QC Sample: L2224404-05 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	7.36	35.8	39.4	90		39.6	94		67-148	1		30
Perfluoropentanoic Acid (PFPeA)	11.1	35.8	44.3	93		43.8	95		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	2.57	31.8	31.6	91		30.8	92		65-157	3		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	33.6	33.2	99		31.4	97		37-219	6		30
Perfluorohexanoic Acid (PFHxA)	14.6	35.8	47.6	92		45.8	90		69-168	4		30
Perfluoropentanesulfonic Acid (PFPeS)	0.801J	33.7	33.0	96		29.8	89		52-156	10		30
Perfluoroheptanoic Acid (PFHpA)	10.4	35.8	42.8	90		40.8	88		58-159	5		30
Perfluorohexanesulfonic Acid (PFHxS)	19.2	32.7	55.1	110		52.2	105		69-177	5		30
Perfluorooctanoic Acid (PFOA)	43.6	35.8	76.0	90		79.8	105		63-159	5		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	6.68	34.1	39.0	95		39.0	98		49-187	0		30
Perfluoroheptanesulfonic Acid (PFHpS)	1.33J	34.1	35.2	99		33.5	98		61-179	5		30
Perfluorononanoic Acid (PFNA)	3.99	35.8	40.0	101		38.8	101		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	36.6	33.2	70.4	102		66.5	94		52-151	6		30
Perfluorodecanoic Acid (PFDA)	1.01J	35.8	32.0	87		32.0	90		63-171	0		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	34.4	36.5	106		32.8	99		56-173	11		30
Perfluorononanesulfonic Acid (PFNS)	ND	34.4	33.2	96		33.9	102		48-150	2		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	35.8	35.8	100		34.2	99		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	ND	35.8	34.4	96		35.1	102		60-153	2		30
Perfluorodecanesulfonic Acid (PFDS)	ND	34.6	26.5	77		25.0	75		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	ND	35.8	30.9	86		31.9	92		46-170	3		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	35.8	35.9	100		33.6	98		45-170	7		30
Perfluorododecanoic Acid (PFDoA)	ND	35.8	31.9	89		29.6	86		67-153	7		30

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 22 QC Batch ID: WG1637024-3 WG1637024-4 QC Sample: L2224404-05 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTTrDA)	ND	35.8	35.8	100		36.0	104		48-158	1		30
Perfluorotetradecanoic Acid (PFTTA)	ND	35.8	34.8	97		34.6	100		59-182	1		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	257	Q	282	Q	10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	205	Q	209	Q	12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	258	Q	266	Q	14-147
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	95		98		27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90		93		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		90		55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		91		62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	71		70		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		84		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		100		71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79		80		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		74		22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		90		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		84		62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	27		27		10-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		98		69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		85		62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		91		59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		92		70-131

# PCBS

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 10:44  
**Analyst:** WR  
**Percent Solids:** 96%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.95	1	A
Aroclor 1221	ND		ug/kg	33.2	3.33	1	A
Aroclor 1232	ND		ug/kg	33.2	7.04	1	A
Aroclor 1242	ND		ug/kg	33.2	4.48	1	A
Aroclor 1248	ND		ug/kg	33.2	4.98	1	A
Aroclor 1254	ND		ug/kg	33.2	3.64	1	A
Aroclor 1260	ND		ug/kg	33.2	6.14	1	A
Aroclor 1262	ND		ug/kg	33.2	4.22	1	A
Aroclor 1268	ND		ug/kg	33.2	3.44	1	A
PCBs, Total	ND		ug/kg	33.2	2.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	70		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-02  
**Client ID:** SB-7 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 10:52  
**Analyst:** WR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.8	3.10	1	A
Aroclor 1221	ND		ug/kg	34.8	3.49	1	A
Aroclor 1232	ND		ug/kg	34.8	7.39	1	A
Aroclor 1242	ND		ug/kg	34.8	4.70	1	A
Aroclor 1248	ND		ug/kg	34.8	5.23	1	A
Aroclor 1254	ND		ug/kg	34.8	3.81	1	A
Aroclor 1260	ND		ug/kg	34.8	6.44	1	A
Aroclor 1262	ND		ug/kg	34.8	4.43	1	A
Aroclor 1268	ND		ug/kg	34.8	3.61	1	A
PCBs, Total	ND		ug/kg	34.8	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	42		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:00  
**Analyst:** WR  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.12	1	A
Aroclor 1221	ND		ug/kg	35.1	3.52	1	A
Aroclor 1232	ND		ug/kg	35.1	7.44	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.27	1	A
Aroclor 1254	ND		ug/kg	35.1	3.84	1	A
Aroclor 1260	ND		ug/kg	35.1	6.49	1	A
Aroclor 1262	ND		ug/kg	35.1	4.46	1	A
Aroclor 1268	ND		ug/kg	35.1	3.64	1	A
PCBs, Total	ND		ug/kg	35.1	3.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	69		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:08  
**Analyst:** WR  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.11	1	A
Aroclor 1221	ND		ug/kg	35.1	3.51	1	A
Aroclor 1232	ND		ug/kg	35.1	7.43	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	ND		ug/kg	35.1	3.84	1	A
Aroclor 1260	ND		ug/kg	35.1	6.48	1	A
Aroclor 1262	ND		ug/kg	35.1	4.45	1	A
Aroclor 1268	ND		ug/kg	35.1	3.63	1	A
PCBs, Total	ND		ug/kg	35.1	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	61		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:15  
**Analyst:** WR  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.5	3.15	1	A
Aroclor 1221	ND		ug/kg	35.5	3.55	1	A
Aroclor 1232	ND		ug/kg	35.5	7.52	1	A
Aroclor 1242	ND		ug/kg	35.5	4.78	1	A
Aroclor 1248	ND		ug/kg	35.5	5.32	1	A
Aroclor 1254	ND		ug/kg	35.5	3.88	1	A
Aroclor 1260	ND		ug/kg	35.5	6.56	1	A
Aroclor 1262	ND		ug/kg	35.5	4.50	1	A
Aroclor 1268	ND		ug/kg	35.5	3.68	1	A
PCBs, Total	ND		ug/kg	35.5	3.15	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	72		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/10/22 09:35  
**Analyst:** ER  
**Percent Solids:** 39%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 20:07  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/10/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	80.2	7.12	1	A
Aroclor 1221	ND		ug/kg	80.2	8.04	1	A
Aroclor 1232	ND		ug/kg	80.2	17.0	1	A
Aroclor 1242	ND		ug/kg	80.2	10.8	1	A
Aroclor 1248	ND		ug/kg	80.2	12.0	1	A
Aroclor 1254	328		ug/kg	80.2	8.78	1	B
Aroclor 1260	349		ug/kg	80.2	14.8	1	A
Aroclor 1262	ND		ug/kg	80.2	10.2	1	A
Aroclor 1268	ND		ug/kg	80.2	8.31	1	A
PCBs, Total	677		ug/kg	80.2	7.12	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	58		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:31  
**Analyst:** WR  
**Percent Solids:** 84%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.0	3.38	1	A
Aroclor 1221	ND		ug/kg	38.0	3.81	1	A
Aroclor 1232	ND		ug/kg	38.0	8.06	1	A
Aroclor 1242	ND		ug/kg	38.0	5.12	1	A
Aroclor 1248	ND		ug/kg	38.0	5.70	1	A
Aroclor 1254	ND		ug/kg	38.0	4.16	1	A
Aroclor 1260	ND		ug/kg	38.0	7.02	1	A
Aroclor 1262	ND		ug/kg	38.0	4.83	1	A
Aroclor 1268	ND		ug/kg	38.0	3.94	1	A
PCBs, Total	ND		ug/kg	38.0	3.38	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	A
Decachlorobiphenyl	31		30-150	A
2,4,5,6-Tetrachloro-m-xylene	39		30-150	B
Decachlorobiphenyl	31		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:39  
**Analyst:** WR  
**Percent Solids:** 100%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	31.8	2.82	1	A
Aroclor 1221	ND		ug/kg	31.8	3.18	1	A
Aroclor 1232	ND		ug/kg	31.8	6.74	1	A
Aroclor 1242	ND		ug/kg	31.8	4.28	1	A
Aroclor 1248	ND		ug/kg	31.8	4.76	1	A
Aroclor 1254	ND		ug/kg	31.8	3.48	1	A
Aroclor 1260	ND		ug/kg	31.8	5.87	1	A
Aroclor 1262	ND		ug/kg	31.8	4.04	1	A
Aroclor 1268	ND		ug/kg	31.8	3.29	1	A
PCBs, Total	ND		ug/kg	31.8	2.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	75		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/19/22 07:30  
**Analyst:** JM  
**Percent Solids:** 86%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/18/22 13:13  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/18/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/19/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	3.28	1	A
Aroclor 1221	ND		ug/kg	36.9	3.70	1	A
Aroclor 1232	ND		ug/kg	36.9	7.83	1	A
Aroclor 1242	ND		ug/kg	36.9	4.98	1	A
Aroclor 1248	ND		ug/kg	36.9	5.54	1	A
Aroclor 1254	ND		ug/kg	36.9	4.04	1	A
Aroclor 1260	ND		ug/kg	36.9	6.83	1	A
Aroclor 1262	ND		ug/kg	36.9	4.69	1	A
Aroclor 1268	ND		ug/kg	36.9	3.83	1	A
PCBs, Total	ND		ug/kg	36.9	3.28	1	A

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	66		30-150	B
Decachlorobiphenyl	64		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:55  
**Analyst:** WR  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.1	3.21	1	A
Aroclor 1221	ND		ug/kg	36.1	3.62	1	A
Aroclor 1232	ND		ug/kg	36.1	7.66	1	A
Aroclor 1242	ND		ug/kg	36.1	4.87	1	A
Aroclor 1248	ND		ug/kg	36.1	5.42	1	A
Aroclor 1254	ND		ug/kg	36.1	3.95	1	A
Aroclor 1260	ND		ug/kg	36.1	6.67	1	A
Aroclor 1262	ND		ug/kg	36.1	4.59	1	A
Aroclor 1268	ND		ug/kg	36.1	3.74	1	A
PCBs, Total	ND		ug/kg	36.1	3.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	59		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:03  
**Analyst:** WR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.12	1	A
Aroclor 1221	ND		ug/kg	35.1	3.52	1	A
Aroclor 1232	ND		ug/kg	35.1	7.44	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	ND		ug/kg	35.1	3.84	1	A
Aroclor 1260	ND		ug/kg	35.1	6.49	1	A
Aroclor 1262	ND		ug/kg	35.1	4.46	1	A
Aroclor 1268	ND		ug/kg	35.1	3.64	1	A
PCBs, Total	ND		ug/kg	35.1	3.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	70		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:11  
**Analyst:** WR  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.8	3.09	1	A
Aroclor 1221	ND		ug/kg	34.8	3.49	1	A
Aroclor 1232	ND		ug/kg	34.8	7.38	1	A
Aroclor 1242	ND		ug/kg	34.8	4.69	1	A
Aroclor 1248	ND		ug/kg	34.8	5.22	1	A
Aroclor 1254	ND		ug/kg	34.8	3.81	1	A
Aroclor 1260	ND		ug/kg	34.8	6.43	1	A
Aroclor 1262	ND		ug/kg	34.8	4.42	1	A
Aroclor 1268	ND		ug/kg	34.8	3.61	1	A
PCBs, Total	ND		ug/kg	34.8	3.09	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	63		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:19  
**Analyst:** WR  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.9	3.45	1	A
Aroclor 1221	ND		ug/kg	38.9	3.90	1	A
Aroclor 1232	ND		ug/kg	38.9	8.25	1	A
Aroclor 1242	ND		ug/kg	38.9	5.24	1	A
Aroclor 1248	ND		ug/kg	38.9	5.83	1	A
Aroclor 1254	ND		ug/kg	38.9	4.26	1	A
Aroclor 1260	ND		ug/kg	38.9	7.19	1	A
Aroclor 1262	ND		ug/kg	38.9	4.94	1	A
Aroclor 1268	ND		ug/kg	38.9	4.03	1	A
PCBs, Total	ND		ug/kg	38.9	3.45	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	53		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:27  
**Analyst:** WR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.6	2.98	1	A
Aroclor 1221	ND		ug/kg	33.6	3.36	1	A
Aroclor 1232	ND		ug/kg	33.6	7.12	1	A
Aroclor 1242	ND		ug/kg	33.6	4.52	1	A
Aroclor 1248	ND		ug/kg	33.6	5.04	1	A
Aroclor 1254	ND		ug/kg	33.6	3.67	1	A
Aroclor 1260	ND		ug/kg	33.6	6.20	1	A
Aroclor 1262	ND		ug/kg	33.6	4.26	1	A
Aroclor 1268	ND		ug/kg	33.6	3.48	1	A
PCBs, Total	ND		ug/kg	33.6	2.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	73		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-16  
**Client ID:** SB-18 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 20:04  
**Analyst:** ER  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 03:25  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/08/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.0	3.20	1	A
Aroclor 1221	ND		ug/kg	36.0	3.60	1	A
Aroclor 1232	ND		ug/kg	36.0	7.63	1	A
Aroclor 1242	ND		ug/kg	36.0	4.85	1	A
Aroclor 1248	ND		ug/kg	36.0	5.40	1	A
Aroclor 1254	ND		ug/kg	36.0	3.94	1	A
Aroclor 1260	10.2	J	ug/kg	36.0	6.65	1	B
Aroclor 1262	ND		ug/kg	36.0	4.57	1	A
Aroclor 1268	ND		ug/kg	36.0	3.73	1	A
PCBs, Total	10.2	J	ug/kg	36.0	3.20	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	65		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:35  
**Analyst:** WR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.59	1	A
Aroclor 1232	ND		ug/kg	35.8	7.60	1	A
Aroclor 1242	ND		ug/kg	35.8	4.83	1	A
Aroclor 1248	ND		ug/kg	35.8	5.38	1	A
Aroclor 1254	ND		ug/kg	35.8	3.92	1	A
Aroclor 1260	ND		ug/kg	35.8	6.62	1	A
Aroclor 1262	ND		ug/kg	35.8	4.55	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	56		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:42  
**Analyst:** WR  
**Percent Solids:** 99%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	32.4	2.88	1	A
Aroclor 1221	ND		ug/kg	32.4	3.25	1	A
Aroclor 1232	ND		ug/kg	32.4	6.87	1	A
Aroclor 1242	ND		ug/kg	32.4	4.37	1	A
Aroclor 1248	ND		ug/kg	32.4	4.86	1	A
Aroclor 1254	ND		ug/kg	32.4	3.54	1	A
Aroclor 1260	ND		ug/kg	32.4	5.99	1	A
Aroclor 1262	ND		ug/kg	32.4	4.11	1	A
Aroclor 1268	ND		ug/kg	32.4	3.36	1	A
PCBs, Total	ND		ug/kg	32.4	2.88	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	79		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:50  
**Analyst:** WR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.58	1	A
Aroclor 1232	ND		ug/kg	35.8	7.58	1	A
Aroclor 1242	ND		ug/kg	35.8	4.82	1	A
Aroclor 1248	ND		ug/kg	35.8	5.37	1	A
Aroclor 1254	ND		ug/kg	35.8	3.91	1	A
Aroclor 1260	17.2	J	ug/kg	35.8	6.61	1	A
Aroclor 1262	ND		ug/kg	35.8	4.54	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	17.2	J	ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	58		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-20  
**Client ID:** SB-1 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:35  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 13:06  
**Analyst:** WR  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.6	3.25	1	A
Aroclor 1221	ND		ug/kg	36.6	3.66	1	A
Aroclor 1232	ND		ug/kg	36.6	7.75	1	A
Aroclor 1242	ND		ug/kg	36.6	4.93	1	A
Aroclor 1248	ND		ug/kg	36.6	5.49	1	A
Aroclor 1254	ND		ug/kg	36.6	4.00	1	A
Aroclor 1260	38.2		ug/kg	36.6	6.76	1	A
Aroclor 1262	ND		ug/kg	36.6	4.64	1	A
Aroclor 1268	ND		ug/kg	36.6	3.79	1	A
PCBs, Total	38.2		ug/kg	36.6	3.25	1	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	80		30-150	B
Decachlorobiphenyl	78		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 13:14  
**Analyst:** WR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	3.33	1	A
Aroclor 1221	ND		ug/kg	37.5	3.76	1	A
Aroclor 1232	ND		ug/kg	37.5	7.95	1	A
Aroclor 1242	ND		ug/kg	37.5	5.05	1	A
Aroclor 1248	ND		ug/kg	37.5	5.62	1	A
Aroclor 1254	ND		ug/kg	37.5	4.10	1	A
Aroclor 1260	ND		ug/kg	37.5	6.93	1	A
Aroclor 1262	ND		ug/kg	37.5	4.76	1	A
Aroclor 1268	ND		ug/kg	37.5	3.88	1	A
PCBs, Total	ND		ug/kg	37.5	3.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	68		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/17/22 15:10  
**Analyst:** WR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/17/22 04:21  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/17/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/17/22

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	87		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	78		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/16/22 19:47  
**Analyst:** WR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/15/22 15:35  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/16/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/16/22

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	86		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	85		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 13:22  
**Analyst:** WR  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 03:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/07/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.6	2.98	1	A
Aroclor 1221	ND		ug/kg	33.6	3.37	1	A
Aroclor 1232	ND		ug/kg	33.6	7.12	1	A
Aroclor 1242	ND		ug/kg	33.6	4.53	1	A
Aroclor 1248	ND		ug/kg	33.6	5.04	1	A
Aroclor 1254	ND		ug/kg	33.6	3.68	1	A
Aroclor 1260	ND		ug/kg	33.6	6.21	1	A
Aroclor 1262	ND		ug/kg	33.6	4.27	1	A
Aroclor 1268	ND		ug/kg	33.6	3.48	1	A
PCBs, Total	ND		ug/kg	33.6	2.98	1	A

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	67		30-150	B
Decachlorobiphenyl	65		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 20:36  
**Analyst:** ER  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 03:25  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/08/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.1	3.03	1	A
Aroclor 1221	ND		ug/kg	34.1	3.42	1	A
Aroclor 1232	ND		ug/kg	34.1	7.22	1	A
Aroclor 1242	ND		ug/kg	34.1	4.59	1	A
Aroclor 1248	ND		ug/kg	34.1	5.11	1	A
Aroclor 1254	ND		ug/kg	34.1	3.73	1	A
Aroclor 1260	11.2	J	ug/kg	34.1	6.30	1	A
Aroclor 1262	ND		ug/kg	34.1	4.33	1	A
Aroclor 1268	ND		ug/kg	34.1	3.53	1	A
PCBs, Total	11.2	J	ug/kg	34.1	3.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	64		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/11/22 16:34  
**Analyst:** ER  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/10/22 12:26  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/10/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/11/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.68	1	A
Aroclor 1232	ND		ug/kg	36.7	7.78	1	A
Aroclor 1242	ND		ug/kg	36.7	4.95	1	A
Aroclor 1248	ND		ug/kg	36.7	5.51	1	A
Aroclor 1254	ND		ug/kg	36.7	4.02	1	A
Aroclor 1260	ND		ug/kg	36.7	6.79	1	A
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	ND		ug/kg	36.7	3.80	1	A
PCBs, Total	ND		ug/kg	36.7	3.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	52		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 05/09/22 10:20  
 Analyst: WR

Extraction Method: EPA 3546  
 Extraction Date: 05/07/22 03:18  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/07/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05,07-08,10-14,17-21,25 Batch: WG1635633-1						
Aroclor 1016	ND		ug/kg	32.2	2.86	A
Aroclor 1221	ND		ug/kg	32.2	3.23	A
Aroclor 1232	ND		ug/kg	32.2	6.84	A
Aroclor 1242	ND		ug/kg	32.2	4.35	A
Aroclor 1248	ND		ug/kg	32.2	4.84	A
Aroclor 1254	ND		ug/kg	32.2	3.53	A
Aroclor 1260	ND		ug/kg	32.2	5.96	A
Aroclor 1262	ND		ug/kg	32.2	4.10	A
Aroclor 1268	ND		ug/kg	32.2	3.34	A
PCBs, Total	ND		ug/kg	32.2	2.86	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	85		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 05/09/22 21:24  
 Analyst: ER

Extraction Method: EPA 3546  
 Extraction Date: 05/08/22 00:18  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/08/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 16,26 Batch: WG1635783-1						
Aroclor 1016	ND		ug/kg	32.1	2.85	A
Aroclor 1221	ND		ug/kg	32.1	3.22	A
Aroclor 1232	ND		ug/kg	32.1	6.81	A
Aroclor 1242	ND		ug/kg	32.1	4.33	A
Aroclor 1248	ND		ug/kg	32.1	4.82	A
Aroclor 1254	ND		ug/kg	32.1	3.51	A
Aroclor 1262	ND		ug/kg	32.1	4.08	A
Aroclor 1268	ND		ug/kg	32.1	3.33	A
Aroclor 1260	14.4	J	ug/kg	32.1	5.93	B
PCBs, Total	14.4	J	ug/kg	32.1	2.85	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	71		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8082A  
**Analytical Date:** 05/10/22 00:58  
**Analyst:** JM

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 10:45  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/09/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 06 Batch: WG1636093-1						
Aroclor 1016	ND		ug/kg	32.0	2.84	A
Aroclor 1221	ND		ug/kg	32.0	3.21	A
Aroclor 1232	ND		ug/kg	32.0	6.79	A
Aroclor 1242	ND		ug/kg	32.0	4.31	A
Aroclor 1248	ND		ug/kg	32.0	4.80	A
Aroclor 1254	ND		ug/kg	32.0	3.50	A
Aroclor 1262	ND		ug/kg	32.0	4.06	A
Aroclor 1268	ND		ug/kg	32.0	3.32	A
Aroclor 1260	14.6	J	ug/kg	32.0	5.92	B
PCBs, Total	14.6	J	ug/kg	32.0	2.84	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	74		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8082A  
**Analytical Date:** 05/11/22 15:44  
**Analyst:** AD

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/10/22 12:26  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/10/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/11/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 27 Batch: WG1636668-1						
Aroclor 1016	ND		ug/kg	31.5	2.80	A
Aroclor 1221	ND		ug/kg	31.5	3.16	A
Aroclor 1232	ND		ug/kg	31.5	6.69	A
Aroclor 1242	ND		ug/kg	31.5	4.25	A
Aroclor 1248	ND		ug/kg	31.5	4.73	A
Aroclor 1254	ND		ug/kg	31.5	3.45	A
Aroclor 1260	ND		ug/kg	31.5	5.83	A
Aroclor 1262	ND		ug/kg	31.5	4.01	A
Aroclor 1268	ND		ug/kg	31.5	3.27	A
PCBs, Total	ND		ug/kg	31.5	2.80	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	55		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 05/16/22 19:22  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 05/15/22 15:35  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/16/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/16/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 23 Batch: WG1638651-1						
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	81		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	82		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8082A  
**Analytical Date:** 05/17/22 14:45  
**Analyst:** WR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/17/22 04:21  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/17/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/17/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 22 Batch: WG1639157-1						
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	52		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	75		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8082A  
**Analytical Date:** 05/18/22 14:26  
**Analyst:** WR

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/17/22 19:45  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/18/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/18/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 09 Batch: WG1639652-1						
Aroclor 1016	ND		ug/kg	32.2	2.86	A
Aroclor 1221	ND		ug/kg	32.2	3.23	A
Aroclor 1232	ND		ug/kg	32.2	6.83	A
Aroclor 1242	ND		ug/kg	32.2	4.34	A
Aroclor 1248	ND		ug/kg	32.2	4.83	A
Aroclor 1254	ND		ug/kg	32.2	3.52	A
Aroclor 1260	ND		ug/kg	32.2	5.95	A
Aroclor 1262	ND		ug/kg	32.2	4.09	A
Aroclor 1268	ND		ug/kg	32.2	3.34	A
PCBs, Total	ND		ug/kg	32.2	2.86	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	50		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05,07-08,10-14,17-21,25 Batch: WG1635633-2 WG1635633-3									
Aroclor 1016	87		89		40-140	2		50	A
Aroclor 1260	88		90		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		89		30-150	A
Decachlorobiphenyl	90		91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		88		30-150	B
Decachlorobiphenyl	84		85		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 16,26 Batch: WG1635783-2 WG1635783-3									
Aroclor 1016	80		78		40-140	3		50	A
Aroclor 1260	79		81		40-140	3		50	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	78		76		30-150	A
Decachlorobiphenyl	76		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		75		30-150	B
Decachlorobiphenyl	71		69		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 06 Batch: WG1636093-2 WG1636093-3									
Aroclor 1016	71		72		40-140	1		50	A
Aroclor 1260	83		87		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		65		30-150	A
Decachlorobiphenyl	71		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		66		30-150	B
Decachlorobiphenyl	71		71		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 27 Batch: WG1636668-2 WG1636668-3									
Aroclor 1016	61		73		40-140	18		50	A
Aroclor 1260	55		63		40-140	14		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		72		30-150	A
Decachlorobiphenyl	55		62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		61		30-150	B
Decachlorobiphenyl	50		56		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 23 Batch: WG1638651-2 WG1638651-3									
Aroclor 1016	82		82		40-140	0		50	A
Aroclor 1260	78		80		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		93		30-150	A
Decachlorobiphenyl	87		92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		87		30-150	B
Decachlorobiphenyl	94		99		30-150	B



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 22 Batch: WG1639157-2 WG1639157-3									
Aroclor 1016	75		85		40-140	13		50	A
Aroclor 1260	76		80		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		92		30-150	A
Decachlorobiphenyl	81		91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		82		30-150	B
Decachlorobiphenyl	83		90		30-150	B

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 09 Batch: WG1639652-2 WG1639652-3									
Aroclor 1016	68		71		40-140	4		50	A
Aroclor 1260	50		54		40-140	8		50	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	A
Decachlorobiphenyl	48		53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		75		30-150	B
Decachlorobiphenyl	52		56		30-150	B

**Matrix Spike Analysis***Batch Quality Control***Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 16,26 QC Batch ID: WG1635783-6 WG1635783-7 QC Sample: L2223093-26 Client ID: SB-4 (0-2)													
Aroclor 1016	ND	213	155	73		161	76		40-140	4		50	A
Aroclor 1260	11.2J	213	156	73		158	74		40-140	1		50	A

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance</b>		<b>Column</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Criteria</b>		
2,4,5,6-Tetrachloro-m-xylene	75		78		30-150		A
Decachlorobiphenyl	76		78		30-150		A
2,4,5,6-Tetrachloro-m-xylene	75		77		30-150		B
Decachlorobiphenyl	70		72		30-150		B

**Matrix Spike Analysis***Batch Quality Control***Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 27 QC Batch ID: WG1636668-4 WG1636668-5 QC Sample: L2223093-27 Client ID: SB-5 (0-2)													
Aroclor 1016	ND	230	112	49		127	55		40-140	13		50	A
Aroclor 1260	ND	230	101	44		106	46		40-140	5		50	A

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	51		51		30-150	A
Decachlorobiphenyl	49		54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		45		30-150	B
Decachlorobiphenyl	48		50		30-150	B

# PESTICIDES

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-01  
**Client ID:** SB-7 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 14:03  
**Analyst:** AR  
**Percent Solids:** 96%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	0.323	1	A
Lindane	ND		ug/kg	0.688	0.307	1	A
Alpha-BHC	ND		ug/kg	0.688	0.195	1	A
Beta-BHC	ND		ug/kg	1.65	0.626	1	A
Heptachlor	ND		ug/kg	0.825	0.370	1	A
Aldrin	ND		ug/kg	1.65	0.581	1	A
Endrin	ND		ug/kg	0.688	0.282	1	A
Dieldrin	ND		ug/kg	1.03	0.516	1	A
4,4'-DDE	ND		ug/kg	1.65	0.382	1	A
4,4'-DDD	ND		ug/kg	1.65	0.589	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.65	0.390	1	A
Endosulfan II	ND		ug/kg	1.65	0.552	1	A
Endosulfan sulfate	ND		ug/kg	0.688	0.327	1	A
cis-Chlordane	ND		ug/kg	2.06	0.575	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	93		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-02  
**Client ID:** SB-7 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 08:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 15:03  
**Analyst:** AR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.328	1	A
Lindane	ND		ug/kg	0.698	0.312	1	A
Alpha-BHC	ND		ug/kg	0.698	0.198	1	A
Beta-BHC	ND		ug/kg	1.68	0.635	1	A
Heptachlor	ND		ug/kg	0.838	0.376	1	A
Aldrin	ND		ug/kg	1.68	0.590	1	A
Endrin	ND		ug/kg	0.698	0.286	1	A
Dieldrin	ND		ug/kg	1.05	0.524	1	A
4,4'-DDE	ND		ug/kg	1.68	0.387	1	A
4,4'-DDD	ND		ug/kg	1.68	0.598	1	A
4,4'-DDT	ND		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.396	1	A
Endosulfan II	ND		ug/kg	1.68	0.560	1	A
Endosulfan sulfate	ND		ug/kg	0.698	0.332	1	A
cis-Chlordane	ND		ug/kg	2.09	0.584	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	69		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-03  
**Client ID:** SB-6 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 15:13  
**Analyst:** AR  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

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	0.628	1	A
Heptachlor	ND		ug/kg	0.829	0.372	1	A
Aldrin	ND		ug/kg	1.66	0.584	1	A
Endrin	ND		ug/kg	0.691	0.283	1	A
Dieldrin	ND		ug/kg	1.04	0.518	1	A
4,4'-DDE	ND		ug/kg	1.66	0.383	1	A
4,4'-DDD	ND		ug/kg	1.66	0.591	1	A
4,4'-DDT	ND		ug/kg	3.11	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
cis-Chlordane	0.597	JIP	ug/kg	2.07	0.577	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	59		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 14:14  
**Analyst:** AR  
**Percent Solids:** 91%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.337	1	A
Lindane	ND		ug/kg	0.717	0.321	1	A
Alpha-BHC	ND		ug/kg	0.717	0.204	1	A
Beta-BHC	ND		ug/kg	1.72	0.653	1	A
Heptachlor	ND		ug/kg	0.861	0.386	1	A
Aldrin	ND		ug/kg	1.72	0.606	1	A
Endrin	ND		ug/kg	0.717	0.294	1	A
Dieldrin	ND		ug/kg	1.08	0.538	1	A
4,4'-DDE	ND		ug/kg	1.72	0.398	1	A
4,4'-DDD	ND		ug/kg	1.72	0.614	1	A
4,4'-DDT	ND		ug/kg	3.23	1.38	1	A
Endosulfan I	ND		ug/kg	1.72	0.407	1	A
Endosulfan II	ND		ug/kg	1.72	0.575	1	A
Endosulfan sulfate	ND		ug/kg	0.717	0.342	1	A
cis-Chlordane	ND	IP	ug/kg	2.15	0.600	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	88		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-05  
**Client ID:** SB-9 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 15:23  
**Analyst:** AR  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

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
Endrin	ND		ug/kg	0.716	0.293	1	A
Dieldrin	ND		ug/kg	1.07	0.537	1	A
4,4'-DDE	1.63	J	ug/kg	1.72	0.397	1	B
4,4'-DDD	ND		ug/kg	1.72	0.612	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	A
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
cis-Chlordane	ND		ug/kg	2.15	0.598	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	73		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-06      D  
**Client ID:** SB-8B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/11/22 14:42  
**Analyst:** AR  
**Percent Solids:** 39%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	78.0	15.3	20	A
Lindane	ND		ug/kg	32.5	14.5	20	A
Alpha-BHC	ND		ug/kg	32.5	9.24	20	A
Beta-BHC	ND		ug/kg	78.0	29.6	20	A
Heptachlor	ND		ug/kg	39.0	17.5	20	A
Aldrin	ND		ug/kg	78.0	27.5	20	A
Endrin	ND		ug/kg	32.5	13.3	20	A
Dieldrin	ND		ug/kg	48.8	24.4	20	A
4,4'-DDE	ND		ug/kg	78.0	18.0	20	A
4,4'-DDD	ND		ug/kg	78.0	27.8	20	A
4,4'-DDT	ND		ug/kg	146	62.8	20	A
Endosulfan I	ND		ug/kg	78.0	18.4	20	A
Endosulfan II	ND		ug/kg	78.0	26.1	20	A
Endosulfan sulfate	ND		ug/kg	32.5	15.5	20	A
cis-Chlordane	ND		ug/kg	97.6	27.2	20	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-07  
**Client ID:** SB-12 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 15:44  
**Analyst:** AR  
**Percent Solids:** 84%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.89	0.371	1	A
Lindane	ND		ug/kg	0.789	0.353	1	A
Alpha-BHC	ND		ug/kg	0.789	0.224	1	A
Beta-BHC	ND		ug/kg	1.89	0.718	1	A
Heptachlor	ND		ug/kg	0.947	0.424	1	A
Aldrin	ND		ug/kg	1.89	0.667	1	A
Endrin	ND		ug/kg	0.789	0.324	1	A
Dieldrin	ND		ug/kg	1.18	0.592	1	A
4,4'-DDE	46.2		ug/kg	1.89	0.438	1	B
4,4'-DDD	ND		ug/kg	1.89	0.675	1	A
4,4'-DDT	5.89		ug/kg	3.55	1.52	1	A
Endosulfan I	ND		ug/kg	1.89	0.447	1	A
Endosulfan II	ND		ug/kg	1.89	0.633	1	A
Endosulfan sulfate	ND		ug/kg	0.789	0.376	1	A
cis-Chlordane	0.967	J	ug/kg	2.37	0.660	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	61		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-08  
**Client ID:** SB-10A (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 10:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 15:54  
**Analyst:** AR  
**Percent Solids:** 100%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.56	0.305	1	A
Lindane	ND		ug/kg	0.648	0.290	1	A
Alpha-BHC	ND		ug/kg	0.648	0.184	1	A
Beta-BHC	ND		ug/kg	1.56	0.590	1	A
Heptachlor	ND		ug/kg	0.778	0.349	1	A
Aldrin	ND		ug/kg	1.56	0.548	1	A
Endrin	ND		ug/kg	0.648	0.266	1	A
Dieldrin	ND		ug/kg	0.973	0.486	1	A
4,4'-DDE	ND		ug/kg	1.56	0.360	1	A
4,4'-DDD	ND		ug/kg	1.56	0.555	1	A
4,4'-DDT	ND		ug/kg	2.92	1.25	1	A
Endosulfan I	ND		ug/kg	1.56	0.368	1	A
Endosulfan II	ND		ug/kg	1.56	0.520	1	A
Endosulfan sulfate	ND		ug/kg	0.648	0.309	1	A
cis-Chlordane	ND		ug/kg	1.94	0.542	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	49		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:05  
**Analyst:** AR  
**Percent Solids:** 86%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.76	0.345	1	A
Lindane	ND		ug/kg	0.733	0.328	1	A
Alpha-BHC	ND		ug/kg	0.733	0.208	1	A
Beta-BHC	ND		ug/kg	1.76	0.667	1	A
Heptachlor	ND		ug/kg	0.880	0.394	1	A
Aldrin	ND		ug/kg	1.76	0.620	1	A
Endrin	ND		ug/kg	0.733	0.301	1	A
Dieldrin	ND		ug/kg	1.10	0.550	1	A
4,4'-DDE	ND		ug/kg	1.76	0.407	1	A
4,4'-DDD	ND		ug/kg	1.76	0.628	1	A
4,4'-DDT	1.57	J	ug/kg	3.30	1.42	1	A
Endosulfan I	ND		ug/kg	1.76	0.416	1	A
Endosulfan II	ND		ug/kg	1.76	0.588	1	A
Endosulfan sulfate	ND		ug/kg	0.733	0.349	1	A
cis-Chlordane	0.934	J	ug/kg	2.20	0.613	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	74		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-10  
**Client ID:** SB-16 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:15  
**Analyst:** AR  
**Percent Solids:** 92%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.338	1	A
Lindane	ND		ug/kg	0.720	0.322	1	A
Alpha-BHC	ND		ug/kg	0.720	0.204	1	A
Beta-BHC	ND		ug/kg	1.73	0.655	1	A
Heptachlor	ND		ug/kg	0.864	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Endrin	ND		ug/kg	0.720	0.295	1	A
Dieldrin	ND		ug/kg	1.08	0.540	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.616	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.408	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.720	0.343	1	A
cis-Chlordane	ND		ug/kg	2.16	0.602	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	71		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-11  
**Client ID:** SB-17 (2-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:25  
**Analyst:** AR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.67	0.327	1	A
Lindane	ND		ug/kg	0.696	0.311	1	A
Alpha-BHC	ND		ug/kg	0.696	0.198	1	A
Beta-BHC	ND		ug/kg	1.67	0.633	1	A
Heptachlor	ND		ug/kg	0.835	0.374	1	A
Aldrin	ND		ug/kg	1.67	0.588	1	A
Endrin	ND		ug/kg	0.696	0.285	1	A
Dieldrin	ND		ug/kg	1.04	0.522	1	A
4,4'-DDE	ND		ug/kg	1.67	0.386	1	A
4,4'-DDD	ND		ug/kg	1.67	0.596	1	A
4,4'-DDT	ND		ug/kg	3.13	1.34	1	A
Endosulfan I	ND		ug/kg	1.67	0.395	1	A
Endosulfan II	ND		ug/kg	1.67	0.558	1	A
Endosulfan sulfate	ND		ug/kg	0.696	0.331	1	A
cis-Chlordane	ND		ug/kg	2.09	0.582	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	60		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-12  
**Client ID:** SB-17 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:36  
**Analyst:** AR  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.335	1	A
Lindane	ND		ug/kg	0.713	0.318	1	A
Alpha-BHC	ND		ug/kg	0.713	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.648	1	A
Heptachlor	ND		ug/kg	0.855	0.383	1	A
Aldrin	ND		ug/kg	1.71	0.602	1	A
Endrin	ND		ug/kg	0.713	0.292	1	A
Dieldrin	ND		ug/kg	1.07	0.534	1	A
4,4'-DDE	0.509	J	ug/kg	1.71	0.396	1	A
4,4'-DDD	ND		ug/kg	1.71	0.610	1	A
4,4'-DDT	ND		ug/kg	3.21	1.38	1	A
Endosulfan I	ND		ug/kg	1.71	0.404	1	A
Endosulfan II	ND		ug/kg	1.71	0.572	1	A
Endosulfan sulfate	ND		ug/kg	0.713	0.339	1	A
cis-Chlordane	ND		ug/kg	2.14	0.596	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	65		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-13  
**Client ID:** SB-19 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 14:25  
**Analyst:** AR  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.81	0.354	1	A
Lindane	ND		ug/kg	0.754	0.337	1	A
Alpha-BHC	ND		ug/kg	0.754	0.214	1	A
Beta-BHC	ND		ug/kg	1.81	0.686	1	A
Heptachlor	ND		ug/kg	0.905	0.406	1	A
Aldrin	ND		ug/kg	1.81	0.637	1	A
Endrin	ND		ug/kg	0.754	0.309	1	A
Dieldrin	ND		ug/kg	1.13	0.565	1	A
4,4'-DDE	ND		ug/kg	1.81	0.418	1	A
4,4'-DDD	ND		ug/kg	1.81	0.645	1	A
4,4'-DDT	ND		ug/kg	3.39	1.46	1	A
Endosulfan I	ND		ug/kg	1.81	0.427	1	A
Endosulfan II	ND		ug/kg	1.81	0.605	1	A
Endosulfan sulfate	ND		ug/kg	0.754	0.359	1	A
cis-Chlordane	ND		ug/kg	2.26	0.630	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	98		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-14  
**Client ID:** SB-19 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 12:45  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 14:36  
**Analyst:** AR  
**Percent Solids:** 95%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.67	0.328	1	A
Lindane	ND		ug/kg	0.698	0.312	1	A
Alpha-BHC	ND		ug/kg	0.698	0.198	1	A
Beta-BHC	ND		ug/kg	1.67	0.635	1	A
Heptachlor	ND		ug/kg	0.837	0.375	1	A
Aldrin	ND		ug/kg	1.67	0.590	1	A
Endrin	ND		ug/kg	0.698	0.286	1	A
Dieldrin	ND		ug/kg	1.05	0.523	1	A
4,4'-DDE	ND		ug/kg	1.67	0.387	1	A
4,4'-DDD	ND		ug/kg	1.67	0.597	1	A
4,4'-DDT	ND		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.67	0.396	1	A
Endosulfan II	ND		ug/kg	1.67	0.560	1	A
Endosulfan sulfate	ND		ug/kg	0.698	0.332	1	A
cis-Chlordane	ND		ug/kg	2.09	0.583	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	93		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-16  
**Client ID:** SB-18 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:20  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 00:29  
**Analyst:** AR  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 04:38  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/08/22

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	0.715	0.319	1	A
Alpha-BHC	ND		ug/kg	0.715	0.203	1	A
Beta-BHC	ND		ug/kg	1.72	0.650	1	A
Heptachlor	ND		ug/kg	0.858	0.384	1	A
Aldrin	ND		ug/kg	1.72	0.604	1	A
Endrin	ND		ug/kg	0.715	0.293	1	A
Dieldrin	ND		ug/kg	1.07	0.536	1	A
4,4'-DDE	ND		ug/kg	1.72	0.397	1	A
4,4'-DDD	ND		ug/kg	1.72	0.612	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	A
Endosulfan I	ND		ug/kg	1.72	0.405	1	A
Endosulfan II	ND		ug/kg	1.72	0.573	1	A
Endosulfan sulfate	ND		ug/kg	0.715	0.340	1	A
cis-Chlordane	ND		ug/kg	2.14	0.597	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	75		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-17  
**Client ID:** SB-18 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 08:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:46  
**Analyst:** AR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

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	0.730	0.326	1	A
Alpha-BHC	ND		ug/kg	0.730	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.665	1	A
Heptachlor	ND		ug/kg	0.877	0.393	1	A
Aldrin	ND		ug/kg	1.75	0.617	1	A
Endrin	ND		ug/kg	0.730	0.300	1	A
Dieldrin	ND		ug/kg	1.10	0.548	1	A
4,4'-DDE	ND		ug/kg	1.75	0.405	1	A
4,4'-DDD	ND		ug/kg	1.75	0.625	1	A
4,4'-DDT	ND		ug/kg	3.29	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.414	1	A
Endosulfan II	ND		ug/kg	1.75	0.586	1	A
Endosulfan sulfate	ND		ug/kg	0.730	0.348	1	A
cis-Chlordane	ND		ug/kg	2.19	0.611	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	62		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-18  
**Client ID:** SB-11 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 14:47  
**Analyst:** AR  
**Percent Solids:** 99%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.58	0.309	1	A
Lindane	ND		ug/kg	0.657	0.294	1	A
Alpha-BHC	ND		ug/kg	0.657	0.186	1	A
Beta-BHC	ND		ug/kg	1.58	0.598	1	A
Heptachlor	ND		ug/kg	0.788	0.353	1	A
Aldrin	ND		ug/kg	1.58	0.555	1	A
Endrin	ND		ug/kg	0.657	0.269	1	A
Dieldrin	ND		ug/kg	0.985	0.493	1	A
4,4'-DDE	ND		ug/kg	1.58	0.364	1	A
4,4'-DDD	ND		ug/kg	1.58	0.562	1	A
4,4'-DDT	ND		ug/kg	2.96	1.27	1	A
Endosulfan I	ND		ug/kg	1.58	0.372	1	A
Endosulfan II	ND		ug/kg	1.58	0.527	1	A
Endosulfan sulfate	ND		ug/kg	0.657	0.313	1	A
cis-Chlordane	ND		ug/kg	1.97	0.549	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	92		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 17:07  
**Analyst:** AR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.342	1	A
Lindane	ND		ug/kg	0.728	0.325	1	A
Alpha-BHC	ND		ug/kg	0.728	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.662	1	A
Heptachlor	ND		ug/kg	0.874	0.392	1	A
Aldrin	ND		ug/kg	1.75	0.615	1	A
Endrin	ND		ug/kg	0.728	0.298	1	A
Dieldrin	ND		ug/kg	1.09	0.546	1	A
4,4'-DDE	ND		ug/kg	1.75	0.404	1	A
4,4'-DDD	ND		ug/kg	1.75	0.623	1	A
4,4'-DDT	ND		ug/kg	3.28	1.40	1	A
Endosulfan I	ND		ug/kg	1.75	0.413	1	A
Endosulfan II	ND		ug/kg	1.75	0.584	1	A
Endosulfan sulfate	ND		ug/kg	0.728	0.346	1	A
cis-Chlordane	ND	IP	ug/kg	2.18	0.609	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	73		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-20  
**Client ID:** SB-1 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 10:35  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 17:17  
**Analyst:** AR  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.743	0.332	1	A
Alpha-BHC	ND		ug/kg	0.743	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.676	1	A
Heptachlor	ND		ug/kg	0.892	0.400	1	A
Aldrin	ND		ug/kg	1.78	0.628	1	A
Endrin	ND		ug/kg	0.743	0.305	1	A
Dieldrin	ND		ug/kg	1.11	0.557	1	A
4,4'-DDE	ND		ug/kg	1.78	0.412	1	A
4,4'-DDD	ND		ug/kg	1.78	0.636	1	A
4,4'-DDT	ND		ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.596	1	A
Endosulfan sulfate	ND		ug/kg	0.743	0.354	1	A
cis-Chlordane	ND	IP	ug/kg	2.23	0.621	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	68		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-21  
**Client ID:** SB-2 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:15  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 17:27  
**Analyst:** AR  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.743	0.332	1	A
Alpha-BHC	ND		ug/kg	0.743	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.676	1	A
Heptachlor	ND		ug/kg	0.891	0.400	1	A
Aldrin	ND		ug/kg	1.78	0.628	1	A
Endrin	ND		ug/kg	0.743	0.304	1	A
Dieldrin	ND		ug/kg	1.11	0.557	1	A
4,4'-DDE	ND		ug/kg	1.78	0.412	1	A
4,4'-DDD	ND		ug/kg	1.78	0.636	1	A
4,4'-DDT	ND		ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.596	1	A
Endosulfan sulfate	ND		ug/kg	0.743	0.354	1	A
cis-Chlordane	ND		ug/kg	2.23	0.621	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	60		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 13:09  
**Analyst:** AR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/07/22 01:56

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
Endrin	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
cis-Chlordane	ND		ug/l	0.014	0.005	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	81		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-22  
**Client ID:** FIELD BLANK-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:00  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water

**Analytical Method:** 1,8151A

**Analytical Date:** 05/07/22 10:52

**Analyst:** AKM

**Extraction Method:** EPA 8151A

**Extraction Date:** 05/05/22 06:15

**Methylation Date:** 05/05/22 17:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	83		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 13:20  
**Analyst:** AR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/07/22 01:56

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
Endrin	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
cis-Chlordane	ND		ug/l	0.014	0.005	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	59		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-23  
**Client ID:** FIELD BLANK-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 13:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water

**Extraction Method:** EPA 8151A

**Analytical Method:** 1,8151A

**Extraction Date:** 05/05/22 06:15

**Analytical Date:** 05/07/22 11:11

**Analyst:** AKM

**Methylation Date:** 05/05/22 17:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
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	82		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-25  
**Client ID:** SB-3 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:40  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 16:56  
**Analyst:** AR  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	0.324	1	A
Lindane	ND		ug/kg	0.689	0.308	1	A
Alpha-BHC	ND		ug/kg	0.689	0.196	1	A
Beta-BHC	ND		ug/kg	1.65	0.627	1	A
Heptachlor	ND		ug/kg	0.827	0.371	1	A
Aldrin	ND		ug/kg	1.65	0.582	1	A
Endrin	ND		ug/kg	0.689	0.282	1	A
Dieldrin	ND		ug/kg	1.03	0.517	1	A
4,4'-DDE	ND		ug/kg	1.65	0.382	1	A
4,4'-DDD	ND		ug/kg	1.65	0.590	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.65	0.391	1	A
Endosulfan II	ND		ug/kg	1.65	0.552	1	A
Endosulfan sulfate	ND		ug/kg	0.689	0.328	1	A
cis-Chlordane	ND		ug/kg	2.07	0.576	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	75		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 00:17  
**Analyst:** AR  
**Percent Solids:** 94%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 04:38  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.62	0.317	1	A
Lindane	ND		ug/kg	0.675	0.302	1	A
Alpha-BHC	ND		ug/kg	0.675	0.192	1	A
Beta-BHC	ND		ug/kg	1.62	0.614	1	A
Heptachlor	ND		ug/kg	0.810	0.363	1	A
Aldrin	ND		ug/kg	1.62	0.570	1	A
Endrin	ND		ug/kg	0.675	0.277	1	A
Dieldrin	ND		ug/kg	1.01	0.506	1	A
4,4'-DDE	ND		ug/kg	1.62	0.374	1	A
4,4'-DDD	ND		ug/kg	1.62	0.578	1	A
4,4'-DDT	ND		ug/kg	3.04	1.30	1	A
Endosulfan I	ND		ug/kg	1.62	0.382	1	A
Endosulfan II	ND		ug/kg	1.62	0.541	1	A
Endosulfan sulfate	ND		ug/kg	0.675	0.321	1	A
cis-Chlordane	ND		ug/kg	2.02	0.564	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	69		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-27  
**Client ID:** SB-5 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:30  
**Date Received:** 05/03/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/17/22 10:46  
**Analyst:** EJJ  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/16/22 16:13  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/17/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.338	1	A
Lindane	ND		ug/kg	0.718	0.321	1	A
Alpha-BHC	ND		ug/kg	0.718	0.204	1	A
Beta-BHC	ND		ug/kg	1.72	0.654	1	A
Heptachlor	ND		ug/kg	0.862	0.386	1	A
Aldrin	ND		ug/kg	1.72	0.607	1	A
Endrin	ND		ug/kg	0.718	0.295	1	A
Dieldrin	ND		ug/kg	1.08	0.539	1	A
4,4'-DDE	ND		ug/kg	1.72	0.399	1	A
4,4'-DDD	ND		ug/kg	1.72	0.615	1	A
4,4'-DDT	ND		ug/kg	3.23	1.39	1	A
Endosulfan I	ND		ug/kg	1.72	0.407	1	A
Endosulfan II	ND		ug/kg	1.72	0.576	1	A
Endosulfan sulfate	ND		ug/kg	0.718	0.342	1	A
cis-Chlordane	ND		ug/kg	2.16	0.601	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	116		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8151A  
 Analytical Date: 05/06/22 15:36  
 Analyst: AKM

Extraction Method: EPA 8151A  
 Extraction Date: 05/05/22 06:15

Methylation Date: 05/05/22 17:41

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 22-23 Batch: WG1634671-1						
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	79		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 12:54  
**Analyst:** AKM

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/06/22 07:59

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 22-23 Batch: WG1635259-1						
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
Endrin	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
cis-Chlordane	ND		ug/l	0.014	0.005	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	52		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 13:31  
**Analyst:** AR

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/07/22 01:33  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/07/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-14,17-21,25 Batch: WG1635623-1						
Delta-BHC	ND		ug/kg	1.57	0.308	A
Lindane	ND		ug/kg	0.655	0.293	A
Alpha-BHC	ND		ug/kg	0.655	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.596	A
Heptachlor	ND		ug/kg	0.786	0.352	A
Aldrin	ND		ug/kg	1.57	0.553	A
Endrin	ND		ug/kg	0.655	0.268	A
Dieldrin	ND		ug/kg	0.982	0.491	A
4,4'-DDE	ND		ug/kg	1.57	0.363	A
4,4'-DDD	ND		ug/kg	1.57	0.560	A
4,4'-DDT	ND		ug/kg	2.95	1.26	A
Endosulfan I	ND		ug/kg	1.57	0.371	A
Endosulfan II	ND		ug/kg	1.57	0.525	A
Endosulfan sulfate	ND		ug/kg	0.655	0.312	A
cis-Chlordane	ND		ug/kg	1.96	0.547	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	85		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/09/22 22:36  
**Analyst:** AR

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 04:38  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 16,26 Batch: WG1635789-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.632	0.283	A
Alpha-BHC	ND		ug/kg	0.632	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.534	A
Endrin	ND		ug/kg	0.632	0.259	A
Dieldrin	ND		ug/kg	0.949	0.474	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.541	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.507	A
Endosulfan sulfate	ND		ug/kg	0.632	0.301	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	78		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/17/22 10:13  
**Analyst:** EJJ

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/16/22 16:13  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/17/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 27 Batch: WG1639033-1						
Delta-BHC	ND		ug/kg	1.57	0.308	A
Lindane	ND		ug/kg	0.654	0.292	A
Alpha-BHC	ND		ug/kg	0.654	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.596	A
Heptachlor	ND		ug/kg	0.785	0.352	A
Aldrin	ND		ug/kg	1.57	0.553	A
Endrin	ND		ug/kg	0.654	0.268	A
Dieldrin	ND		ug/kg	0.982	0.491	A
4,4'-DDE	ND		ug/kg	1.57	0.363	A
4,4'-DDD	ND		ug/kg	1.57	0.560	A
4,4'-DDT	ND		ug/kg	2.94	1.26	A
Endosulfan I	ND		ug/kg	1.57	0.371	A
Endosulfan II	ND		ug/kg	1.57	0.525	A
Endosulfan sulfate	ND		ug/kg	0.654	0.312	A
cis-Chlordane	ND		ug/kg	1.96	0.547	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	105		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	135		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 22-23 Batch: WG1634671-2 WG1634671-3									
2,4,5-TP (Silvex)	92		91		30-150	1		25	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
DCAA	96		104		30-150	A
DCAA	95		96		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 22-23 Batch: WG1635259-2 WG1635259-3									
Delta-BHC	50		61		30-150	18		20	A
Lindane	53		68		30-150	25	Q	20	A
Alpha-BHC	55		69		30-150	24	Q	20	A
Beta-BHC	53		75		30-150	35	Q	20	A
Heptachlor	54		68		30-150	23	Q	20	A
Aldrin	53		67		30-150	22	Q	20	A
Endrin	54		69		30-150	25	Q	20	A
Dieldrin	55		71		30-150	25	Q	20	A
4,4'-DDE	52		68		30-150	26	Q	20	A
4,4'-DDD	57		73		30-150	25	Q	20	A
4,4'-DDT	55		71		30-150	25	Q	20	A
Endosulfan I	50		64		30-150	24	Q	20	A
Endosulfan II	53		65		30-150	21	Q	20	A
Endosulfan sulfate	52		62		30-150	18		20	A
cis-Chlordane	49		62		30-150	24	Q	20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		61		30-150	A
Decachlorobiphenyl	48		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		66		30-150	B
Decachlorobiphenyl	53		64		30-150	B

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-14,17-21,25 Batch: WG1635623-2 WG1635623-3									
Delta-BHC	65		71		30-150	9		30	A
Lindane	68		73		30-150	7		30	A
Alpha-BHC	67		73		30-150	9		30	A
Beta-BHC	67		70		30-150	4		30	A
Heptachlor	71		78		30-150	9		30	A
Aldrin	63		70		30-150	11		30	A
Endrin	66		73		30-150	10		30	A
Dieldrin	66		75		30-150	13		30	A
4,4'-DDE	60		67		30-150	11		30	A
4,4'-DDD	67		74		30-150	10		30	A
4,4'-DDT	58		63		30-150	8		30	A
Endosulfan I	60		67		30-150	11		30	A
Endosulfan II	65		70		30-150	7		30	A
Endosulfan sulfate	56		57		30-150	2		30	A
cis-Chlordane	54		60		30-150	11		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		64		30-150	A
Decachlorobiphenyl	73		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		71		30-150	B
Decachlorobiphenyl	92		101		30-150	B



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 16,26 Batch: WG1635789-2 WG1635789-3									
Delta-BHC	91		78		30-150	15		30	A
Lindane	95		82		30-150	15		30	A
Alpha-BHC	98		85		30-150	14		30	A
Beta-BHC	84		75		30-150	11		30	A
Heptachlor	67		58		30-150	14		30	A
Aldrin	84		72		30-150	15		30	A
Endrin	90		78		30-150	14		30	A
Dieldrin	96		83		30-150	15		30	A
4,4'-DDE	98		86		30-150	13		30	A
4,4'-DDD	104		90		30-150	14		30	A
4,4'-DDT	91		78		30-150	15		30	A
Endosulfan I	80		69		30-150	15		30	A
Endosulfan II	91		78		30-150	15		30	A
Endosulfan sulfate	77		67		30-150	14		30	A
cis-Chlordane	69		61		30-150	12		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		78		30-150	A
Decachlorobiphenyl	89		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		76		30-150	B
Decachlorobiphenyl	78		67		30-150	B

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 27 Batch: WG1639033-2 WG1639033-3									
Delta-BHC	72		79		30-150	9		30	A
Lindane	74		82		30-150	10		30	A
Alpha-BHC	77		86		30-150	11		30	A
Beta-BHC	79		85		30-150	7		30	A
Heptachlor	81		90		30-150	11		30	A
Aldrin	74		82		30-150	10		30	A
Endrin	79		88		30-150	11		30	A
Dieldrin	81		89		30-150	9		30	A
4,4'-DDE	74		82		30-150	10		30	A
4,4'-DDD	80		88		30-150	10		30	A
4,4'-DDT	81		90		30-150	11		30	A
Endosulfan I	72		80		30-150	11		30	A
Endosulfan II	77		87		30-150	12		30	A
Endosulfan sulfate	70		77		30-150	10		30	A
cis-Chlordane	66		73		30-150	10		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150	A
Decachlorobiphenyl	95		103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		86		30-150	B
Decachlorobiphenyl	120		126		30-150	B

**Matrix Spike Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Organochlorine Pesticides by GC - Westborough Lab ID: SB-4 (0-2) Associated sample(s): 16,26 QC Batch ID: WG1635789-4 WG1635789-5 QC Sample: L2223093-26 Client													
Delta-BHC	ND	34.2	35.9	105		38.4	112		30-150	7		50	A
Lindane	ND	34.2	37.1	108		40.0	117		30-150	8		50	A
Alpha-BHC	ND	34.2	40.9	120		43.2	126		30-150	5		50	A
Beta-BHC	ND	34.2	32.8P	96		35.6	104		30-150	8		50	A
Heptachlor	ND	34.2	27.1	79		29.0	85		30-150	7		50	A
Aldrin	ND	34.2	33.6	98		35.8	105		30-150	6		50	A
Endrin	ND	34.2	35.1	103		37.1	108		30-150	6		50	A
Dieldrin	ND	34.2	37.9	111		40.1	117		30-150	6		50	A
4,4'-DDE	ND	34.2	37.8	110		40.3	118		30-150	6		50	A
4,4'-DDD	ND	34.2	41.6	122		43.8	128		30-150	5		50	A
4,4'-DDT	ND	34.2	36.2	106		38.5	112		30-150	6		50	A
Endosulfan I	ND	34.2	32.0	94		33.7	98		30-150	5		50	A
Endosulfan II	ND	34.2	35.8	105		37.6	110		30-150	5		50	A
Endosulfan sulfate	ND	34.2	29.0	85		29.9	87		30-150	3		50	A
cis-Chlordane	ND	34.2	27.8	81		29.5	86		30-150	6		50	A

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	99		107		30-150	A
Decachlorobiphenyl	99		105		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		98		30-150	B
Decachlorobiphenyl	75		85		30-150	B

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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 SB-5 (0-2) Associated sample(s): 27 QC Batch ID: WG1639033-4 WG1639033-5 QC Sample: L2223093-27 Client ID:													
Delta-BHC	ND	37.2	33.2	89		28.8	78		30-150	14		50	A
Lindane	ND	37.2	34.2	92		29.7	80		30-150	14		50	A
Alpha-BHC	ND	37.2	35.6	96		30.9	84		30-150	14		50	A
Beta-BHC	ND	37.2	35.6	96		30.2	82		30-150	16		50	A
Heptachlor	ND	37.2	37.5	101		32.8	89		30-150	13		50	A
Aldrin	ND	37.2	34.0	92		29.2	79		30-150	15		50	A
Endrin	ND	37.2	34.7	93		30.4	82		30-150	13		50	A
Dieldrin	ND	37.2	36.0	97		31.0	84		30-150	15		50	A
4,4'-DDE	ND	37.2	32.7	88		28.3	77		30-150	14		50	A
4,4'-DDD	ND	37.2	34.9	94		29.9	81		30-150	15		50	A
4,4'-DDT	ND	37.2	35.4	95		30.4	82		30-150	15		50	A
Endosulfan I	ND	37.2	32.0	86		27.8	75		30-150	14		50	A
Endosulfan II	ND	37.2	34.1	92		29.1	79		30-150	16		50	A
Endosulfan sulfate	ND	37.2	30.6	82		25.2	68		30-150	19		50	A
cis-Chlordane	ND	37.2	29.4	79		25.2	68		30-150	15		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		74		30-150	A
Decachlorobiphenyl	107		92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		88		30-150	B
Decachlorobiphenyl	129		122		30-150	B

## **METALS**

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-01

Date Collected: 05/02/22 08:30

Client ID: SB-7 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.530		mg/kg	0.410	0.085	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Barium, Total	19.0		mg/kg	0.410	0.071	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Beryllium, Total	0.094	J	mg/kg	0.205	0.014	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.410	0.040	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Chromium, Total	11.5		mg/kg	0.410	0.039	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Copper, Total	10.8		mg/kg	0.410	0.106	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Lead, Total	2.18		mg/kg	2.05	0.110	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Manganese, Total	112		mg/kg	0.410	0.065	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.066	0.043	1	05/18/22 10:15	05/18/22 20:06	EPA 7471B	1,7471B	DR
Nickel, Total	8.20		mg/kg	1.03	0.099	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Selenium, Total	0.152	J	mg/kg	0.821	0.106	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.410	0.116	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
Zinc, Total	11.4		mg/kg	2.05	0.120	1	05/18/22 08:00	05/26/22 12:12	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	11	J	mg/kg	0.83	0.83	1		05/26/22 12:12	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-02

Date Collected: 05/02/22 08:40

Client ID: SB-7 (7-9)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.552		mg/kg	0.406	0.084	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Barium, Total	43.4		mg/kg	0.406	0.071	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Beryllium, Total	0.162	J	mg/kg	0.203	0.013	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.406	0.040	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Chromium, Total	20.0		mg/kg	0.406	0.039	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Copper, Total	19.0		mg/kg	0.406	0.105	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Lead, Total	2.33		mg/kg	2.03	0.109	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Manganese, Total	187		mg/kg	0.406	0.065	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.066	0.043	1	05/18/22 10:15	05/18/22 20:20	EPA 7471B	1,7471B	DR
Nickel, Total	12.0		mg/kg	1.01	0.098	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Selenium, Total	0.219	J	mg/kg	0.812	0.105	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.406	0.115	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
Zinc, Total	15.0		mg/kg	2.03	0.119	1	05/18/22 08:00	05/26/22 12:08	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	20	J	mg/kg	0.84	0.84	1		05/26/22 12:08	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-03

Date Collected: 05/02/22 09:00

Client ID: SB-6 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.648		mg/kg	0.413	0.086	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Barium, Total	40.0		mg/kg	0.413	0.072	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Beryllium, Total	0.116	J	mg/kg	0.206	0.014	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.413	0.040	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Chromium, Total	12.2		mg/kg	0.413	0.040	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Copper, Total	16.2		mg/kg	0.413	0.106	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Lead, Total	2.09		mg/kg	2.06	0.111	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Manganese, Total	129		mg/kg	0.413	0.066	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.069	0.045	1	05/18/22 10:15	05/18/22 20:23	EPA 7471B	1,7471B	DR
Nickel, Total	17.7		mg/kg	1.03	0.100	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.826	0.106	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.413	0.117	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
Zinc, Total	12.3		mg/kg	2.06	0.121	1	05/18/22 08:00	05/26/22 13:13	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		05/26/22 13:13	NA	107,-	





**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-04

Date Collected: 05/02/22 09:15

Client ID: SB-6 (7-9)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	ND		mg/kg	0.417	0.087	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Barium, Total	104		mg/kg	0.417	0.073	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Beryllium, Total	0.338		mg/kg	0.209	0.014	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.417	0.041	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Chromium, Total	15.9		mg/kg	0.417	0.040	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Copper, Total	37.5		mg/kg	0.417	0.108	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Lead, Total	8.04		mg/kg	2.09	0.112	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Manganese, Total	45.8		mg/kg	0.417	0.066	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.069	0.045	1	05/18/22 10:15	05/18/22 20:33	EPA 7471B	1,7471B	DR
Nickel, Total	17.6		mg/kg	1.04	0.101	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Selenium, Total	0.230	J	mg/kg	0.834	0.108	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.417	0.118	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
Zinc, Total	20.5		mg/kg	2.09	0.122	1	05/18/22 08:00	05/26/22 13:17	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	16		mg/kg	0.88	0.88	1		05/26/22 13:17	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-05

Date Collected: 05/02/22 09:45

Client ID: SB-9 (0-4)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.603		mg/kg	0.410	0.085	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Barium, Total	68.3		mg/kg	0.410	0.071	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Beryllium, Total	0.230		mg/kg	0.205	0.014	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.410	0.040	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Chromium, Total	15.0		mg/kg	0.410	0.039	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Copper, Total	14.6		mg/kg	0.410	0.106	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Lead, Total	4.87		mg/kg	2.05	0.110	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Manganese, Total	113		mg/kg	0.410	0.065	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Mercury, Total	0.092		mg/kg	0.069	0.045	1	05/18/22 10:15	05/18/22 20:36	EPA 7471B	1,7471B	DR
Nickel, Total	14.3		mg/kg	1.02	0.099	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Selenium, Total	0.135	J	mg/kg	0.820	0.106	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.410	0.116	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
Zinc, Total	24.8		mg/kg	2.05	0.120	1	05/18/22 08:00	05/26/22 13:22	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	15		mg/kg	0.87	0.87	1		05/26/22 13:22	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-06

Date Collected: 05/02/22 09:30

Client ID: SB-8B (0-3)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 39%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	7.77		mg/kg	1.01	0.209	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Barium, Total	154		mg/kg	1.01	0.175	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Beryllium, Total	0.322	J	mg/kg	0.503	0.033	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	1.01	0.099	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Chromium, Total	24.7		mg/kg	1.01	0.097	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Copper, Total	25.4		mg/kg	1.01	0.260	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Lead, Total	60.5		mg/kg	5.03	0.270	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Manganese, Total	223		mg/kg	1.01	0.160	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Mercury, Total	0.428		mg/kg	0.161	0.105	1	05/18/22 10:15	05/18/22 20:40	EPA 7471B	1,7471B	DR
Nickel, Total	14.3		mg/kg	2.52	0.244	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	2.01	0.260	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	1.01	0.285	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
Zinc, Total	217		mg/kg	5.03	0.295	1	05/18/22 08:00	05/26/22 13:26	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	25		mg/kg	2.0	2.1	1		05/26/22 13:26	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-07

Date Collected: 05/02/22 11:30

Client ID: SB-12 (0-4)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.336	J	mg/kg	0.454	0.094	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Barium, Total	110		mg/kg	0.454	0.079	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Beryllium, Total	0.481		mg/kg	0.227	0.015	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.454	0.045	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Chromium, Total	22.1		mg/kg	0.454	0.044	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Copper, Total	29.7		mg/kg	0.454	0.117	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Lead, Total	7.67		mg/kg	2.27	0.122	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Manganese, Total	700		mg/kg	0.454	0.072	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.075	0.049	1	05/18/22 10:15	05/18/22 20:43	EPA 7471B	1,7471B	DR
Nickel, Total	35.8		mg/kg	1.13	0.110	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Selenium, Total	0.413	J	mg/kg	0.908	0.117	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Silver, Total	0.136	J	mg/kg	0.454	0.128	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
Zinc, Total	27.5		mg/kg	2.27	0.133	1	05/18/22 08:00	05/26/22 13:31	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	22	J	mg/kg	0.95	0.95	1		05/26/22 13:31	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-08

Date Collected: 05/02/22 10:30

Client ID: SB-10A (0-3)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 100%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	ND		mg/kg	0.389	0.081	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Barium, Total	82.8		mg/kg	0.389	0.068	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Beryllium, Total	0.163	J	mg/kg	0.194	0.013	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.389	0.038	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Chromium, Total	20.8		mg/kg	0.389	0.037	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Copper, Total	3.67		mg/kg	0.389	0.100	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Lead, Total	3.65		mg/kg	1.94	0.104	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Manganese, Total	72.1		mg/kg	0.389	0.062	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Mercury, Total	1.27		mg/kg	0.064	0.042	1	05/18/22 10:15	05/18/22 20:46	EPA 7471B	1,7471B	DR
Nickel, Total	25.4		mg/kg	0.973	0.094	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Selenium, Total	0.241	J	mg/kg	0.778	0.100	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.389	0.110	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
Zinc, Total	9.30		mg/kg	1.94	0.114	1	05/18/22 08:00	05/26/22 13:36	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	20	J	mg/kg	0.80	0.80	1		05/26/22 13:36	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-09

Date Collected: 05/02/22 11:00

Client ID: SB-10B (0-3)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.766		mg/kg	0.435	0.091	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Barium, Total	184		mg/kg	0.435	0.076	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Beryllium, Total	0.178	J	mg/kg	0.217	0.014	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.435	0.043	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Chromium, Total	23.1		mg/kg	0.435	0.042	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Copper, Total	12.6		mg/kg	0.435	0.112	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Lead, Total	8.21		mg/kg	2.17	0.116	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Manganese, Total	59.2		mg/kg	0.435	0.069	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Mercury, Total	0.065	J	mg/kg	0.073	0.047	1	05/18/22 10:15	05/18/22 20:49	EPA 7471B	1,7471B	DR
Nickel, Total	31.5		mg/kg	1.09	0.105	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Selenium, Total	0.230	J	mg/kg	0.870	0.112	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.435	0.123	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
Zinc, Total	15.4		mg/kg	2.17	0.127	1	05/18/22 08:00	05/26/22 13:40	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	23		mg/kg	0.93	0.93	1		05/26/22 13:40	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-10

Date Collected: 05/02/22 12:00

Client ID: SB-16 (0-4)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.22		mg/kg	0.418	0.087	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Barium, Total	27.7		mg/kg	0.418	0.073	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Beryllium, Total	0.184	J	mg/kg	0.209	0.014	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.418	0.041	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Chromium, Total	9.84		mg/kg	0.418	0.040	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Copper, Total	14.2		mg/kg	0.418	0.108	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Lead, Total	26.4		mg/kg	2.09	0.112	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Manganese, Total	45.8		mg/kg	0.418	0.067	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.070	0.045	1	05/18/22 10:15	05/18/22 20:53	EPA 7471B	1,7471B	DR
Nickel, Total	8.70		mg/kg	1.04	0.101	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Selenium, Total	0.180	J	mg/kg	0.836	0.108	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.418	0.118	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
Zinc, Total	18.3		mg/kg	2.09	0.122	1	05/18/22 08:00	05/26/22 13:45	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	9.5	J	mg/kg	0.87	0.87	1		05/26/22 13:45	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-11

Date Collected: 05/02/22 12:20

Client ID: SB-17 (2-4)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.05		mg/kg	0.411	0.086	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Barium, Total	24.4		mg/kg	0.411	0.072	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Beryllium, Total	0.177	J	mg/kg	0.205	0.014	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.411	0.040	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Chromium, Total	10.3		mg/kg	0.411	0.039	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Copper, Total	10.8		mg/kg	0.411	0.106	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Lead, Total	3.92		mg/kg	2.05	0.110	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Manganese, Total	71.1		mg/kg	0.411	0.065	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.067	0.043	1	05/18/22 10:15	05/18/22 20:56	EPA 7471B	1,7471B	DR
Nickel, Total	6.99		mg/kg	1.03	0.099	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Selenium, Total	0.144	J	mg/kg	0.822	0.106	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.411	0.116	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
Zinc, Total	13.7		mg/kg	2.05	0.120	1	05/18/22 08:00	05/26/22 13:50	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	10	J	mg/kg	0.84	0.85	1		05/26/22 13:50	NA	107,-	





**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-12

Date Collected: 05/02/22 12:15

Client ID: SB-17 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.18		mg/kg	0.434	0.090	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Barium, Total	30.5		mg/kg	0.434	0.076	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Beryllium, Total	0.200	J	mg/kg	0.217	0.014	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.434	0.043	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Chromium, Total	9.26		mg/kg	0.434	0.042	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Copper, Total	14.1		mg/kg	0.434	0.112	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Lead, Total	5.41		mg/kg	2.17	0.116	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Manganese, Total	47.9		mg/kg	0.434	0.069	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.070	0.046	1	05/18/22 10:15	05/18/22 20:59	EPA 7471B	1,7471B	DR
Nickel, Total	10.4		mg/kg	1.08	0.105	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Selenium, Total	0.200	J	mg/kg	0.868	0.112	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.434	0.123	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
Zinc, Total	15.9		mg/kg	2.17	0.127	1	05/18/22 08:00	05/26/22 13:54	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	9.3		mg/kg	0.89	0.89	1		05/26/22 13:54	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-13

Date Collected: 05/02/22 12:30

Client ID: SB-19 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.02		mg/kg	0.451	0.094	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Barium, Total	34.8		mg/kg	0.451	0.078	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Beryllium, Total	0.234		mg/kg	0.225	0.015	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.451	0.044	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Chromium, Total	9.88		mg/kg	0.451	0.043	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Copper, Total	5.02		mg/kg	0.451	0.116	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Lead, Total	8.52		mg/kg	2.25	0.121	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Manganese, Total	76.7		mg/kg	0.451	0.072	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.073	0.048	1	05/18/22 10:15	05/18/22 21:03	EPA 7471B	1,7471B	DR
Nickel, Total	5.90		mg/kg	1.13	0.109	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Selenium, Total	0.288	J	mg/kg	0.902	0.116	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.451	0.128	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
Zinc, Total	14.4		mg/kg	2.25	0.132	1	05/18/22 08:00	05/26/22 14:21	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	9.7	J	mg/kg	0.94	0.94	1		05/26/22 14:21	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-14

Date Collected: 05/02/22 12:45

Client ID: SB-19 (7-9)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.705		mg/kg	0.417	0.087	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Barium, Total	17.0		mg/kg	0.417	0.073	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Beryllium, Total	0.104	J	mg/kg	0.209	0.014	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.417	0.041	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Chromium, Total	7.54		mg/kg	0.417	0.040	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Copper, Total	7.71		mg/kg	0.417	0.108	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Lead, Total	2.42		mg/kg	2.09	0.112	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Manganese, Total	32.2		mg/kg	0.417	0.066	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.066	0.043	1	05/18/22 10:15	05/18/22 21:13	EPA 7471B	1,7471B	DR
Nickel, Total	5.09		mg/kg	1.04	0.101	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Selenium, Total	0.184	J	mg/kg	0.834	0.108	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.417	0.118	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
Zinc, Total	11.9		mg/kg	2.09	0.122	1	05/18/22 08:00	05/26/22 18:35	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	7.5		mg/kg	0.84	0.84	1		05/26/22 18:35	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-16

Date Collected: 05/03/22 08:20

Client ID: SB-18 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	3.96		mg/kg	0.419	0.087	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Barium, Total	70.2		mg/kg	0.419	0.073	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Beryllium, Total	0.243		mg/kg	0.210	0.014	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.419	0.041	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Chromium, Total	14.0		mg/kg	0.419	0.040	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Copper, Total	26.2		mg/kg	0.419	0.108	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Lead, Total	219		mg/kg	2.10	0.112	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Manganese, Total	128		mg/kg	0.419	0.067	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Mercury, Total	0.474		mg/kg	0.071	0.046	1	05/18/22 10:15	05/18/22 21:16	EPA 7471B	1,7471B	DR
Nickel, Total	10.2		mg/kg	1.05	0.101	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Selenium, Total	0.792	J	mg/kg	0.838	0.108	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Silver, Total	0.461		mg/kg	0.419	0.119	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
Zinc, Total	97.4		mg/kg	2.10	0.123	1	05/18/22 08:00	05/26/22 18:39	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	14		mg/kg	0.89	0.89	1		05/26/22 18:39	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-17

Date Collected: 05/03/22 08:30

Client ID: SB-18 (7-9)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.32		mg/kg	0.439	0.091	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Barium, Total	20.3		mg/kg	0.439	0.076	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Beryllium, Total	0.162	J	mg/kg	0.219	0.015	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.439	0.043	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Chromium, Total	9.50		mg/kg	0.439	0.042	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Copper, Total	10.4		mg/kg	0.439	0.113	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Lead, Total	4.81		mg/kg	2.19	0.118	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Manganese, Total	59.4		mg/kg	0.439	0.070	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.071	0.046	1	05/18/22 10:15	05/18/22 21:19	EPA 7471B	1,7471B	DR
Nickel, Total	6.15		mg/kg	1.10	0.106	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.878	0.113	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.439	0.124	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
Zinc, Total	14.3		mg/kg	2.19	0.128	1	05/18/22 08:00	05/26/22 18:43	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	9.2	J	mg/kg	0.90	0.90	1		05/26/22 18:43	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-18

Date Collected: 05/03/22 10:00

Client ID: SB-11 (0-4)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 99%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.917		mg/kg	0.385	0.080	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Barium, Total	112		mg/kg	0.385	0.067	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Beryllium, Total	0.397		mg/kg	0.192	0.013	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.385	0.038	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Chromium, Total	26.5		mg/kg	0.385	0.037	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Copper, Total	34.7		mg/kg	0.385	0.099	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Lead, Total	29.4		mg/kg	1.92	0.103	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Manganese, Total	130		mg/kg	0.385	0.061	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Mercury, Total	0.227		mg/kg	0.064	0.041	1	05/18/22 10:15	05/18/22 21:23	EPA 7471B	1,7471B	DR
Nickel, Total	36.5		mg/kg	0.963	0.093	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Selenium, Total	0.246	J	mg/kg	0.770	0.0994	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.385	0.109	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
Zinc, Total	27.5		mg/kg	1.92	0.113	1	05/18/22 08:00	05/26/22 18:48	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	26		mg/kg	0.81	0.81	1		05/26/22 18:48	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-19

Date Collected: 05/03/22 11:00

Client ID: SB-DUP-2

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	ND		mg/kg	0.422	0.088	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Barium, Total	219		mg/kg	0.422	0.074	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Beryllium, Total	0.558		mg/kg	0.211	0.014	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.422	0.041	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Chromium, Total	32.2		mg/kg	0.422	0.041	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Copper, Total	16.1		mg/kg	0.422	0.109	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Lead, Total	6.18		mg/kg	2.11	0.113	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Manganese, Total	86.2		mg/kg	0.422	0.067	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.071	0.046	1	05/18/22 10:15	05/18/22 21:26	EPA 7471B	1,7471B	DR
Nickel, Total	31.2		mg/kg	1.06	0.102	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.845	0.109	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.422	0.120	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
Zinc, Total	29.4		mg/kg	2.11	0.124	1	05/18/22 08:00	05/26/22 18:53	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	32	J	mg/kg	0.90	0.90	1		05/26/22 18:53	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-20

Date Collected: 05/03/22 10:35

Client ID: SB-1 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	2.28		mg/kg	2.23	0.465	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Barium, Total	228		mg/kg	2.23	0.389	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Beryllium, Total	1.16		mg/kg	1.12	0.074	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	2.23	0.219	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Chromium, Total	727		mg/kg	2.23	0.214	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Copper, Total	62.1		mg/kg	2.23	0.576	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Lead, Total	6.39	J	mg/kg	11.2	0.599	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Manganese, Total	594		mg/kg	2.23	0.355	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.073	0.047	1	05/18/22 10:15	05/18/22 21:29	EPA 7471B	1,7471B	DR
Nickel, Total	143		mg/kg	5.59	0.541	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Selenium, Total	0.693	J	mg/kg	4.47	0.576	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	2.23	0.632	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
Zinc, Total	110		mg/kg	11.2	0.655	5	05/18/22 08:00	05/26/22 19:59	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	720		mg/kg	2.2	2.2	1		05/26/22 19:59	NA	107,-	





**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-21

Date Collected: 05/03/22 11:15

Client ID: SB-2 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.268	J	mg/kg	0.433	0.090	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Barium, Total	106		mg/kg	0.433	0.075	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Beryllium, Total	0.875		mg/kg	0.216	0.014	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.433	0.042	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Chromium, Total	34.8		mg/kg	0.433	0.042	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Copper, Total	120		mg/kg	0.433	0.112	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Lead, Total	6.26		mg/kg	2.16	0.116	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Manganese, Total	175		mg/kg	0.433	0.069	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.071	0.046	1	05/18/22 10:15	05/18/22 21:32	EPA 7471B	1,7471B	DR
Nickel, Total	28.5		mg/kg	1.08	0.105	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.866	0.112	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.433	0.122	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
Zinc, Total	60.1		mg/kg	2.16	0.127	1	05/18/22 08:00	05/26/22 19:03	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	35		mg/kg	0.90	0.90	1		05/26/22 19:03	NA	107,-	



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-22

Date Collected: 05/03/22 13:00

Client ID: FIELD BLANK-1

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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											
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Barium, Total	ND		mg/l	0.00050	0.00017	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/23/22 19:40	05/24/22 15:56	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	05/23/22 22:24	05/24/22 12:19	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/23/22 19:40	05/24/22 10:43	EPA 3005A	1,6020B	SV
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		05/24/22 10:43	NA	107,-	



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-23

Date Collected: 05/03/22 13:30

Client ID: FIELD BLANK-2

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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											
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Barium, Total	0.00095		mg/l	0.00050	0.00017	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/23/22 19:40	05/24/22 16:01	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	05/23/22 22:24	05/24/22 12:23	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/23/22 19:40	05/24/22 10:47	EPA 3005A	1,6020B	SV
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		05/24/22 10:47	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-25

Date Collected: 05/03/22 12:40

Client ID: SB-3 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	ND		mg/kg	0.416	0.087	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Barium, Total	71.1		mg/kg	0.416	0.073	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Beryllium, Total	0.216		mg/kg	0.208	0.014	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Cadmium, Total	0.550		mg/kg	0.416	0.041	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Chromium, Total	13.0		mg/kg	0.416	0.040	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Copper, Total	12.5		mg/kg	0.416	0.107	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Lead, Total	5.89		mg/kg	2.08	0.112	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Manganese, Total	102		mg/kg	0.416	0.066	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Mercury, Total	2.00		mg/kg	0.081	0.053	1	05/18/22 11:32	05/18/22 19:01	EPA 7471B	1,7471B	DMB
Nickel, Total	21.2		mg/kg	1.04	0.101	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.833	0.107	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.416	0.118	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
Zinc, Total	14.2		mg/kg	2.08	0.122	1	05/18/22 11:50	05/31/22 15:15	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	13		mg/kg	0.85	0.85	1		05/31/22 15:15	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-26

Date Collected: 05/03/22 12:50

Client ID: SB-4 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	ND		mg/kg	0.414	0.086	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Barium, Total	68.0		mg/kg	0.414	0.072	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Beryllium, Total	0.178	J	mg/kg	0.207	0.014	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Cadmium, Total	0.724		mg/kg	0.414	0.041	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Chromium, Total	15.7		mg/kg	0.414	0.040	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Copper, Total	34.6		mg/kg	0.414	0.107	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Lead, Total	4.22		mg/kg	2.07	0.111	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Manganese, Total	124		mg/kg	0.414	0.066	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Mercury, Total	0.547		mg/kg	0.085	0.055	1	05/18/22 11:32	05/18/22 18:18	EPA 7471B	1,7471B	DMB
Nickel, Total	16.9		mg/kg	1.03	0.100	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.828	0.107	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.414	0.117	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
Zinc, Total	30.2		mg/kg	2.07	0.121	1	05/18/22 11:50	05/31/22 09:55	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	16		mg/kg	0.85	0.85	1		05/31/22 09:55	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223093**Project Number:** 15514**Report Date:** 05/31/22**SAMPLE RESULTS**

Lab ID: L2223093-27

Date Collected: 05/03/22 12:30

Client ID: SB-5 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.610		mg/kg	0.442	0.092	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Barium, Total	27.8		mg/kg	0.442	0.077	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Beryllium, Total	0.230		mg/kg	0.221	0.015	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Cadmium, Total	0.336	J	mg/kg	0.442	0.043	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Chromium, Total	14.9		mg/kg	0.442	0.042	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Copper, Total	7.10		mg/kg	0.442	0.114	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Lead, Total	7.75		mg/kg	2.21	0.118	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Manganese, Total	225		mg/kg	0.442	0.070	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.091	0.060	1	05/18/22 11:32	05/18/22 18:31	EPA 7471B	1,7471B	DMB
Nickel, Total	8.17		mg/kg	1.10	0.107	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.884	0.114	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.442	0.125	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
Zinc, Total	17.2		mg/kg	2.21	0.129	1	05/18/22 11:50	05/31/22 11:22	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	15		mg/kg	0.90	0.90	1		05/31/22 11:22	NA	107,-	



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

## 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): 01-14,16-21 Batch: WG1639550-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Barium, Total	ND		mg/kg	0.400	0.070	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Beryllium, Total	ND		mg/kg	0.200	0.013	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.400	0.039	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Chromium, Total	0.212	J	mg/kg	0.400	0.038	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Copper, Total	ND		mg/kg	0.400	0.103	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Lead, Total	ND		mg/kg	2.00	0.107	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Manganese, Total	ND		mg/kg	0.400	0.064	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Nickel, Total	0.100	J	mg/kg	1.00	0.097	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Selenium, Total	0.144	J	mg/kg	0.800	0.103	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Silver, Total	ND		mg/kg	0.400	0.113	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW
Zinc, Total	0.156	J	mg/kg	2.00	0.117	1	05/18/22 08:00	05/26/22 11:59	1,6010D	EW

### 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): 01-14,16-21 Batch: WG1639551-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	05/18/22 10:15	05/18/22 20:00	1,7471B	DR

### Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 25-27 Batch: WG1639565-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Barium, Total	ND		mg/kg	0.400	0.070	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Beryllium, Total	ND		mg/kg	0.200	0.013	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.400	0.039	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

### Method Blank Analysis Batch Quality Control

Chromium, Total	ND	mg/kg	0.400	0.038	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Copper, Total	ND	mg/kg	0.400	0.103	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Lead, Total	ND	mg/kg	2.00	0.107	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Manganese, Total	ND	mg/kg	0.400	0.064	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Nickel, Total	ND	mg/kg	1.00	0.097	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Selenium, Total	ND	mg/kg	0.800	0.103	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Silver, Total	ND	mg/kg	0.400	0.113	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW
Zinc, Total	ND	mg/kg	2.00	0.117	1	05/18/22 09:42	05/31/22 09:41	1,6010D	EW

#### 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): 25-27 Batch: WG1639571-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	05/18/22 11:32	05/18/22 18:11	1,7471B	DMB

#### Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 22-23 Batch: WG1641831-1										
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Barium, Total	ND		mg/l	0.00050	0.00017	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/23/22 19:40	05/24/22 15:51	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV





Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

## Method Blank Analysis Batch Quality Control

Zinc, Total	ND	mg/l	0.01000	0.00341	1	05/23/22 19:40	05/24/22 09:27	1,6020B	SV
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### 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): 22-23 Batch: WG1641833-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	05/23/22 22:24	05/24/22 11:40	1,7470A	DMB

### Prep Information

Digestion Method: EPA 7470A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 Batch: WG1639550-2 SRM Lot Number: D113-540								
Arsenic, Total	92		-		70-130	-		
Barium, Total	86		-		75-125	-		
Beryllium, Total	83		-		75-125	-		
Cadmium, Total	87		-		75-125	-		
Chromium, Total	87		-		70-130	-		
Copper, Total	90		-		75-125	-		
Lead, Total	87		-		72-128	-		
Manganese, Total	86		-		77-123	-		
Nickel, Total	87		-		70-130	-		
Selenium, Total	96		-		66-134	-		
Silver, Total	86		-		70-131	-		
Zinc, Total	86		-		70-130	-		
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 Batch: WG1639551-2 SRM Lot Number: D113-540								
Mercury, Total	95		-		60-140	-		

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 25-27 Batch: WG1639565-2 SRM Lot Number: D113-540					
Arsenic, Total	96	-	70-130	-	
Barium, Total	92	-	75-125	-	
Beryllium, Total	91	-	75-125	-	
Cadmium, Total	93	-	75-125	-	
Chromium, Total	88	-	70-130	-	
Copper, Total	91	-	75-125	-	
Lead, Total	91	-	72-128	-	
Manganese, Total	91	-	77-123	-	
Nickel, Total	92	-	70-130	-	
Selenium, Total	97	-	66-134	-	
Silver, Total	91	-	70-131	-	
Zinc, Total	101	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 25-27 Batch: WG1639571-2 SRM Lot Number: D113-540					
Mercury, Total	96	-	60-140	-	

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 22-23 Batch: WG1641831-2					
Arsenic, Total	107	-	80-120	-	
Barium, Total	102	-	80-120	-	
Beryllium, Total	95	-	80-120	-	
Cadmium, Total	104	-	80-120	-	
Chromium, Total	103	-	80-120	-	
Copper, Total	100	-	80-120	-	
Lead, Total	105	-	80-120	-	
Manganese, Total	103	-	80-120	-	
Nickel, Total	99	-	80-120	-	
Selenium, Total	112	-	80-120	-	
Silver, Total	104	-	80-120	-	
Zinc, Total	96	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 22-23 Batch: WG1641833-2					
Mercury, Total	97	-	80-120	-	

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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): 01-14,16-21 QC Batch ID: WG1639550-3 QC Sample: L2223093-01 Client ID: SB-7 (0-2)												
Arsenic, Total	0.530	9.85	8.75	83		-	-		75-125	-		20
Barium, Total	19.0	164	150	80		-	-		75-125	-		20
Beryllium, Total	0.094J	4.1	3.06	74	Q	-	-		75-125	-		20
Cadmium, Total	ND	4.35	3.14	72	Q	-	-		75-125	-		20
Chromium, Total	11.5	16.4	23.6	74	Q	-	-		75-125	-		20
Copper, Total	10.8	20.5	27.8	83		-	-		75-125	-		20
Lead, Total	2.18	43.5	34.5	74	Q	-	-		75-125	-		20
Manganese, Total	112	41	154	102		-	-		75-125	-		20
Nickel, Total	8.20	41	38.1	73	Q	-	-		75-125	-		20
Selenium, Total	0.152J	9.85	8.17	83		-	-		75-125	-		20
Silver, Total	ND	24.6	19.1	78		-	-		75-125	-		20
Zinc, Total	11.4	41	41.6	74	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 QC Batch ID: WG1639551-3 QC Sample: L2223093-01 Client ID: SB-7 (0-2)												
Mercury, Total	ND	0.133	0.148	111		-	-		80-120	-		20

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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): 25-27    QC Batch ID: WG1639565-3    WG1639565-4    QC Sample: L2223093-26    Client ID: SB-4 (0-2)											
Arsenic, Total	ND	9.81	7.01	71	Q	6.48	67	Q	75-125	8	20
Barium, Total	68.0	163	172	64	Q	171	64	Q	75-125	1	20
Beryllium, Total	0.178J	4.09	2.68	66	Q	2.55	63	Q	75-125	5	20
Cadmium, Total	0.724	4.33	3.45	63	Q	3.21	58	Q	75-125	7	20
Chromium, Total	15.7	16.3	25.0	57	Q	24.0	51	Q	75-125	4	20
Copper, Total	34.6	20.4	45.3	52	Q	48.2	67	Q	75-125	6	20
Lead, Total	4.22	43.3	29.7	59	Q	27.2	54	Q	75-125	9	20
Manganese, Total	124	40.9	151	66	Q	151	67	Q	75-125	0	20
Nickel, Total	16.9	40.9	39.9	56	Q	38.1	52	Q	75-125	5	20
Selenium, Total	ND	9.81	5.57	57	Q	5.02	52	Q	75-125	10	20
Silver, Total	ND	24.5	16.7	68	Q	15.5	64	Q	75-125	7	20
Zinc, Total	30.2	40.9	54.4	59	Q	50.7	51	Q	75-125	7	20

# Matrix Spike Analysis

## Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

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): 25-27			QC Batch ID: WG1639565-9			WG1639565-10	QC Sample: L2223093-27			Client ID: SB-5 (0-2)	
Arsenic, Total	0.610	10.4	7.93	70	Q	8.21	71	Q	75-125	3	20
Barium, Total	27.8	173	140	65	Q	148	67	Q	75-125	6	20
Beryllium, Total	0.230	4.33	3.01	64	Q	3.15	65	Q	75-125	5	20
Cadmium, Total	0.336J	4.59	3.22	70	Q	3.35	70	Q	75-125	4	20
Chromium, Total	14.9	17.3	25.3	60	Q	26.9	67	Q	75-125	6	20
Copper, Total	7.10	21.6	21.6	67	Q	22.2	67	Q	75-125	3	20
Lead, Total	7.75	45.9	35.4	60	Q	36.3	60	Q	75-125	3	20
Manganese, Total	225	43.3	256	72	Q	252	60	Q	75-125	2	20
Nickel, Total	8.17	43.3	34.0	60	Q	36.1	62	Q	75-125	6	20
Selenium, Total	ND	10.4	6.50	62	Q	6.63	62	Q	75-125	2	20
Silver, Total	ND	26	20.0	77		17.8	66	Q	75-125	12	20
Zinc, Total	17.2	43.3	44.7	64	Q	46.9	66	Q	75-125	5	20
Total Metals - Mansfield Lab Associated sample(s): 25-27			QC Batch ID: WG1639571-3			WG1639571-4	QC Sample: L2223093-26			Client ID: SB-4 (0-2)	
Mercury, Total	0.547	0.166	0.680	80		0.779	143	Q	80-120	14	20
Total Metals - Mansfield Lab Associated sample(s): 25-27			QC Batch ID: WG1639571-5			WG1639571-6	QC Sample: L2223093-27			Client ID: SB-5 (0-2)	
Mercury, Total	ND	0.184	0.239	130	Q	0.211	123	Q	80-120	12	20

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

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): 22-23 QC Batch ID: WG1641831-3 WG1641831-4 QC Sample: L2222978-03 Client ID: MS Sample									
Arsenic, Total	ND	0.12	0.1239	103	0.1225	102	75-125	1	20
Barium, Total	0.07207	2	2.072	100	2.133	103	75-125	3	20
Beryllium, Total	ND	0.05	0.05148	103	0.04978	100	75-125	3	20
Cadmium, Total	ND	0.053	0.05429	102	0.05735	108	75-125	5	20
Chromium, Total	0.00389	0.2	0.1996	98	0.2030	100	75-125	2	20
Copper, Total	0.00502	0.25	0.2399	94	0.2459	96	75-125	2	20
Lead, Total	0.00051J	0.53	0.5468	103	0.5706	108	75-125	4	20
Manganese, Total	0.02925	0.5	0.5225	99	0.5380	102	75-125	3	20
Nickel, Total	0.00333	0.5	0.4839	96	0.4951	98	75-125	2	20
Selenium, Total	ND	0.12	0.122	102	0.133	111	75-125	9	20
Silver, Total	ND	0.05	0.05134	103	0.05274	105	75-125	3	20
Zinc, Total	0.00392J	0.5	0.4754	95	0.4788	96	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 22-23 QC Batch ID: WG1641833-3 WG1641833-4 QC Sample: L2222978-03 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00479	96	0.00468	94	75-125	2	20



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2223093  
**Report Date:** 05/31/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 QC Batch ID: WG1639550-4 QC Sample: L2223093-01 Client ID: SB-7 (0-2)						
Arsenic, Total	0.530	0.553	mg/kg	4		20
Barium, Total	19.0	22.7	mg/kg	18		20
Beryllium, Total	0.094J	0.098J	mg/kg	NC		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	11.5	9.97	mg/kg	14		20
Copper, Total	10.8	11.6	mg/kg	7		20
Lead, Total	2.18	2.56	mg/kg	16		20
Manganese, Total	112	133	mg/kg	17		20
Nickel, Total	8.20	8.70	mg/kg	6		20
Selenium, Total	0.152J	0.161J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Zinc, Total	11.4	11.2	mg/kg	2		20
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 QC Batch ID: WG1639551-4 QC Sample: L2223093-01 Client ID: SB-7 (0-2)						
Mercury, Total	ND	ND	mg/kg	NC		20

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2223093  
**Report Date:** 05/31/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-14,16-21 QC Batch ID: WG1639550-6 QC Sample: L2223093-01 Client ID: SB-7 (0-2)						
Barium, Total	19.0	30.7	mg/kg	62	Q	20
Chromium, Total	11.5	15.4	mg/kg	34	Q	20
Copper, Total	10.8	14.3	mg/kg	32	Q	20
Manganese, Total	112	142	mg/kg	27	Q	20
Total Metals - Mansfield Lab Associated sample(s): 25-27 QC Batch ID: WG1639565-12 QC Sample: L2223093-27 Client ID: SB-5 (0-2)						
Barium, Total	27.8	36.9	mg/kg	33	Q	20
Chromium, Total	14.9	20.0	mg/kg	34	Q	20
Manganese, Total	225	303	mg/kg	35	Q	20
Total Metals - Mansfield Lab Associated sample(s): 25-27 QC Batch ID: WG1639565-6 QC Sample: L2223093-26 Client ID: SB-4 (0-2)						
Barium, Total	68.0	91.2	mg/kg	34	Q	20
Chromium, Total	15.7	21.4	mg/kg	36	Q	20
Copper, Total	34.6	44.8	mg/kg	29	Q	20
Manganese, Total	124	170	mg/kg	37	Q	20
Total Metals - Mansfield Lab Associated sample(s): 22-23 QC Batch ID: WG1641831-6 QC Sample: L2222978-03 Client ID: DUP Sample						
Barium, Total	0.07207	0.07631	mg/l	6		20
Manganese, Total	0.02925	0.02841	mg/l	3		20

# **INORGANICS & MISCELLANEOUS**

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-01

Client ID: SB-7 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 08:30

Date Received: 05/03/22

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	95.9		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	0.96	0.20	1	05/13/22 10:25	05/13/22 13:54	1,9010C/9012B	CS
Chromium, Hexavalent	0.219	J	mg/kg	0.834	0.167	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-02

Client ID: SB-7 (7-9)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 08:40

Date Received: 05/03/22

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	95.0		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	0.99	0.21	1	05/13/22 10:25	05/13/22 13:57	1,9010C/9012B	CS
Chromium, Hexavalent	0.221	J	mg/kg	0.842	0.168	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-03

Client ID: SB-6 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 09:00

Date Received: 05/03/22

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	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/13/22 10:25	05/13/22 13:58	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.879	0.176	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### SAMPLE RESULTS

**Lab ID:** L2223093-04  
**Client ID:** SB-6 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 09:15  
**Date Received:** 05/03/22  
**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	91.4		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.0	0.22	1	05/13/22 10:25	05/13/22 13:59	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.875	0.175	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-05

Client ID: SB-9 (0-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 09:45

Date Received: 05/03/22

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	91.7		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/16/22 10:35	05/16/22 13:41	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.872	0.174	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL





Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-06

Client ID: SB-8B (0-3)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 09:30

Date Received: 05/03/22

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	39.1		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	1.7	J	mg/kg	2.4	0.51	1	05/16/22 10:35	05/16/22 13:42	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	2.05	0.409	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-07

Client ID: SB-12 (0-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 11:30

Date Received: 05/03/22

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	84.2		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.24	1	05/16/22 10:35	05/16/22 13:56	1,9010C/9012B	CS
Chromium, Hexavalent	0.380	J	mg/kg	0.950	0.190	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-08

Client ID: SB-10A (0-3)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 10:30

Date Received: 05/03/22

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	99.6		%	0.100	NA	1	-	05/11/22 09:38	121,2540G	RI
Cyanide, Total	ND		mg/kg	0.94	0.20	1	05/16/22 10:35	05/16/22 13:45	1,9010C/9012B	CS
Chromium, Hexavalent	0.211	J	mg/kg	0.803	0.161	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### SAMPLE RESULTS

**Lab ID:** L2223093-09  
**Client ID:** SB-10B (0-3)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/02/22 11:00  
**Date Received:** 05/03/22  
**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	86.3		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.24	1	05/16/22 10:35	05/16/22 13:57	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.927	0.185	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-10

Client ID: SB-16 (0-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 12:00

Date Received: 05/03/22

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	92.0		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.0	0.22	1	05/16/22 10:35	05/16/22 14:00	1,9010C/9012B	CS
Chromium, Hexavalent	0.293	J	mg/kg	0.870	0.174	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-11

Client ID: SB-17 (2-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 12:20

Date Received: 05/03/22

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	94.7		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.0	0.21	1	05/16/22 10:35	05/16/22 14:08	1,9010C/9012B	CS
Chromium, Hexavalent	0.222	J	mg/kg	0.845	0.169	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-12

Client ID: SB-17 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 12:15

Date Received: 05/03/22

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	90.0		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/16/22 10:35	05/16/22 14:02	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.889	0.178	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-13

Date Collected: 05/02/22 12:30

Client ID: SB-19 (0-2)

Date Received: 05/03/22

Sample Location: 60 MCLEAN AVENUE

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	85.3		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/16/22 10:35	05/16/22 14:03	1,9010C/9012B	CS
Chromium, Hexavalent	0.188	J	mg/kg	0.938	0.188	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL





Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-14

Client ID: SB-19 (7-9)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/02/22 12:45

Date Received: 05/03/22

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	95.1		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.0	0.22	1	05/16/22 10:35	05/16/22 14:04	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.841	0.168	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-16

Client ID: SB-18 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 08:20

Date Received: 05/03/22

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	89.7		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 10:35	05/17/22 13:38	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-17

Client ID: SB-18 (7-9)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 08:30

Date Received: 05/03/22

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	89.0		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 10:35	05/17/22 13:39	1,9010C/9012B	CS
Chromium, Hexavalent	0.292	J	mg/kg	0.899	0.180	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-18

Client ID: SB-11 (0-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 10:00

Date Received: 05/03/22

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	98.8		%	0.100	NA	1	-	05/11/22 09:38	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.21	1	05/17/22 10:35	05/17/22 13:40	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.810	0.162	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### SAMPLE RESULTS

**Lab ID:** L2223093-19  
**Client ID:** SB-DUP-2  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 11:00  
**Date Received:** 05/03/22  
**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	88.9		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 10:35	05/17/22 13:41	1,9010C/9012B	CS
Chromium, Hexavalent	0.427	J	mg/kg	0.900	0.180	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-20

Client ID: SB-1 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 10:35

Date Received: 05/03/22

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	86.8		%	0.100	NA	1	-	05/11/22 09:38	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	05/17/22 10:35	05/17/22 13:42	1,9010C/9012B	CS
Chromium, Hexavalent	2.00		mg/kg	0.922	0.184	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-21

Client ID: SB-2 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 11:15

Date Received: 05/03/22

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	88.8		%	0.100	NA	1	-	05/04/22 15:40	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.24	1	05/17/22 10:35	05/17/22 13:45	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.901	0.180	1	05/05/22 18:03	05/07/22 11:33	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-22

Client ID: FIELD BLANK-1

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 13:00

Date Received: 05/03/22

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	05/17/22 10:35	05/17/22 13:12	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/04/22 08:15	05/04/22 08:27	1,7196A	KA





**Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22**SAMPLE RESULTS****Lab ID:** L2223093-23**Client ID:** FIELD BLANK-2**Sample Location:** 60 MCLEAN AVENUE**Date Collected:** 05/03/22 13:30**Date Received:** 05/03/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/17/22 10:35	05/17/22 13:13	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/04/22 08:15	05/04/22 08:27	1,7196A	KA



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-25

Client ID: SB-3 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 12:40

Date Received: 05/03/22

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	94.0		%	0.100	NA	1	-	05/04/22 15:50	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.0	0.22	1	05/17/22 10:35	05/17/22 13:46	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.851	0.170	1	05/05/22 18:03	05/07/22 11:33	1,7196A	NL



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

**SAMPLE RESULTS**

**Lab ID:** L2223093-26  
**Client ID:** SB-4 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:50  
**Date Received:** 05/03/22  
**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	94.4		%	0.100	NA	1	-	05/04/22 16:10	121,2540G	TR
Cyanide, Total	ND		mg/kg	0.99	0.21	1	05/17/22 10:35	05/17/22 13:52	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.847	0.169	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223093

Report Date: 05/31/22

## SAMPLE RESULTS

Lab ID: L2223093-27

Client ID: SB-5 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 12:30

Date Received: 05/03/22

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	88.7		%	0.100	NA	1	-	05/04/22 16:10	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 10:35	05/17/22 13:47	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.902	0.180	1	05/05/22 18:03	05/07/22 11:33	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223093

Project Number: 15514

Report Date: 05/31/22

### 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): 22-23 Batch: WG1634192-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/04/22 08:15	05/04/22 08:22	1,7196A	KA
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1634981-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL
General Chemistry - Westborough Lab for sample(s): 11-14,16-20,26 Batch: WG1634982-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	05/09/22 09:00	05/12/22 21:05	1,7196A	NL
General Chemistry - Westborough Lab for sample(s): 21,25,27 Batch: WG1634983-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	05/05/22 18:03	05/07/22 11:33	1,7196A	NL
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1638137-1										
Cyanide, Total	ND		mg/kg	0.97	0.20	1	05/13/22 10:25	05/13/22 13:34	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 05-06,08 Batch: WG1638806-1										
Cyanide, Total	ND		mg/kg	0.89	0.19	1	05/16/22 10:35	05/16/22 13:17	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 07,09-14 Batch: WG1638810-1										
Cyanide, Total	ND		mg/kg	0.97	0.21	1	05/16/22 10:35	05/16/22 13:52	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 16-21,25,27 Batch: WG1639289-1										
Cyanide, Total	ND		mg/kg	0.97	0.21	1	05/17/22 10:35	05/17/22 13:34	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 26 Batch: WG1639292-1										
Cyanide, Total	ND		mg/kg	0.97	0.21	1	05/17/22 10:35	05/17/22 13:34	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 22-23 Batch: WG1639294-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/17/22 10:35	05/17/22 13:08	1,9010C/9012B	CS

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 22-23 Batch: WG1634192-2								
Chromium, Hexavalent	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1634981-2								
Chromium, Hexavalent	70	Q	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11-14,16-20,26 Batch: WG1634982-2								
Chromium, Hexavalent	70	Q	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 21,25,27 Batch: WG1634983-2								
Chromium, Hexavalent	99		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1638137-2 WG1638137-3								
Cyanide, Total	90		89		80-120	16		35
General Chemistry - Westborough Lab Associated sample(s): 05-06,08 Batch: WG1638806-2 WG1638806-3								
Cyanide, Total	59	Q	76	Q	80-120	32		35
General Chemistry - Westborough Lab Associated sample(s): 07,09-14 Batch: WG1638810-2 WG1638810-3								
Cyanide, Total	71	Q	76	Q	80-120	21		35

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223093**Report Date:** 05/31/22

Parameter	LCS %Recovery		LCSD %Recovery	%Recovery Limits	RPD		RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 16-21,25,27 Batch: WG1639289-2 WG1639289-3							
Cyanide, Total	42	Q	84	80-120	67	Q	35
General Chemistry - Westborough Lab Associated sample(s): 26 Batch: WG1639292-2 WG1639292-3							
Cyanide, Total	42	Q	84	80-120	67	Q	35
General Chemistry - Westborough Lab Associated sample(s): 22-23 Batch: WG1639294-2 WG1639294-3							
Cyanide, Total	95		95	85-115	0		20

# **Matrix Spike Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 22-23 QC Batch ID: WG1634192-4 QC Sample: L2223093-23 Client ID: FIELD BLANK-2												
Chromium, Hexavalent	ND	0.1	0.102	102		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1634981-4 QC Sample: L2223093-01 Client ID: SB-7 (0-2)												
Chromium, Hexavalent	0.219J	1060	1070	101		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 11-14,16-20,26 QC Batch ID: WG1634982-4 WG1634982-5 QC Sample: L2223093-26 Client ID: SB-4 (0-2)												
Chromium, Hexavalent	ND	1110	1120	101		811	99		75-125	32	Q	20
General Chemistry - Westborough Lab Associated sample(s): 21,25,27 QC Batch ID: WG1634983-4 WG1634983-5 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
Chromium, Hexavalent	ND	1620	1440	89		963	91		75-125	40	Q	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1638137-4 WG1638137-5 QC Sample: L2223093-01 Client ID: SB-7 (0-2)												
Cyanide, Total	ND	10	10	100		8.9	91		75-125	12		35
General Chemistry - Westborough Lab Associated sample(s): 05-06,08 QC Batch ID: WG1638806-4 WG1638806-5 QC Sample: L2223093-06 Client ID: SB-8B (0-3)												
Cyanide, Total	1.7J	25	26	96		27	100		75-125	4		35
General Chemistry - Westborough Lab Associated sample(s): 07,09-14 QC Batch ID: WG1638810-4 WG1638810-5 QC Sample: L2223093-14 Client ID: SB-19 (7-9)												
Cyanide, Total	ND	10	10	96		11	110		75-125	10		35
General Chemistry - Westborough Lab Associated sample(s): 16-21,25,27 QC Batch ID: WG1639289-4 WG1639289-5 QC Sample: L2223093-27 Client ID: SB-5 (0-2)												
Cyanide, Total	ND	11	11	99		11	100		75-125	0		35



# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 26 (0-2) QC Batch ID: WG1639292-4 WG1639292-5 QC Sample: L2223093-26 Client ID: SB-4									
Cyanide, Total	ND	10	9.9	97	8.6	83	75-125	14	35
General Chemistry - Westborough Lab Associated sample(s): 22-23 Sample QC Batch ID: WG1639294-4 WG1639294-5 QC Sample: L2224211-07 Client ID: MS									
Cyanide, Total	ND	0.2	0.193	96	0.190	95	80-120	2	20

# **Lab Duplicate Analysis** *Batch Quality Control*

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223093

**Report Date:** 05/31/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 22-23 QC Batch ID: WG1634192-3 QC Sample: L2223093-22 Client ID: FIELD BLANK-1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-07,09-14,16-17,19,21,25 QC Batch ID: WG1634440-1 QC Sample: L2223093-01 Client ID: SB-7 (0-2)						
Solids, Total	95.9	96.2	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 26-27 QC Batch ID: WG1634457-1 QC Sample: L2223093-26 Client ID: SB-4 (0-2)						
Solids, Total	94.4	95.9	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1634981-6 QC Sample: L2223093-01 Client ID: SB-7 (0-2)						
Chromium, Hexavalent	0.219J	0.219J	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11-14,16-20,26 QC Batch ID: WG1634982-7 QC Sample: L2223093-26 Client ID: SB-4 (0-2)						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 21,25,27 QC Batch ID: WG1634983-7 QC Sample: L2223093-27 Client ID: SB-5 (0-2)						
Chromium, Hexavalent	ND	0.361J	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 08,18,20 QC Batch ID: WG1637013-1 QC Sample: L2223720-01 Client ID: DUP Sample						
Solids, Total	24.0	23.6	%	2		20

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

Serial\_No:05312221:16  
**Lab Number:** L2223093  
**Report Date:** 05/31/22

### 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(*)
L2223093-01A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-01B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-01C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-01D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),CU-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-01F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-01G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-02A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-02B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-02C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-02D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-02F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-02G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-03A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-03B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Serial\_No:** 05312221:16  
**Lab Number:** L2223093  
**Report Date:** 05/31/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-03C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-03D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-03F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-03G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-04A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-04B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-04C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-04D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-04F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-04G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-05A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-05B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-05C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-05D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-05F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-05G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-06A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-06B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-06C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-06D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),CU-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-06F	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-07A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-07B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-07C	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-07D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-07E	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-07F	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-07G	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-08A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-08B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-08C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-08D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-08F	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-09A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-09B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-09C	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-09D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-09E	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-09F	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-Ti(180),BA-Ti(180),AS-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),ZN-Ti(180),PB-Ti(180),CU-Ti(180),SE-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L2223093-09G	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-09H	Plastic 8oz unpreserved	D	NA		4.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-09I	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-10A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-10B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-10C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-10D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L2223093-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),ZN-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L2223093-10F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-10G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-11A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-11B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-11C	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-11D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-11E	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),NI-Ti(180),CR-Ti(180),SE-Ti(180),CU-Ti(180),PB-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L2223093-11F	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-11G	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-12A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L2223093-12B	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-12C	Vial water preserved	A	NA		3.4	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-12D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)

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**Project Number:** 15514

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**Report Date:** 05/31/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-12E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-12F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-12G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-13A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-13B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-13C	Vial water preserved	D	NA		4.1	Y	Absent		ARCHIVE()
L2223093-13D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-13E	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-13F	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-13G	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-14A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-14B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-14C	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-14D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-14E	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-14F	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),ZN-TI(180),SE-TI(180),PB-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-14G	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-14H	Plastic 8oz unpreserved	D	NA		4.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-14I	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-16A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-16B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-16C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-16D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-16E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-16F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-16G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-17A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-17B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-17C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-17D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-17E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),ZN-TI(180),PB-TI(180),SE-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-17F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-17G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-18A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-18B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-18C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-18D	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),SE-TI(180),CU-TI(180),ZN-TI(180),PB-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-18E	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-18F	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-19A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-19B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-19C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-19D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Serial\_No:**05312221:16  
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**Report Date:** 05/31/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-19E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-19F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-19G	Plastic 8oz unpreserved	C	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-19H	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-20A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-20B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-20C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-20D	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-20E	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		TCN-9010(14),NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-20F	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		TCN-9010(14),NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-21A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-21B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-21C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-21D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-21E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-21F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-21G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-22A	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-22B	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-22C	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-22D	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8082-LVI(365)
L2223093-22E	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8082-LVI(365)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-22F	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8081(7)
L2223093-22G	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8081(7)
L2223093-22H	Plastic 250ml HNO3 preserved	B	<2	<2	3.9	Y	Absent		BA-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180)
L2223093-22I	Plastic 250ml NaOH preserved	B	>12	>12	3.9	Y	Absent		TCN-9010(14)
L2223093-22J	Plastic 500ml unpreserved	B	7	7	3.9	Y	Absent		HEXCR-7196(1)
L2223093-22K	Plastic 250ml unpreserved	B	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-22L	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223093-22M	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223093-22N	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223093-22O	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223093-22P	Amber 1000ml unpreserved	B	7	7	3.9	Y	Absent		HERB-APA(7)
L2223093-22Q	Amber 1000ml unpreserved	B	7	7	3.9	Y	Absent		HERB-APA(7)
L2223093-23A	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-23B	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-23C	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-23D	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8082-LVI(365)
L2223093-23E	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8082-LVI(365)
L2223093-23F	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8081(7)
L2223093-23G	Amber 120ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8081(7)
L2223093-23H	Plastic 250ml HNO3 preserved	B	<2	<2	3.9	Y	Absent		BA-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28)
L2223093-23I	Plastic 250ml NaOH preserved	B	>12	>12	3.9	Y	Absent		TCN-9010(14)
L2223093-23J	Plastic 500ml unpreserved	B	7	7	3.9	Y	Absent		HEXCR-7196(1)
L2223093-23K	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

\*Values in parentheses indicate holding time in days

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-23L	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2223093-23M	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223093-23N	Amber 250ml unpreserved	B	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2223093-23O	Amber 1000ml unpreserved	B	7	7	3.9	Y	Absent		HERB-APA(7)
L2223093-23P	Amber 1000ml unpreserved	B	7	7	3.9	Y	Absent		HERB-APA(7)
L2223093-24A	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-24B	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-25A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-25B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-25C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-25D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-25F	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CU-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223093-25G	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-25H	Plastic 8oz unpreserved	C	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-25I	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-26A1	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-26A2	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223093-26B	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26B1	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26B2	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26C	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26C1	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26C2	Vial water preserved	C	NA		4.7	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-26D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-26D1	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)

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**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-26D2	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223093-26E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-26E1	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-26E2	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-26F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26F1	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26F2	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26G1	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-26G2	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-27A	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-27A1	Vial MeOH preserved	D	NA		4.1	Y	Absent		NYTCL-8260HLW(14)
L2223093-27B	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-27B1	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-27C	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-27C1	Vial water preserved	D	NA		4.1	Y	Absent	04-MAY-22 05:44	NYTCL-8260HLW(14)
L2223093-27D	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-27D1	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-27E	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-27E1	Plastic 2oz unpreserved for TS	D	NA		4.1	Y	Absent		TS(7)
L2223093-27F	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)

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### Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223093-27F1	Metals Only-Glass 60mL/2oz unpreserved	D	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223093-27G	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-27G1	Glass 120ml/4oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-27H	Plastic 8oz unpreserved	D	NA		4.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-27H1	Plastic 8oz unpreserved	D	NA		4.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223093-27I	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-27I1	Glass 500ml/16oz unpreserved	D	NA		4.1	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223093-28A	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)
L2223093-28B	Vial HCl preserved	B	NA		3.9	Y	Absent		NYTCL-8260(14)

### Container Comments

L2223093-13C Empty Container

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### 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	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	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
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	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	PFEESEA	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

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## GLOSSARY

### Acronyms

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

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

### 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.

**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'.

**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.

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.)

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- 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.

**Report Format:** DU Report with 'J' Qualifiers





**Project Name:** 60 MCLEAN AVENUE  
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**Report Date:** 05/31/22

**Data Qualifiers**

- 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:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223093  
**Report Date:** 05/31/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## 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.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

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**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **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), **EPA 600/4-81-045:** PCB-Oil.**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.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>1</u> of <u>4</u>		Date Rec'd in Lab <u>5/3/22</u>		ALPHA Job # <u>W2223093</u>																																																																																																																																																																																																														
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<b>Client Information</b> Client: <u>Impact Env. Closure</u> Address: <u>170 Kregland Ct Bohemia NY 11716</u> Phone: <u>631 269 8800</u> Fax: <u></u> Email: <u>C.Connolly@impactenv.com</u>		<b>Project Manager:</b> <u>C Connolly</u> <b>ALPHAQuote #:</b> <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Rush (only if pre approved) <input type="checkbox"/>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																																																																																
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<b>Please specify Metals or TAL.</b>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th colspan="10"></th> </tr> <tr> <th>Date</th> <th>Time</th> <th colspan="10"></th> </tr> </thead> <tbody> <tr><td>23093-01</td><td>SB-7 (0-2)</td><td>5-2-22</td><td>830</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02</td><td>SB-7 (7-9)</td><td>5-2-22</td><td>840</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03</td><td>SB-6 (0-2)</td><td>5-2-22</td><td>900</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>04</td><td>SB-6 (7-9)</td><td>5-2-22</td><td>915</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>05</td><td>SB-9 (0-4)</td><td>5-2-22</td><td>945</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>06</td><td>SB-8b (0-3)</td><td>5-2-22</td><td>930</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>07</td><td>SB-12 (0-4)</td><td>5-2-22</td><td>1130</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>08</td><td>SB-10a (0-3)</td><td>5-2-22</td><td>1030</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>09</td><td>SB-10b (0-3)</td><td>5-2-22</td><td>1100</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td>SB-16 (0-4)</td><td>5-2-22</td><td>1200</td><td>S</td><td>AK</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection			Sample Matrix	Sampler's Initials											Date	Time											23093-01	SB-7 (0-2)	5-2-22	830	S	AK	X	X	X	X									02	SB-7 (7-9)	5-2-22	840	S	AK	X	X	X	X									03	SB-6 (0-2)	5-2-22	900	S	AK	X	X	X	X									04	SB-6 (7-9)	5-2-22	915	S	AK	X	X	X	X									05	SB-9 (0-4)	5-2-22	945	S	AK	X	X	X	X									06	SB-8b (0-3)	5-2-22	930	S	AK	X	X	X	X									07	SB-12 (0-4)	5-2-22	1130	S	AK	X	X	X	X									08	SB-10a (0-3)	5-2-22	1030	S	AK	X	X	X	X									09	SB-10b (0-3)	5-2-22	1100	S	AK	X	X	X	X	X								10	SB-16 (0-4)	5-2-22	1200	S	AK	X	X	X	X									<b>Sample Specific Comments</b>	
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 <b>NEW YORK CHAIN OF CUSTODY</b> 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		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>2</u> of <u>4</u>		Date Rec'd in Lab <u>5/3/22</u>		ALPHA Job # <u>62223093</u>					
		<b>Project Information</b> Project Name: <u>60 McLean Ave</u> Project Location: <u>60 McLean Ave</u> Project # <u>15514</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #							
<b>Client Information</b> Client: <u>Impact Environmental</u> Address: <u>170 Keyland Ct</u> <u>Borenia, NY 11716</u> Phone: <u>631 269 8800</u> Fax: <u></u> Email: <u>ccomolly@impactenvironmental.com</u>		Project Manager: <u>C Connolly</u> ALPHAQuote #: <u></u> Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: <u></u> Rush (only if pre approved) <input type="checkbox"/> # of Days: <u></u>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:							
These samples have been previously analyzed by Alpha <input type="checkbox"/>						<b>ANALYSIS</b> <u>NY DEC 375 VOCs + TICs</u> <u>Part 375 SVOCs + TICs</u> <u>Part 375 metals Cr + 6 Cyanide</u> <u>Part 375 Pest, PCBs</u> <u>PFAS/PFOs + 1,4-dioxane</u> <u>PFAS/PFOs AX</u>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)					
Other project specific requirements/comments:						<b>Sample Specific Comments</b>		Total Bottles					
Please specify Metals or TAL.													
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials								
		Date	Time										
23093-11	SB-17 (2-4)	5-2-22	12:20	S	AK	X	X	X	X				
12	SB-17 (0-2)	5-2-22	12:15	S	AK	X	X	X	X				
13	SB-19 (0-2)	5-2-22	12:30	S	AK	X	X	X	X				
14	SB-19 (7-9)	5-2-22	12:45	S	AK	X	X	X	X	X			
15	SB-Dup-1	5-3-22	13:00	S	AK	X	X	X	X				
16	SB-18 (0-2)	5-3-22	13:10	S	AK	X	X	X	X				
17	SB-18 (7-9)	5-3-22	13:20	S	AK	X	X	X	X				
18	SB-11 (0-4)	5-3-22	13:30	S	AK	X	X	X	X				
19	SB-Dup-2	5-3-22	11:00	S	AK	X	X	X	X				
20	SB-1 (0-2)	5-3-22	10:35	S	AK	X	X	X	X				
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative		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: <u>[Signature]</u>		Date/Time: <u>5-3-22 14:00</u>		Received By: <u>[Signature]</u>		Date/Time: <u>5-3-22 14:00</u>							
Relinquished By: <u>[Signature]</u>		Date/Time: <u>5-3-22 15:30</u>		Received By: <u>[Signature]</u>		Date/Time: <u>5/3/22 16:10</u>							
Relinquished By: <u>[Signature]</u>		Date/Time: <u>5/3/22</u>		Received By: <u>[Signature]</u>		Date/Time: <u>5/3/22 2000</u>							



 <b>NEW YORK CHAIN OF CUSTODY</b> 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		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <b>3</b> of <b>4</b>		Date Rec'd in Lab <b>5/3/22</b>		ALPHA Job # <b>2223093</b>	
		<b>Project Information</b> Project Name: <b>60 Mclean Ave</b> Project Location: <b>60 Mclean Ave</b> Project # <b>15514</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #			
<b>Client Information</b> Client: <b>Impact Environmental</b> Address: <b>120 Keyland Ct</b> <b>Bohemia, NY</b> Phone: <b>631 269 8800</b> Fax: <b>631 269 8800</b> Email: <b>C.Connolly@impactenv.com</b>		<b>Project Manager:</b> <b>C Connolly</b> <b>ALPHAQuote #:</b> <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Rush (only if pre approved) <input type="checkbox"/>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:			
These samples have been previously analyzed by Alpha <input type="checkbox"/>						<b>ANALYSIS</b> NY DEC Part 375 VOCs + tics Part 375 SVOCs + tics Part 375 Metals, Cr+6, Cyanide Part 375 pest, PCBs PFAS/PFOs + 1,4-dioxane TCL/PAH, VOCs, SVOCs, Metals, pest, PCBs Part 375 VOCs		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)	
Other project specific requirements/comments:						<b>Sample Specific Comments</b>		<b>Total Bottles</b>	
Please specify Metals or TAL.									
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials	
23093-21		SB-2 (0-2)		5-3-22 11:15		S		ALC	
26		SB-ms-1		5-3-22 11:50		S		ALC	
26		SB-msd-1		5-3-22 11:55		S		ALC	
27		SB-ms-2		5-3-22 12:30		S		ALC	
27		SB-msd-2		5-3-22 12:35		S		ALC	
22		Field Blank-1		5-3-22 13:00		L		ALC	
23		Field Blank-2		5-3-22 13:30		L		ALC	
24		Trip Blank 1		5-3-22 -		L		ALC	
25		SB-3 (0-2)		5-3-22 12:40		S		ALC	
26		SB-4 (0-2)		5-3-22 12:50		S		ALC	
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		Preservative	
Relinquished By: <b>[Signature]</b>		Date/Time: <b>5-3-22 14:00</b>		Received By: <b>[Signature]</b>		Date/Time: <b>5-3-22 14:00</b>		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)		<b>[Signature]</b>		<b>5/3/22</b>		<b>[Signature]</b>		<b>5/3/22</b>	



ALPHA Job #  
12223093

☐ Same as Client Info  
PO #

☐ NJ ☐ NY  
☐ Other:

Sample Specific Comments
<p>1. The sample is a 100% pure substance, as indicated by the single sharp peak in the mass spectrum.</p> <p>2. The molecular ion peak is observed at m/z 100, which is consistent with the molecular formula C<sub>8</sub>H<sub>8</sub>.</p> <p>3. The base peak is at m/z 77, which is characteristic of the phenyl cation (C<sub>6</sub>H<sub>5</sub><sup>+</sup>).</p> <p>4. The fragmentation pattern is consistent with the structure of toluene (C<sub>6</sub>H<sub>5</sub>CH<sub>3</sub>).</p>

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.)



## ANALYTICAL REPORT

Lab Number:	L2223458
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	60 MCLEAN AVENUE
Project Number:	15514
Report Date:	05/24/22

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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





**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2223458-01	SB-20 (0-2)	SOIL	60 MCLEAN AVENUE	05/04/22 10:00	05/04/22
L2223458-02	SB-20 (7-9)	SOIL	60 MCLEAN AVENUE	05/04/22 10:15	05/04/22
L2223458-03	SB-20 (13-15)	SOIL	60 MCLEAN AVENUE	05/04/22 10:20	05/04/22
L2223458-04	SB-14 (0-4)	SOIL	60 MCLEAN AVENUE	05/04/22 11:30	05/04/22
L2223458-05	SB-DUP-1	SOIL	60 MCLEAN AVENUE	05/03/22 12:00	05/04/22

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### 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.

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**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Case Narrative (continued)

#### Report Submission

May 24, 2022: This final report includes the results of all requested analyses.

May 20, 2022: This is a preliminary report.

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

#### Sample Receipt

L2223458-03: At the client's request, the analyses of Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Total Metals, Hexavalent Chromium and Total Cyanide were not performed.

#### Volatile Organics

L2223458-02: The internal standard (IS) responses for fluorobenzene (13%), chlorobenzene-d5 (15%), and 1,4-dichlorobenzene-d4 (14%) and the surrogate recovery for 1,2-dichloroethane-d4 (164%) were outside the acceptance criteria; however, re-analysis achieved the following results: fluorobenzene (10%), chlorobenzene-d5 (12%), and 1,4-dichlorobenzene-d4 (12%) and 1,2-dichloroethane-d4 (169%). The results of both analyses are reported.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2223458-05: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

L2223458-05: The MeOH fraction of the extraction is reported for perfluorooctanesulfonamide (fosa) due to better extraction efficiency of the perfluoro[13c8]octanesulfonamide (m8fosa) Extracted Internal Standard.

#### Total Metals

The WG1640166-3 MS recoveries, performed on L2223458-01, are outside the acceptance criteria for lead (68%), nickel (64%), silver (74%) and zinc (71%). A post digestion spike was performed and yielded

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Case Narrative (continued)

unacceptable recoveries for lead (76%), nickel (73%), silver (70%) and zinc (75%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

The WG1640166-3 MS recoveries, performed on L2223458-01, are outside the acceptance criteria for barium (69%), beryllium (72%), cadmium (72%), chromium (67%), copper (139%), manganese (69%) and selenium (66%). A post digestion spike was performed and was within acceptance criteria.

The WG1640166-6 serial dilution analysis, associated with L2223458-01, had a %D above the acceptance criteria for copper (29%) and manganese (21%).

#### Cyanide, Total

The WG1639289-2 LCS recovery for cyanide, total (42%), associated with L2223458-05, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported. The LCS/LCSD RPD is above the acceptance criteria for cyanide, total (67%).

The WG1639561-2/-3 LCS/LCSD recoveries for cyanide, total (76%/77%), associated with L2223458-01, -02, and -04, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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

Authorized Signature: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 05/24/22

# ORGANICS

# **VOLATILES**

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 00:53  
**Analyst:** JC  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	ND		ug/kg	11	5.4	1
2-Butanone	ND		ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.38	1
1,4-Dioxane	ND		ug/kg	90	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 01:18  
**Analyst:** JC  
**Percent Solids:** 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.4	3.9	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.24	1
Chloroform	ND		ug/kg	2.5	0.24	1
Carbon tetrachloride	ND		ug/kg	1.7	0.39	1
Tetrachloroethene	ND		ug/kg	0.84	0.33	1
Chlorobenzene	ND		ug/kg	0.84	0.21	1
1,2-Dichloroethane	ND		ug/kg	1.7	0.43	1
1,1,1-Trichloroethane	ND		ug/kg	0.84	0.28	1
Benzene	ND		ug/kg	0.84	0.28	1
Toluene	ND		ug/kg	1.7	0.92	1
Ethylbenzene	ND		ug/kg	1.7	0.24	1
Vinyl chloride	ND		ug/kg	1.7	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.7	0.40	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	0.23	1
Trichloroethene	ND		ug/kg	0.84	0.23	1
1,2-Dichlorobenzene	ND		ug/kg	3.4	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	3.4	0.29	1
Methyl tert butyl ether	ND		ug/kg	3.4	0.34	1
p/m-Xylene	ND		ug/kg	3.4	0.94	1
o-Xylene	ND		ug/kg	1.7	0.49	1
cis-1,2-Dichloroethene	ND		ug/kg	1.7	0.30	1
Acetone	42		ug/kg	17	8.1	1
2-Butanone	ND		ug/kg	17	3.7	1
n-Butylbenzene	ND		ug/kg	1.7	0.28	1
sec-Butylbenzene	ND		ug/kg	1.7	0.25	1
tert-Butylbenzene	ND		ug/kg	3.4	0.20	1
n-Propylbenzene	ND		ug/kg	1.7	0.29	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	3.4	0.33	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.4	0.56	1
1,4-Dioxane	ND		ug/kg	140	59.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	164	Q	70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	118		70-130

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS**

Lab ID: L2223458-02 R

Date Collected: 05/04/22 10:15

Client ID: SB-20 (7-9)

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 05/11/22 21:38

Analyst: JC

Percent Solids: 90%

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
Tetrachloroethene	ND		ug/kg	0.58	0.22	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.2	0.38	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
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	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Acetone	9.7	J	ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.6	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.2	0.20	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02 R  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	92	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	169	Q	70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	119		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 02:07  
**Analyst:** JC  
**Percent Solids:** 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Benzene	0.31	J	ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	0.32	J	ug/kg	1.2	0.17	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
Acetone	ND		ug/kg	12	5.8	1
2-Butanone	ND		ug/kg	12	2.7	1
n-Butylbenzene	1.0	J	ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
n-Propylbenzene	ND		ug/kg	1.2	0.21	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	0.78	J	ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	97	42.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 05/11/22 01:42  
**Analyst:** JC  
**Percent Solids:** 93%

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	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.1	0.38	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
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	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	0.53	J	ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Acetone	31		ug/kg	11	5.5	1
2-Butanone	4.4	J	ug/kg	11	2.5	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3,5-Trimethylbenzene	0.45	J	ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	0.40	J	ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	91	40.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/10/22 21:09  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1637730-5					
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
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.0	0.34
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
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
Acetone	ND		ug/kg	10	4.8
2-Butanone	ND		ug/kg	10	2.2
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 05/10/22 21:09  
**Analyst:** AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1637730-5					
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	95		70-130

Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458

Project Number: 15514

Report Date: 05/24/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 05/11/22 20:24  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02 Batch: WG1639494-5					
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
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/kg	1.0	0.34
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
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
Acetone	ND		ug/kg	10	4.8
2-Butanone	ND		ug/kg	10	2.2
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 05/11/22 20:24  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02 Batch: WG1639494-5					
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	94		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1637730-3 WG1637730-4								
Methylene chloride	98		90		70-130	9		30
1,1-Dichloroethane	108		99		70-130	9		30
Chloroform	102		94		70-130	8		30
Carbon tetrachloride	96		88		70-130	9		30
Tetrachloroethene	103		93		70-130	10		30
Chlorobenzene	110		98		70-130	12		30
1,2-Dichloroethane	103		95		70-130	8		30
1,1,1-Trichloroethane	103		95		70-130	8		30
Benzene	108		98		70-130	10		30
Toluene	108		97		70-130	11		30
Ethylbenzene	111		99		70-130	11		30
Vinyl chloride	126		114		67-130	10		30
1,1-Dichloroethene	101		92		65-135	9		30
trans-1,2-Dichloroethene	102		94		70-130	8		30
Trichloroethene	105		95		70-130	10		30
1,2-Dichlorobenzene	106		98		70-130	8		30
1,3-Dichlorobenzene	108		98		70-130	10		30
1,4-Dichlorobenzene	108		99		70-130	9		30
Methyl tert butyl ether	102		96		66-130	6		30
p/m-Xylene	112		101		70-130	10		30
o-Xylene	113		102		70-130	10		30
cis-1,2-Dichloroethene	104		95		70-130	9		30
Acetone	95		88		54-140	8		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1637730-3 WG1637730-4								
2-Butanone	93		89		70-130	4		30
n-Butylbenzene	116		107		70-130	8		30
sec-Butylbenzene	114		104		70-130	9		30
tert-Butylbenzene	110		99		70-130	11		30
n-Propylbenzene	116		106		70-130	9		30
1,3,5-Trimethylbenzene	114		103		70-130	10		30
1,2,4-Trimethylbenzene	113		103		70-130	9		30
1,4-Dioxane	106		104		65-136	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		102		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	95		96		70-130

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02 Batch: WG1639494-3 WG1639494-4								
Methylene chloride	96		102		70-130	6		30
1,1-Dichloroethane	110		116		70-130	5		30
Chloroform	102		109		70-130	7		30
Carbon tetrachloride	103		110		70-130	7		30
Tetrachloroethene	109		115		70-130	5		30
Chlorobenzene	107		115		70-130	7		30
1,2-Dichloroethane	98		105		70-130	7		30
1,1,1-Trichloroethane	110		116		70-130	5		30
Benzene	109		115		70-130	5		30
Toluene	109		114		70-130	4		30
Ethylbenzene	112		119		70-130	6		30
Vinyl chloride	132	Q	140	Q	67-130	6		30
1,1-Dichloroethene	109		113		65-135	4		30
trans-1,2-Dichloroethene	107		113		70-130	5		30
Trichloroethene	108		114		70-130	5		30
1,2-Dichlorobenzene	105		112		70-130	6		30
1,3-Dichlorobenzene	109		115		70-130	5		30
1,4-Dichlorobenzene	109		115		70-130	5		30
Methyl tert butyl ether	96		103		66-130	7		30
p/m-Xylene	113		120		70-130	6		30
o-Xylene	113		120		70-130	6		30
cis-1,2-Dichloroethene	104		111		70-130	7		30
Acetone	94		95		54-140	1		30

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Lab Number:** L2223458

**Project Number:** 15514

**Report Date:** 05/24/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02 Batch: WG1639494-3 WG1639494-4								
2-Butanone	86		93		70-130	8		30
n-Butylbenzene	129		136	Q	70-130	5		30
sec-Butylbenzene	124		131	Q	70-130	5		30
tert-Butylbenzene	117		122		70-130	4		30
n-Propylbenzene	124		130		70-130	5		30
1,3,5-Trimethylbenzene	118		124		70-130	5		30
1,2,4-Trimethylbenzene	116		122		70-130	5		30
1,4-Dioxane	98		104		65-136	6		30

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	99		101		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	94		95		70-130



# SEMIVOLATILES

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/15/22 20:48  
**Analyst:** JG  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 03:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Fluoranthene	ND		ug/kg	120	22.	1
Naphthalene	ND		ug/kg	190	24.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Dibenzofuran	ND		ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	160	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

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	53		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/15/22 21:12  
**Analyst:** JG  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 03:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Dibenzofuran	ND		ug/kg	180	17.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	53		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/18/22 20:48  
**Analyst:** ALS  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/18/22 12:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	ND		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Dibenzofuran	ND		ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	102		25-120
Phenol-d6	105		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	95		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	97		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 05/15/22 22:00  
**Analyst:** JG  
**Percent Solids:** 93%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 03:39

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	100	20.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	180	21.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	30.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Dibenzofuran	ND		ug/kg	180	16.	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



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	47		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/14/22 23:27  
**Analyst:** SG  
**Percent Solids:** 93%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.493	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.493	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.247	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.493	0.052	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.247	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.247	0.060	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.247	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.493	0.177	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.493	0.135	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.247	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.247	0.128	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.247	0.066	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.493	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.493	0.199	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.493	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.493	0.151	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.493	0.083	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.493	0.069	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.493	0.202	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.493	0.053	1
PFOA/PFOS, Total	ND		ng/g	0.247	0.041	1

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS****Lab ID:** L2223458-05**Date Collected:** 05/03/22 12:00**Client ID:** SB-DUP-1**Date Received:** 05/04/22**Sample Location:** 60 MCLEAN AVENUE**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	78		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	86		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	83		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	24	Q	31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		61-155
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	34		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	54		24-159

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/15/22 12:27  
**Analyst:** SG  
**Percent Solids:** 93%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.493	0.097	1
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			87		10-117	

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/12/22 01:40  
**Analyst:** JG

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,05 Batch: WG1635905-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
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.
Dibenzofuran	ND		ug/kg	160	16.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/12/22 01:40  
 Analyst: JG

Extraction Method: EPA 3546  
 Extraction Date: 05/09/22 02:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,05 Batch: WG1635905-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	72		18-120

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/14/22 21:31  
**Analyst:** SG

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05 Batch: WG1637514-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.500	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.500	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.250	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.500	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.250	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.250	0.061
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.250	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.500	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.500	0.136
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.250	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.250	0.130
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.250	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.500	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.500	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.500	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.500	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.500	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.500	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.500	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.500	0.054
PFOA/PFOS, Total	ND		ng/g	0.250	0.042

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/14/22 21:31  
**Analyst:** SG

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05 Batch: WG1637514-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	84		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	76		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	73		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	81		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	79		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	80		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	65		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	53		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	58		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	55		24-159



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 05/15/22 12:06  
**Analyst:** SG

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 05/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05 Batch: WG1637514-1					
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	94		10-117

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 05/18/22 19:37  
**Analyst:** ALS

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/18/22 12:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1639985-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
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.
Dibenzofuran	ND		ug/kg	160	15.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 05/18/22 19:37  
 Analyst: ALS

Extraction Method: EPA 3546  
 Extraction Date: 05/18/22 12:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1639985-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	93		25-120
Phenol-d6	94		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	86		18-120

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1635905-2 WG1635905-3								
Acenaphthene	65		71		31-137	9		50
Hexachlorobenzene	61		68		40-140	11		50
Fluoranthene	67		74		40-140	10		50
Naphthalene	66		72		40-140	9		50
Benzo(a)anthracene	63		69		40-140	9		50
Benzo(a)pyrene	58		63		40-140	8		50
Benzo(b)fluoranthene	58		63		40-140	8		50
Benzo(k)fluoranthene	60		65		40-140	8		50
Chrysene	61		67		40-140	9		50
Acenaphthylene	68		76		40-140	11		50
Anthracene	64		70		40-140	9		50
Benzo(ghi)perylene	66		71		40-140	7		50
Fluorene	67		73		40-140	9		50
Phenanthrene	67		73		40-140	9		50
Dibenzo(a,h)anthracene	64		70		40-140	9		50
Indeno(1,2,3-cd)pyrene	70		76		40-140	8		50
Pyrene	66		73		35-142	10		50
Dibenzofuran	67		74		40-140	10		50
Pentachlorophenol	61		68		17-109	11		50
Phenol	74		82		26-90	10		50
2-Methylphenol	70		79		30-130	12		50
3-Methylphenol/4-Methylphenol	77		86		30-130	11		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223458**Report Date:** 05/24/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1635905-2 WG1635905-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	77		82		25-120
Phenol-d6	81		87		10-120
Nitrobenzene-d5	76		82		23-120
2-Fluorobiphenyl	71		77		30-120
2,4,6-Tribromophenol	72		78		10-136
4-Terphenyl-d14	63		67		18-120

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 Batch: WG1637514-2								
Perfluorobutanoic Acid (PFBA)	93		-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	93		-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	93		-		72-128	-		30
Perfluorohexanoic Acid (PFHxA)	92		-		70-132	-		30
Perfluoroheptanoic Acid (PFHpA)	91		-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	102		-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	98		-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	94		-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	109		-		70-132	-		30
Perfluorononanoic Acid (PFNA)	100		-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	114		-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	90		-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	92		-		65-137	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	105		-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	109		-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	84		-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	98		-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	94		-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	99		-		69-135	-		30
Perfluorotridecanoic Acid (PFTrDA)	96		-		66-139	-		30
Perfluorotetradecanoic Acid (PFTA)	97		-		69-133	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 Batch: WG1637514-2								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	86				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91				58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87				74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89				78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	80				20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86				72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	81				79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99				19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	65				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82				61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35				10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71				34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	68				24-159

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223458**Report Date:** 05/24/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 Batch: WG1637514-2								
Perfluorooctanesulfonamide (FOSA)	110		-		67-137	-		30

<b>Surrogate (Extracted Internal Standard)</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	91				10-117



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1639985-2 WG1639985-3								
Acenaphthene	62		66		31-137	6		50
Hexachlorobenzene	71		76		40-140	7		50
Fluoranthene	68		71		40-140	4		50
Naphthalene	67		71		40-140	6		50
Benzo(a)anthracene	69		72		40-140	4		50
Benzo(a)pyrene	74		77		40-140	4		50
Benzo(b)fluoranthene	70		73		40-140	4		50
Benzo(k)fluoranthene	72		75		40-140	4		50
Chrysene	66		69		40-140	4		50
Acenaphthylene	71		75		40-140	5		50
Anthracene	65		68		40-140	5		50
Benzo(ghi)perylene	73		75		40-140	3		50
Fluorene	65		69		40-140	6		50
Phenanthrene	63		67		40-140	6		50
Dibenzo(a,h)anthracene	76		79		40-140	4		50
Indeno(1,2,3-cd)pyrene	82		84		40-140	2		50
Pyrene	66		70		35-142	6		50
Dibenzofuran	67		71		40-140	6		50
Pentachlorophenol	45		48		17-109	6		50
Phenol	78		82		26-90	5		50
2-Methylphenol	74		78		30-130	5		50
3-Methylphenol/4-Methylphenol	75		79		30-130	5		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 60 MCLEAN AVENUE**Project Number:** 15514**Lab Number:** L2223458**Report Date:** 05/24/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1639985-2 WG1639985-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	71		77		25-120
Phenol-d6	74		77		10-120
Nitrobenzene-d5	66		71		23-120
2-Fluorobiphenyl	64		67		30-120
2,4,6-Tribromophenol	71		75		10-136
4-Terphenyl-d14	64		66		18-120

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1637514-3 QC Sample: L2223048-01 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	ND	5.34	4.90	92		-	-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	ND	5.34	4.85	91		-	-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.74	4.16	88		-	-		72-128	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	5.01	4.49	90		-	-		62-145	-		30
Perfluorohexanoic Acid (PFHxA)	ND	5.34	4.84	91		-	-		70-132	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	5.03	4.50	90		-	-		73-123	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	5.34	4.84	91		-	-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.88	4.87	100		-	-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	0.224JF	5.34	5.88	106		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	5.08	4.77	94		-	-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	5.09	4.94	97		-	-		70-132	-		30
Perfluorononanoic Acid (PFNA)	ND	5.34	5.44	102		-	-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	0.176J	4.96	5.40	105		-	-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	ND	5.34	4.51	85		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	5.13	5.60	109		-	-		65-137	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	5.14	5.39	105		-	-		69-125	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	5.34	5.80	109		-	-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	5.34	5.93	111		-	-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.16	4.29	83		-	-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	ND	5.34	4.84	91		-	-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	5.34	4.71	88		-	-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	ND	5.34	4.98	93		-	-		69-135	-		30

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

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 Isotope Dilution - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1637514-3 QC Sample: L2223048-01 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTTrDA)	ND	5.34	5.22	98		-	-		66-139	-		30
Perfluorotetradecanoic Acid (PFTTA)	ND	5.34	5.24	98		-	-		69-133	-		30

Surrogate (Extracted Internal Standard)	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	88				19-175
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	70				14-167
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78				20-154
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71				34-137
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	49				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85				61-155
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93				75-130
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97				78-139
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	88				24-159
Perfluoro[13C4]Butanoic Acid (MPFBA)	87				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	96				58-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	79				10-117
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95				79-136
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85				75-130
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91				72-140
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93				74-139

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1637514-4 QC Sample: L2223048-02 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	ND	ND	ng/g	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ng/g	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/g	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/g	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	ND	ng/g	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/g	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/g	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/g	NC		30
Perfluorooctanoic Acid (PFOA)	0.056J	0.053J	ng/g	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/g	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/g	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/g	NC		30
Perfluorooctanesulfonic Acid (PFOS)	0.978	0.965	ng/g	1		30
Perfluorodecanoic Acid (PFDA)	0.089JF	ND	ng/g	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/g	NC		30
Perfluorononanesulfonic Acid (PFNS)	ND	ND	ng/g	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/g	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	0.051J	ng/g	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/g	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/g	NC		30

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1637514-4 QC Sample: L2223048-02 Client ID: DUP Sample						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/g	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/g	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ng/g	NC		30
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/g	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		96		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		102		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		103		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	86		82		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101		98		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	100		99		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		106		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		95		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	100		98		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		98		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		104		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		95		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	139		124		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	92		91		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		94		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	79		77		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	104		104		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	99		98		54-150

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1637514-4 QC Sample: L2223048-02 Client ID: DUP Sample						

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	98		92		24-159

# PCBS



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 11:54  
**Analyst:** WR  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 07:23  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/09/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.9	3.46	1	A
Aroclor 1221	ND		ug/kg	38.9	3.90	1	A
Aroclor 1232	ND		ug/kg	38.9	8.25	1	A
Aroclor 1242	ND		ug/kg	38.9	5.25	1	A
Aroclor 1248	ND		ug/kg	38.9	5.84	1	A
Aroclor 1254	ND		ug/kg	38.9	4.26	1	A
Aroclor 1260	12.4	J	ug/kg	38.9	7.19	1	B
Aroclor 1262	ND		ug/kg	38.9	4.94	1	A
Aroclor 1268	ND		ug/kg	38.9	4.03	1	A
PCBs, Total	12.4	J	ug/kg	38.9	3.46	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	51		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:03  
**Analyst:** WR  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 07:23  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/09/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.64	1	A
Aroclor 1232	ND		ug/kg	36.4	7.71	1	A
Aroclor 1242	ND		ug/kg	36.4	4.90	1	A
Aroclor 1248	ND		ug/kg	36.4	5.45	1	A
Aroclor 1254	ND		ug/kg	36.4	3.98	1	A
Aroclor 1260	11.0	J	ug/kg	36.4	6.72	1	B
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	11.0	J	ug/kg	36.4	3.23	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	60		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:11  
**Analyst:** WR  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 07:23  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/09/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	3.31	1	A
Aroclor 1221	ND		ug/kg	37.3	3.74	1	A
Aroclor 1232	ND		ug/kg	37.3	7.91	1	A
Aroclor 1242	ND		ug/kg	37.3	5.03	1	A
Aroclor 1248	ND		ug/kg	37.3	5.60	1	A
Aroclor 1254	ND		ug/kg	37.3	4.08	1	A
Aroclor 1260	11.4	J	ug/kg	37.3	6.90	1	B
Aroclor 1262	ND		ug/kg	37.3	4.74	1	A
Aroclor 1268	ND		ug/kg	37.3	3.86	1	A
PCBs, Total	11.4	J	ug/kg	37.3	3.31	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	38		30-150	A
Decachlorobiphenyl	35		30-150	A
2,4,5,6-Tetrachloro-m-xylene	40		30-150	B
Decachlorobiphenyl	34		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 05/09/22 12:38  
**Analyst:** WR  
**Percent Solids:** 93%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/08/22 07:23  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 05/09/22  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.6	3.16	1	A
Aroclor 1221	ND		ug/kg	35.6	3.57	1	A
Aroclor 1232	ND		ug/kg	35.6	7.55	1	A
Aroclor 1242	ND		ug/kg	35.6	4.80	1	A
Aroclor 1248	ND		ug/kg	35.6	5.34	1	A
Aroclor 1254	ND		ug/kg	35.6	3.90	1	A
Aroclor 1260	11.2	J	ug/kg	35.6	6.58	1	B
Aroclor 1262	ND		ug/kg	35.6	4.52	1	A
Aroclor 1268	ND		ug/kg	35.6	3.69	1	A
PCBs, Total	11.2	J	ug/kg	35.6	3.16	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	74		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 05/09/22 10:18  
 Analyst: WR

Extraction Method: EPA 3546  
 Extraction Date: 05/08/22 07:23  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 05/08/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 05/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1635800-1						
Aroclor 1016	ND		ug/kg	32.0	2.84	A
Aroclor 1221	ND		ug/kg	32.0	3.20	A
Aroclor 1232	ND		ug/kg	32.0	6.78	A
Aroclor 1242	ND		ug/kg	32.0	4.31	A
Aroclor 1248	ND		ug/kg	32.0	4.80	A
Aroclor 1254	ND		ug/kg	32.0	3.50	A
Aroclor 1262	ND		ug/kg	32.0	4.06	A
Aroclor 1268	ND		ug/kg	32.0	3.31	A
Aroclor 1260	9.68	J	ug/kg	32.0	5.91	B
PCBs, Total	9.68	J	ug/kg	32.0	2.84	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	78		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1635800-2 WG1635800-3									
Aroclor 1016	70		69		40-140	1		50	A
Aroclor 1260	66		67		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		68		30-150	A
Decachlorobiphenyl	71		70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		69		30-150	B
Decachlorobiphenyl	71		71		30-150	B

# PESTICIDES

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-01  
**Client ID:** SB-20 (0-2)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 07:03  
**Analyst:** EJL  
**Percent Solids:** 85%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 05:36  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.88	0.368	1	A
Lindane	ND		ug/kg	0.783	0.350	1	A
Alpha-BHC	ND		ug/kg	0.783	0.222	1	A
Beta-BHC	ND		ug/kg	1.88	0.713	1	A
Heptachlor	ND		ug/kg	0.940	0.421	1	A
Aldrin	ND		ug/kg	1.88	0.662	1	A
Endrin	ND		ug/kg	0.783	0.321	1	A
Dieldrin	ND		ug/kg	1.17	0.587	1	A
4,4'-DDE	ND		ug/kg	1.88	0.435	1	A
4,4'-DDD	ND		ug/kg	1.88	0.670	1	A
4,4'-DDT	ND		ug/kg	3.52	1.51	1	A
Endosulfan I	ND		ug/kg	1.88	0.444	1	A
Endosulfan II	ND		ug/kg	1.88	0.628	1	A
Endosulfan sulfate	ND		ug/kg	0.783	0.373	1	A
cis-Chlordane	ND		ug/kg	2.35	0.655	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	119		30-150	A
2,4,5,6-Tetrachloro-m-xylene	107		30-150	B
Decachlorobiphenyl	101		30-150	B



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-02  
**Client ID:** SB-20 (7-9)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 10:15  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 07:15  
**Analyst:** EJJ  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 05:36  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.335	1	A
Lindane	ND		ug/kg	0.713	0.319	1	A
Alpha-BHC	ND		ug/kg	0.713	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.649	1	A
Heptachlor	ND		ug/kg	0.856	0.384	1	A
Aldrin	ND		ug/kg	1.71	0.603	1	A
Endrin	ND		ug/kg	0.713	0.292	1	A
Dieldrin	ND		ug/kg	1.07	0.535	1	A
4,4'-DDE	ND		ug/kg	1.71	0.396	1	A
4,4'-DDD	ND		ug/kg	1.71	0.610	1	A
4,4'-DDT	ND		ug/kg	3.21	1.38	1	A
Endosulfan I	ND		ug/kg	1.71	0.404	1	A
Endosulfan II	ND		ug/kg	1.71	0.572	1	A
Endosulfan sulfate	ND		ug/kg	0.713	0.340	1	A
cis-Chlordane	ND		ug/kg	2.14	0.596	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	126		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	71		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-04  
**Client ID:** SB-14 (0-4)  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/04/22 11:30  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 07:28  
**Analyst:** EJJ  
**Percent Solids:** 87%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 05:36  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.736	0.329	1	A
Alpha-BHC	ND		ug/kg	0.736	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.670	1	A
Heptachlor	ND		ug/kg	0.883	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.622	1	A
Endrin	ND		ug/kg	0.736	0.302	1	A
Dieldrin	ND		ug/kg	1.10	0.552	1	A
4,4'-DDE	ND		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.630	1	A
4,4'-DDT	ND		ug/kg	3.31	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.417	1	A
Endosulfan II	ND		ug/kg	1.77	0.590	1	A
Endosulfan sulfate	ND		ug/kg	0.736	0.350	1	A
cis-Chlordane	ND		ug/kg	2.21	0.615	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	64		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**SAMPLE RESULTS**

**Lab ID:** L2223458-05  
**Client ID:** SB-DUP-1  
**Sample Location:** 60 MCLEAN AVENUE

**Date Collected:** 05/03/22 12:00  
**Date Received:** 05/04/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 07:41  
**Analyst:** EJJ  
**Percent Solids:** 93%

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 05:36  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.332	1	A
Lindane	ND		ug/kg	0.707	0.316	1	A
Alpha-BHC	ND		ug/kg	0.707	0.201	1	A
Beta-BHC	ND		ug/kg	1.70	0.644	1	A
Heptachlor	ND		ug/kg	0.849	0.380	1	A
Aldrin	ND		ug/kg	1.70	0.598	1	A
Endrin	ND		ug/kg	0.707	0.290	1	A
Dieldrin	ND		ug/kg	1.06	0.530	1	A
4,4'-DDE	ND		ug/kg	1.70	0.392	1	A
4,4'-DDD	ND		ug/kg	1.70	0.605	1	A
4,4'-DDT	ND		ug/kg	3.18	1.36	1	A
Endosulfan I	ND		ug/kg	1.70	0.401	1	A
Endosulfan II	ND		ug/kg	1.70	0.567	1	A
Endosulfan sulfate	ND		ug/kg	0.707	0.337	1	A
cis-Chlordane	ND		ug/kg	2.12	0.591	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	75		30-150	B

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 05/10/22 05:47  
**Analyst:** AR

**Extraction Method:** EPA 3546  
**Extraction Date:** 05/09/22 05:36  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 05/09/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1635921-1						
Delta-BHC	ND		ug/kg	1.52	0.298	A
Lindane	ND		ug/kg	0.635	0.284	A
Alpha-BHC	ND		ug/kg	0.635	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.578	A
Heptachlor	ND		ug/kg	0.762	0.342	A
Aldrin	ND		ug/kg	1.52	0.536	A
Endrin	ND		ug/kg	0.635	0.260	A
Dieldrin	ND		ug/kg	0.952	0.476	A
4,4'-DDE	ND		ug/kg	1.52	0.352	A
4,4'-DDD	ND		ug/kg	1.52	0.543	A
4,4'-DDT	ND		ug/kg	2.86	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.360	A
Endosulfan II	ND		ug/kg	1.52	0.509	A
Endosulfan sulfate	ND		ug/kg	0.635	0.302	A
cis-Chlordane	ND		ug/kg	1.90	0.531	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	79		30-150	B

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1635921-2 WG1635921-3									
Delta-BHC	66		62		30-150	6		30	A
Lindane	67		64		30-150	5		30	A
Alpha-BHC	70		66		30-150	6		30	A
Beta-BHC	62		59		30-150	5		30	A
Heptachlor	53		49		30-150	8		30	A
Aldrin	64		60		30-150	6		30	A
Endrin	70		64		30-150	9		30	A
Dieldrin	77		71		30-150	8		30	A
4,4'-DDE	76		71		30-150	7		30	A
4,4'-DDD	84		76		30-150	10		30	A
4,4'-DDT	73		68		30-150	7		30	A
Endosulfan I	61		57		30-150	7		30	A
Endosulfan II	71		65		30-150	9		30	A
Endosulfan sulfate	54		51		30-150	6		30	A
cis-Chlordane	71		62		30-150	14		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		64		30-150	A
Decachlorobiphenyl	92		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		62		30-150	B
Decachlorobiphenyl	57		55		30-150	B

## METALS

**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS**

Lab ID: L2223458-01

Date Collected: 05/04/22 10:00

Client ID: SB-20 (0-2)

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.29		mg/kg	0.463	0.096	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Barium, Total	34.7		mg/kg	0.463	0.081	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Beryllium, Total	0.278		mg/kg	0.232	0.015	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Cadmium, Total	0.180	J	mg/kg	0.463	0.045	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Chromium, Total	9.88		mg/kg	0.463	0.044	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Copper, Total	17.5		mg/kg	0.463	0.119	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Lead, Total	6.09		mg/kg	2.32	0.124	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Manganese, Total	40.5		mg/kg	0.463	0.074	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Mercury, Total	0.050	J	mg/kg	0.075	0.049	1	05/19/22 11:15	05/19/22 14:28	EPA 7471B	1,7471B	AW
Nickel, Total	6.09		mg/kg	1.16	0.112	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.926	0.119	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.463	0.131	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
Zinc, Total	15.2		mg/kg	2.32	0.136	1	05/19/22 08:00	05/19/22 16:11	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	9.4	J	mg/kg	0.95	0.95	1		05/19/22 16:11	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS**

Lab ID: L2223458-02

Date Collected: 05/04/22 10:15

Client ID: SB-20 (7-9)

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.19		mg/kg	0.434	0.090	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Barium, Total	15.7		mg/kg	0.434	0.076	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Beryllium, Total	0.087	J	mg/kg	0.217	0.014	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Cadmium, Total	0.139	J	mg/kg	0.434	0.043	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Chromium, Total	7.75		mg/kg	0.434	0.042	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Copper, Total	8.82		mg/kg	0.434	0.112	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Lead, Total	2.38		mg/kg	2.17	0.116	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Manganese, Total	38.9		mg/kg	0.434	0.069	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.070	0.046	1	05/19/22 11:15	05/19/22 14:31	EPA 7471B	1,7471B	AW
Nickel, Total	6.79		mg/kg	1.08	0.105	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.868	0.112	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.434	0.123	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
Zinc, Total	15.0		mg/kg	2.17	0.127	1	05/19/22 08:00	05/19/22 16:48	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	7.3	J	mg/kg	0.89	0.89	1		05/19/22 16:48	NA	107,-	





**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS**

Lab ID: L2223458-04

Date Collected: 05/04/22 11:30

Client ID: SB-14 (0-4)

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVENUE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	1.00		mg/kg	0.456	0.095	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Barium, Total	76.9		mg/kg	0.456	0.079	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Beryllium, Total	0.200	J	mg/kg	0.228	0.015	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Cadmium, Total	0.433	J	mg/kg	0.456	0.045	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Chromium, Total	27.0		mg/kg	0.456	0.044	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Copper, Total	32.0		mg/kg	0.456	0.118	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Lead, Total	3.38		mg/kg	2.28	0.122	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Manganese, Total	154		mg/kg	0.456	0.072	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.073	0.048	1	05/19/22 11:15	05/19/22 14:34	EPA 7471B	1,7471B	AW
Nickel, Total	20.1		mg/kg	1.14	0.110	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.911	0.118	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.456	0.129	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
Zinc, Total	40.0		mg/kg	2.28	0.133	1	05/19/22 08:00	05/19/22 16:53	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	27	J	mg/kg	0.92	0.92	1		05/19/22 16:53	NA	107,-	



**Project Name:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22**SAMPLE RESULTS**

Lab ID: L2223458-05

Date Collected: 05/03/22 12:00

Client ID: SB-DUP-1

Date Received: 05/04/22

Sample Location: 60 MCLEAN AVENUE

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.898		mg/kg	0.420	0.087	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Barium, Total	18.5		mg/kg	0.420	0.073	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Beryllium, Total	0.113	J	mg/kg	0.210	0.014	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Cadmium, Total	0.193	J	mg/kg	0.420	0.041	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Chromium, Total	6.74		mg/kg	0.420	0.040	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Copper, Total	8.51		mg/kg	0.420	0.108	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Lead, Total	2.09	J	mg/kg	2.10	0.112	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Manganese, Total	52.5		mg/kg	0.420	0.067	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.067	0.044	1	05/19/22 11:15	05/19/22 14:38	EPA 7471B	1,7471B	AW
Nickel, Total	7.23		mg/kg	1.05	0.102	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	0.839	0.108	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.420	0.119	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
Zinc, Total	13.9		mg/kg	2.10	0.123	1	05/19/22 08:00	05/19/22 16:57	EPA 3050B	1,6010D	EW
<b>General Chemistry - Mansfield Lab</b>											
Chromium, Trivalent	6.7		mg/kg	0.86	0.86	1		05/19/22 16:57	NA	107,-	



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458

Project Number: 15514

Report Date: 05/24/22

## 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): 01-02,04-05 Batch: WG1640045-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	05/19/22 11:15	05/19/22 13:39	1,7471B	AW

### Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1640166-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Barium, Total	ND		mg/kg	0.400	0.070	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Beryllium, Total	ND		mg/kg	0.200	0.013	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Cadmium, Total	ND		mg/kg	0.400	0.039	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Chromium, Total	0.296	J	mg/kg	0.400	0.038	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Copper, Total	ND		mg/kg	0.400	0.103	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Lead, Total	ND		mg/kg	2.00	0.107	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Manganese, Total	0.064	J	mg/kg	0.400	0.064	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Nickel, Total	0.168	J	mg/kg	1.00	0.097	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Selenium, Total	ND		mg/kg	0.800	0.103	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Silver, Total	ND		mg/kg	0.400	0.113	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW
Zinc, Total	ND		mg/kg	2.00	0.117	1	05/19/22 08:00	05/19/22 15:52	1,6010D	EW

### Prep Information

Digestion Method: EPA 3050B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1640045-2 SRM Lot Number: D113-540								
Mercury, Total	100		-		60-140	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1640166-2 SRM Lot Number: D113-540								
Arsenic, Total	104		-		70-130	-		
Barium, Total	79		-		75-125	-		
Beryllium, Total	97		-		75-125	-		
Cadmium, Total	105		-		75-125	-		
Chromium, Total	89		-		70-130	-		
Copper, Total	86		-		75-125	-		
Lead, Total	98		-		72-128	-		
Manganese, Total	78		-		77-123	-		
Nickel, Total	101		-		70-130	-		
Selenium, Total	104		-		66-134	-		
Silver, Total	85		-		70-131	-		
Zinc, Total	99		-		70-130	-		

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

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): 01-02,04-05 QC Batch ID: WG1640045-3 QC Sample: L2225849-05 Client ID: MS Sample												
Mercury, Total	ND	0.143	0.152	106		-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1640166-3 QC Sample: L2223458-01 Client ID: SB-20 (0-2)												
Arsenic, Total	1.29	10.8	9.42	75		-	-		75-125	-		20
Barium, Total	34.7	180	160	69	Q	-	-		75-125	-		20
Beryllium, Total	0.278	4.51	3.53	72	Q	-	-		75-125	-		20
Cadmium, Total	0.180J	4.78	3.47	72	Q	-	-		75-125	-		20
Chromium, Total	9.88	18	22.0	67	Q	-	-		75-125	-		20
Copper, Total	17.5	22.6	48.8	139	Q	-	-		75-125	-		20
Lead, Total	6.09	47.8	38.4	68	Q	-	-		75-125	-		20
Manganese, Total	40.5	45.1	71.8	69	Q	-	-		75-125	-		20
Nickel, Total	6.09	45.1	35.1	64	Q	-	-		75-125	-		20
Selenium, Total	ND	10.8	7.17	66	Q	-	-		75-125	-		20
Silver, Total	ND	27.1	20.0	74	Q	-	-		75-125	-		20
Zinc, Total	15.2	45.1	47.4	71	Q	-	-		75-125	-		20

# Lab Duplicate Analysis

Batch Quality Control

Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223458

Report Date: 05/24/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1640045-4 QC Sample: L2225849-05 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1640166-4 QC Sample: L2223458-01 Client ID: SB-20 (0-2)						
Arsenic, Total	1.29	1.29	mg/kg	0		20
Barium, Total	34.7	35.5	mg/kg	2		20
Beryllium, Total	0.278	0.265	mg/kg	5		20
Cadmium, Total	0.180J	0.175J	mg/kg	NC		20
Chromium, Total	9.88	9.63	mg/kg	3		20
Copper, Total	17.5	20.0	mg/kg	13		20
Lead, Total	6.09	5.33	mg/kg	13		20
Manganese, Total	40.5	41.2	mg/kg	2		20
Nickel, Total	6.09	5.99	mg/kg	2		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Zinc, Total	15.2	15.3	mg/kg	1		20

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1640166-6 QC Sample: L2223458-01 Client ID: SB-20 (0-2)						
Barium, Total	34.7	41.7	mg/kg	20		20
Copper, Total	17.5	22.6	mg/kg	29	Q	20
Manganese, Total	40.5	49.0	mg/kg	21	Q	20

# **INORGANICS & MISCELLANEOUS**



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223458

Report Date: 05/24/22

## SAMPLE RESULTS

Lab ID: L2223458-01

Client ID: SB-20 (0-2)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/04/22 10:00

Date Received: 05/04/22

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	84.5		%	0.100	NA	1	-	05/05/22 19:22	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.24	1	05/17/22 18:20	05/18/22 10:56	1,9010C/9012B	CS
Chromium, Hexavalent	0.509	J	mg/kg	0.947	0.189	1	05/07/22 14:16	05/08/22 14:30	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223458

Report Date: 05/24/22

## SAMPLE RESULTS

Lab ID: L2223458-02

Client ID: SB-20 (7-9)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/04/22 10:15

Date Received: 05/04/22

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	89.7		%	0.100	NA	1	-	05/05/22 19:22	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 18:20	05/18/22 10:57	1,9010C/9012B	CS
Chromium, Hexavalent	0.424	J	mg/kg	0.892	0.178	1	05/07/22 14:16	05/08/22 14:30	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223458

Report Date: 05/24/22

## SAMPLE RESULTS

Lab ID: L2223458-04

Client ID: SB-14 (0-4)

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/04/22 11:30

Date Received: 05/04/22

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	86.9		%	0.100	NA	1	-	05/05/22 19:22	121,2540G	TR
Cyanide, Total	ND		mg/kg	1.1	0.23	1	05/17/22 18:20	05/18/22 10:58	1,9010C/9012B	CS
Chromium, Hexavalent	0.299	J	mg/kg	0.920	0.184	1	05/07/22 14:16	05/08/22 14:30	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Project Number: 15514

Lab Number: L2223458

Report Date: 05/24/22

## SAMPLE RESULTS

Lab ID: L2223458-05

Client ID: SB-DUP-1

Sample Location: 60 MCLEAN AVENUE

Date Collected: 05/03/22 12:00

Date Received: 05/04/22

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	-	05/05/22 19:22	121,2540G	TR
Cyanide, Total	ND		mg/kg	0.99	0.21	1	05/17/22 10:35	05/17/22 13:51	1,9010C/9012B	CS
Chromium, Hexavalent	ND		mg/kg	0.856	0.171	1	05/07/22 14:16	05/08/22 14:30	1,7196A	NL



Project Name: 60 MCLEAN AVENUE

Lab Number: L2223458

Project Number: 15514

Report Date: 05/24/22

### 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): 01-02,04-05 Batch: WG1635743-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	05/07/22 14:16	05/08/22 14:30	1,7196A	NL
General Chemistry - Westborough Lab for sample(s): 05 Batch: WG1639289-1										
Cyanide, Total	ND		mg/kg	0.97	0.21	1	05/17/22 10:35	05/17/22 13:34	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 01-02,04 Batch: WG1639561-1										
Cyanide, Total	ND		mg/kg	0.85	0.18	1	05/17/22 18:20	05/18/22 10:37	1,9010C/9012B	CS

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE

**Project Number:** 15514

**Lab Number:** L2223458

**Report Date:** 05/24/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1635743-2								
Chromium, Hexavalent	95		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 05 Batch: WG1639289-2 WG1639289-3								
Cyanide, Total	42	Q	84		80-120	67	Q	35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1639561-2 WG1639561-3								
Cyanide, Total	76	Q	77	Q	80-120	10		35

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1635743-4 QC Sample: L2223458-01 Client ID: SB-20 (0-2)												
Chromium, Hexavalent	0.509J	1210	1220	101		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 05 QC Batch ID: WG1639289-4 WG1639289-5 QC Sample: L2223093-27 Client ID: MS Sample												
Cyanide, Total	ND	11	11	99		11	100		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04 QC Batch ID: WG1639561-4 WG1639561-5 QC Sample: L2225531-01 Client ID: MS Sample												
Cyanide, Total	ND	10	7.0	67	Q	10	95		75-125	35		35

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

## Lab Duplicate Analysis

*Batch Quality Control*

**Lab Number:** L2223458  
**Report Date:** 05/24/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1635123-1 QC Sample: L2223335-01 Client ID: DUP Sample						
Solids, Total	73.2	72.5	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1635743-6 QC Sample: L2223458-01 Client ID: SB-20 (0-2)						
Chromium, Hexavalent	0.509J	0.438J	mg/kg	NC		20



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

Serial\_No:05242219:37  
**Lab Number:** L2223458  
**Report Date:** 05/24/22

### 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
E	Absent
F	Absent
G	Absent
H	Absent

#### Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223458-01A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223458-01B	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-01C	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-01D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223458-01E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223458-01F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-01G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-02A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223458-02B	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-02C	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-02D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223458-02E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Serial\_No:**05242219:37  
**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2223458-02F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-02G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-03A	Vial MeOH preserved	C	NA		4.7	Y	Absent		HOLD-8260HLW(14)
L2223458-03B	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	HOLD-8260HLW(14)
L2223458-03C	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	HOLD-8260HLW(14)
L2223458-03D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		HOLD-WETCHEM()
L2223458-03E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		HOLD-METAL(180)
L2223458-03F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		HOLD-8270(14),HOLD-8081(14),HOLD-8082(14)
L2223458-03G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		HOLD-8270(14),HOLD-8081(14),HOLD-8082(14)
L2223458-04A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223458-04B	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-04C	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-04D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223458-04E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L2223458-04F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-04G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-05A	Vial MeOH preserved	C	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L2223458-05B	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-05C	Vial water preserved	C	NA		4.7	Y	Absent	05-MAY-22 07:02	NYTCL-8260HLW(14)
L2223458-05D	Plastic 2oz unpreserved for TS	C	NA		4.7	Y	Absent		TS(7)
L2223458-05E	Metals Only-Glass 60mL/2oz unpreserved	C	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2223458-05F	Glass 120ml/4oz unpreserved	C	NA		4.7	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2223458-05G	Glass 500ml/16oz unpreserved	C	NA		4.7	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)

**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

Serial\_No:05242219:37  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2223458-05H	Plastic 8oz unpreserved	C	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L2223458-05I	Plastic 8oz unpreserved	C	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)

Project Name: 60 MCLEAN AVENUE

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## PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	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
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS	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
<b>FLUOROTELOMERS</b>		
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
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
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
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
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
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEEESA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
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:** 60 MCLEAN AVENUE**Lab Number:** L2223458**Project Number:** 15514**Report Date:** 05/24/22

## 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:** 60 MCLEAN AVENUE  
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**Lab Number:** L2223458  
**Report Date:** 05/24/22

### 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.

**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'.

**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.

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.)

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- 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.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

**Data Qualifiers**

- 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:** 60 MCLEAN AVENUE  
**Project Number:** 15514

**Lab Number:** L2223458  
**Report Date:** 05/24/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## 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.





**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **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), **EPA 600/4-81-045:** PCB-Oil.**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.

 <b>NEW YORK CHAIN OF CUSTODY</b>		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>1</u> of <u>1</u>		Date Rec'd in Lab <u>05/04/22</u>		ALPHA Job # <u>L2223458</u>					
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		<b>Project Information</b> Project Name: <u>60 McLean Ave</u> Project Location: <u>60 McLean Ave</u> Project # <u>15514</u> Use Project name as Project # <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #					
<b>Client Information</b> Client: <u>Impact Environmental Closure</u> Address: <u>170 Highland Ct</u> <u>Bohemia, NY</u> Phone: <u>631 269 8800</u> Fax: Email: <u>CConnolly@impactenv.com</u>		<b>Project Manager:</b> ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Rush (only if pre approved) <input type="checkbox"/>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		Due Date: # of Days:					
These samples have been previously analyzed by Alpha <input type="checkbox"/>						<b>ANALYSIS</b>							
Other project specific requirements/comments:						<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)							
Please specify Metals or TAL.						<b>Sample Specific Comments</b>							
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials		Analysis NYSDOL part 375 VOCs + SVOCs Part 375 metals, Cr, Pb, Cyanide Part 375 pesticides PFAS/PFOs + 1,4-dioxane		Total Bottles	
<u>23458-01</u>		<u>SB-20 (0-2)</u>		<u>5-4-22 1000</u>		<u>S</u>		<u>ALC</u>		<input checked="" type="checkbox"/>			
<u>02</u>		<u>SB-20 (7-9)</u>		<u>5-4-22 1015</u>		<u>S</u>		<u>ALC</u>		<input checked="" type="checkbox"/>			
<u>03</u>		<u>SB-20 (13-15)</u>		<u>5-4-22 1020</u>		<u>S</u>		<u>ALC</u>		<input checked="" type="checkbox"/>			
<u>04</u>		<u>SB-14 (0-4)</u>		<u>5-4-22 1130</u>		<u>S</u>		<u>ALC</u>		<input checked="" type="checkbox"/>			
<u>05</u>		<u>SB-Dup-1</u>		<u>5-3-22 1200</u>		<u>S</u>		<u>ALC</u>		<input checked="" type="checkbox"/>			
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		Preservative					
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <u>Paul Mazzella</u>		Date/Time: <u>5-4-22 1500</u>		Received By: <u>Paul Mazzella</u>		Date/Time: <u>5-4-22 1500</u>				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.)	



## ANALYTICAL REPORT

Lab Number:	L2224094
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	Not Specified
Project Number:	15514
Report Date:	05/23/22

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-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2224094-01	SV-2A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:14	05/06/22
L2224094-02	SV-3A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:15	05/06/22
L2224094-03	SV-5A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:35	05/06/22
L2224094-04	IA-2A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 09:27	05/06/22
L2224094-05	SV-6A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:40	05/06/22
L2224094-06	SV-7A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:45	05/06/22
L2224094-07	SV-8A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 09:55	05/06/22
L2224094-08	OA-1A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 10:00	05/06/22
L2224094-09	SV-DUP	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 10:08	05/06/22
L2224094-10	SV-9A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 10:05	05/06/22
L2224094-11	SV-10A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 10:25	05/06/22
L2224094-12	IA-4A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 10:30	05/06/22
L2224094-13	IA-3A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 09:50	05/06/22
L2224094-14	IA-1A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 11:00	05/06/22
L2224094-15	SV-4A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY	05/04/22 10:15	05/06/22
L2224094-16	SV-1A	SOIL_VAPOR	60 MCLEAN AVE YONKERS NY		05/06/22
L2224094-17	OA-2A	AIR	60 MCLEAN AVE YONKERS NY	05/04/22 11:35	05/06/22

**Project Name:** Not Specified  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### 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.

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**Project Name:** Not Specified**Lab Number:** L2224094**Project Number:** 15514**Report Date:** 05/23/22**Case Narrative (continued)**

## Volatile Organics in Air

Canisters were released from the laboratory on April 28, 2022. The canister certification results are provided as an addendum.

L2224094-15D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1641106-3 LCS recoveries for 3-chloropropene (133%), dibromochloromethane (132%), bromoform (134%) and benzyl chloride (134%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

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: 05/23/22

**AIR**

**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-01  
 Client ID: SV-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:14  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 23:02  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.615	0.200	--	3.04	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	11.7	5.00	--	22.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	21.9	1.00	--	52.0	2.38	--		1
Trichlorofluoromethane	0.245	0.200	--	1.38	1.12	--		1
Isopropanol	1.37	0.500	--	3.37	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	1.57	0.500	--	4.63	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-01  
 Client ID: SV-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:14  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.577	0.500	--	1.70	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	0.218	0.200	--	0.696	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	1.15	0.200	--	4.33	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
Tetrachloroethene	6.51	0.200	--	44.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-01  
 Client ID: SV-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:14  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.568	0.400	--	2.47	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	0.212	0.200	--	0.921	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	0.296	0.200	--	1.46	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	98		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-02  
 Client ID: SV-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 23:42  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	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	84.2	5.00	--	159	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	32.3	1.00	--	76.7	2.38	--		1
Trichlorofluoromethane	0.212	0.200	--	1.19	1.12	--		1
Isopropanol	2.10	0.500	--	5.16	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.908	0.500	--	2.75	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	2.15	0.500	--	6.34	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-02  
 Client ID: SV-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.210	0.200	--	1.03	0.977	--		1
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	0.965	0.200	--	3.64	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	4.85	0.200	--	32.9	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-02  
 Client ID: SV-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.424	0.400	--	1.84	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
1,2,4-Trimethylbenzene	0.214	0.200	--	1.05	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	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-03  
 Client ID: SV-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 00:21  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.320	0.200	--	0.661	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	27.2	5.00	--	51.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	14.0	1.00	--	33.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.700	0.500	--	1.72	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	1.43	0.500	--	4.22	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-03  
 Client ID: SV-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.24	0.200	--	6.06	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.313	0.200	--	1.10	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.222	0.200	--	0.709	0.639	--		1
Carbon tetrachloride	0.355	0.200	--	2.23	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	0.985	0.200	--	3.71	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	54.2	0.200	--	368	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.544	0.200	--	2.36	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-03  
 Client ID: SV-5A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.63	0.400	--	7.08	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	0.469	0.200	--	2.04	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-04  
 Client ID: IA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:27  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 19:03  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.576	0.200	--	2.85	0.989	--		1
Chloromethane	0.796	0.200	--	1.64	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	35.8	5.00	--	67.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.04	1.00	--	12.0	2.38	--		1
Trichlorofluoromethane	0.228	0.200	--	1.28	1.12	--		1
Isopropanol	0.793	0.500	--	1.95	1.23	--		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	0.777	0.500	--	2.29	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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-04  
 Client ID: IA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:27  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	6.83	0.200	--	24.1	0.705	--		1
Benzene	2.10	0.200	--	6.71	0.639	--		1
Cyclohexane	1.53	0.200	--	5.27	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	4.29	0.200	--	20.0	0.934	--		1
Heptane	1.96	0.200	--	8.03	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	9.40	0.200	--	35.4	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	1.89	0.200	--	8.21	0.869	--		1
p/m-Xylene	6.60	0.400	--	28.7	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	2.68	0.200	--	11.6	0.869	--		1
4-Ethyltoluene	0.508	0.200	--	2.50	0.983	--		1
1,3,5-Trimethylbenzene	0.579	0.200	--	2.85	0.983	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-04  
 Client ID: IA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:27  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	2.32	0.200	--	11.4	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	99		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-04  
 Client ID: IA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:27  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 19:03  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.087	0.020	--	0.547	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.039	0.020	--	0.264	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-05  
 Client ID: SV-6A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:40  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 01:00  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.567	0.200	--	2.80	0.989	--		1
Chloromethane	0.375	0.200	--	0.774	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	113	5.00	--	213	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	134	1.00	--	318	2.38	--		1
Trichlorofluoromethane	0.232	0.200	--	1.30	1.12	--		1
Isopropanol	11.3	0.500	--	27.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.88	0.500	--	11.8	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	5.52	0.500	--	16.3	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-05  
 Client ID: SV-6A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:40  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.286	0.200	--	1.01	0.705	--		1
1,1,1-Trichloroethane	0.485	0.200	--	2.65	1.09	--		1
Benzene	0.273	0.200	--	0.872	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	0.227	0.200	--	0.818	0.721	--		1
Trichloroethene	0.585	0.200	--	3.14	1.07	--		1
2,2,4-Trimethylpentane	0.301	0.200	--	1.41	0.934	--		1
Heptane	0.266	0.200	--	1.09	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	1.63	0.200	--	6.14	0.754	--		1
2-Hexanone	0.430	0.200	--	1.76	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	14.2	0.200	--	96.3	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.11	0.200	--	4.82	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-05  
 Client ID: SV-6A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:40  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	3.10	0.400	--	13.5	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	0.783	0.200	--	3.40	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	0.366	0.200	--	1.80	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	99		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-06  
 Client ID: SV-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:45  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 01:39  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.506	0.200	--	2.50	0.989	--		1
Chloromethane	0.243	0.200	--	0.502	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	33.1	5.00	--	62.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	63.0	1.00	--	150	2.38	--		1
Trichlorofluoromethane	0.260	0.200	--	1.46	1.12	--		1
Isopropanol	2.86	0.500	--	7.03	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.34	0.500	--	7.09	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	3.98	0.500	--	11.7	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-06  
 Client ID: SV-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:45  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	7.90	0.200	--	38.6	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.304	0.200	--	1.07	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	0.210	0.200	--	1.32	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	0.462	0.200	--	1.66	0.721	--		1
Trichloroethene	0.206	0.200	--	1.11	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.234	0.200	--	0.959	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	1.46	0.200	--	5.50	0.754	--		1
2-Hexanone	0.258	0.200	--	1.06	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	11.7	0.200	--	79.3	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-06  
 Client ID: SV-7A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:45  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.592	0.400	--	2.57	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	0.207	0.200	--	0.899	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	0.215	0.200	--	1.06	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	93		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-07  
 Client ID: SV-8A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:55  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 02:19  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.564	0.200	--	2.79	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	13.4	5.00	--	25.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	49.4	1.00	--	117	2.38	--		1
Trichlorofluoromethane	0.210	0.200	--	1.18	1.12	--		1
Isopropanol	1.54	0.500	--	3.79	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.865	0.500	--	2.62	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.764	0.200	--	2.38	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	2.41	0.500	--	7.11	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-07  
 Client ID: SV-8A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:55  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.214	0.200	--	1.05	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.214	0.200	--	0.754	0.705	--		1
1,1,1-Trichloroethane	0.439	0.200	--	2.40	1.09	--		1
Benzene	0.547	0.200	--	1.75	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	0.217	0.200	--	1.01	0.934	--		1
Heptane	0.221	0.200	--	0.906	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	1.72	0.200	--	6.48	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	43.7	0.200	--	296	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.218	0.200	--	0.947	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-07  
 Client ID: SV-8A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:55  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.715	0.400	--	3.11	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	0.283	0.200	--	1.23	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	0.373	0.200	--	1.83	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	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-08  
 Client ID: OA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 18:24  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.559	0.200	--	2.76	0.989	--		1
Chloromethane	0.675	0.200	--	1.39	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	8.56	5.00	--	16.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	51.6	1.00	--	123	2.38	--		1
Trichlorofluoromethane	0.216	0.200	--	1.21	1.12	--		1
Isopropanol	3.17	0.500	--	7.79	1.23	--		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	0.560	0.500	--	1.65	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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-08  
 Client ID: OA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	13.4	0.200	--	47.2	0.705	--		1
Benzene	0.740	0.200	--	2.36	0.639	--		1
Cyclohexane	1.18	0.200	--	4.06	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	0.577	0.200	--	2.70	0.934	--		1
Heptane	0.670	0.200	--	2.75	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	1.34	0.200	--	5.05	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	0.372	0.200	--	1.62	0.869	--		1
p/m-Xylene	1.21	0.400	--	5.26	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	0.550	0.200	--	2.39	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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-08  
 Client ID: OA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.743	0.200	--	3.65	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	100		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	93		60-140





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-08  
 Client ID: OA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 18:24  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.090	0.020	--	0.566	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.035	0.020	--	0.237	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	92		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-09  
 Client ID: SV-DUP  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:08  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 03:00  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.474	0.200	--	2.34	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	48.2	5.00	--	90.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	55.4	1.00	--	132	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	4.31	0.500	--	10.6	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.41	0.500	--	4.27	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	2.17	0.500	--	6.40	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-09  
 Client ID: SV-DUP  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:08  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.648	0.200	--	2.28	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	0.481	0.200	--	1.97	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	2.42	0.200	--	9.12	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	2.35	0.200	--	15.9	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-09  
 Client ID: SV-DUP  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:08  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.637	0.400	--	2.77	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	0.291	0.200	--	1.26	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	0.477	0.200	--	2.35	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	98		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	89		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-10  
 Client ID: SV-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:05  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 03:39  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.210	0.200	--	0.434	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	28.2	5.00	--	53.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	36.9	1.00	--	87.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	25.8	0.500	--	63.4	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.45	0.500	--	4.40	1.52	--		1
Methylene chloride	1.13	0.500	--	3.93	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	2.22	0.500	--	6.55	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-10  
 Client ID: SV-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:05  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.883	0.500	--	2.60	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.35	0.200	--	4.76	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.472	0.200	--	1.51	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	0.263	0.200	--	0.948	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.721	0.200	--	2.95	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	2.37	0.200	--	8.93	0.754	--		1
2-Hexanone	0.203	0.200	--	0.832	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	3.13	0.200	--	21.2	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.233	0.200	--	1.01	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-10  
 Client ID: SV-9A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:05  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.718	0.400	--	3.12	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	0.274	0.200	--	1.19	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	0.380	0.200	--	1.87	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	92		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-11  
 Client ID: SV-10A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:25  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 07:54  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.528	0.200	--	2.61	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	20.7	5.00	--	39.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	31.7	1.00	--	75.3	2.38	--		1
Trichlorofluoromethane	0.206	0.200	--	1.16	1.12	--		1
Isopropanol	1.81	0.500	--	4.45	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.688	0.500	--	2.09	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.377	0.200	--	1.17	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	4.32	0.500	--	12.7	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-11  
 Client ID: SV-10A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:25  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	3.71	0.200	--	18.1	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	46.7	0.200	--	165	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	11.3	0.200	--	36.1	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	22.9	0.200	--	78.8	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	14.3	0.200	--	58.6	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	5.17	0.200	--	19.5	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	6.08	0.200	--	41.2	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-11  
 Client ID: SV-10A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:25  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.657	0.400	--	2.85	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	0.311	0.200	--	1.35	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	0.479	0.200	--	2.35	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	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	89		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-12  
 Client ID: IA-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:30  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 20:24  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.601	0.200	--	2.97	0.989	--		1
Chloromethane	0.760	0.200	--	1.57	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	5.86	5.00	--	11.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.86	1.00	--	9.17	2.38	--		1
Trichlorofluoromethane	0.221	0.200	--	1.24	1.12	--		1
Isopropanol	0.678	0.500	--	1.67	1.23	--		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	1.32	0.500	--	3.89	1.47	--		1
Ethyl Acetate	0.650	0.500	--	2.34	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.684	0.500	--	2.02	1.47	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-12  
 Client ID: IA-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:30  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	4.80	0.200	--	16.9	0.705	--		1
Benzene	0.799	0.200	--	2.55	0.639	--		1
Cyclohexane	2.07	0.200	--	7.13	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	0.596	0.200	--	2.78	0.934	--		1
Heptane	5.85	0.200	--	24.0	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	1.32	0.200	--	4.97	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	0.729	0.200	--	3.17	0.869	--		1
p/m-Xylene	1.26	0.400	--	5.47	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	0.337	0.200	--	1.46	0.869	--		1
4-Ethyltoluene	0.317	0.200	--	1.56	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-12  
 Client ID: IA-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:30  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.18	0.200	--	5.80	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	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-12  
 Client ID: IA-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:30  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 20:24  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.102	0.020	--	0.642	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.189	0.020	--	1.28	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-13  
 Client ID: IA-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:50  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 21:04  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.556	0.200	--	2.75	0.989	--		1
Chloromethane	0.737	0.200	--	1.52	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	10.5	5.00	--	19.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	108	1.00	--	257	2.38	--		1
Trichlorofluoromethane	0.225	0.200	--	1.26	1.12	--		1
Isopropanol	3.97	0.500	--	9.76	1.23	--		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	0.843	0.500	--	2.49	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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-13  
 Client ID: IA-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:50  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	25.6	0.200	--	90.2	0.705	--		1
Benzene	0.759	0.200	--	2.42	0.639	--		1
Cyclohexane	1.95	0.200	--	6.71	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	0.675	0.200	--	3.15	0.934	--		1
Heptane	0.543	0.200	--	2.23	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	1.68	0.200	--	6.33	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	0.472	0.200	--	2.05	0.869	--		1
p/m-Xylene	1.55	0.400	--	6.73	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	0.722	0.200	--	3.14	0.869	--		1
4-Ethyltoluene	0.205	0.200	--	1.01	0.983	--		1
1,3,5-Trimethylbenzene	0.218	0.200	--	1.07	0.983	--		1





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-13  
 Client ID: IA-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:50  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.945	0.200	--	4.65	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	101		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-13  
 Client ID: IA-3A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 09:50  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 21:04  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.092	0.020	--	0.579	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.039	0.020	--	0.264	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	90		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-14  
 Client ID: IA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 21:44  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.609	0.200	--	3.01	0.989	--		1
Chloromethane	0.796	0.200	--	1.64	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.336	0.200	--	0.743	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	28.3	5.00	--	53.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.89	1.00	--	23.5	2.38	--		1
Trichlorofluoromethane	0.237	0.200	--	1.33	1.12	--		1
Isopropanol	3.39	0.500	--	8.33	1.23	--		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
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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-14  
 Client ID: IA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	3.27	0.200	--	11.5	0.705	--		1
Benzene	1.06	0.200	--	3.39	0.639	--		1
Cyclohexane	0.559	0.200	--	1.92	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	0.549	0.200	--	2.56	0.934	--		1
Heptane	0.610	0.200	--	2.50	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	2.02	0.200	--	7.61	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	0.451	0.200	--	1.96	0.869	--		1
p/m-Xylene	1.34	0.400	--	5.82	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	0.560	0.200	--	2.43	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.266	0.200	--	1.31	0.983	--		1



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-14  
 Client ID: IA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.00	0.200	--	4.92	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	95		60-140
chlorobenzene-d5	97		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-14  
 Client ID: IA-1A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:00  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 21:44  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.097	0.020	--	0.610	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.034	0.020	--	0.231	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-15 D  
 Client ID: SV-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/21/22 04:53  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--		6.25
Chloromethane	ND	1.25	--	ND	2.58	--		6.25
Freon-114	ND	1.25	--	ND	8.74	--		6.25
Vinyl chloride	ND	1.25	--	ND	3.20	--		6.25
1,3-Butadiene	ND	1.25	--	ND	2.77	--		6.25
Bromomethane	ND	1.25	--	ND	4.85	--		6.25
Chloroethane	ND	1.25	--	ND	3.30	--		6.25
Ethanol	ND	31.2	--	ND	58.8	--		6.25
Vinyl bromide	ND	1.25	--	ND	5.47	--		6.25
Acetone	7.08	6.25	--	16.8	14.8	--		6.25
Trichlorofluoromethane	ND	1.25	--	ND	7.02	--		6.25
Isopropanol	ND	3.12	--	ND	7.67	--		6.25
1,1-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
Tertiary butyl Alcohol	ND	3.12	--	ND	9.46	--		6.25
Methylene chloride	ND	3.12	--	ND	10.8	--		6.25
3-Chloropropene	ND	1.25	--	ND	3.91	--		6.25
Carbon disulfide	ND	1.25	--	ND	3.89	--		6.25
Freon-113	ND	1.25	--	ND	9.58	--		6.25
trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
1,1-Dichloroethane	ND	1.25	--	ND	5.06	--		6.25
Methyl tert butyl ether	ND	1.25	--	ND	4.51	--		6.25
2-Butanone	ND	3.12	--	ND	9.20	--		6.25
cis-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-15 D  
 Client ID: SV-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	3.12	--	ND	11.2	--		6.25
Chloroform	ND	1.25	--	ND	6.10	--		6.25
Tetrahydrofuran	ND	3.12	--	ND	9.20	--		6.25
1,2-Dichloroethane	ND	1.25	--	ND	5.06	--		6.25
n-Hexane	1.34	1.25	--	4.72	4.41	--		6.25
1,1,1-Trichloroethane	ND	1.25	--	ND	6.82	--		6.25
Benzene	ND	1.25	--	ND	3.99	--		6.25
Carbon tetrachloride	ND	1.25	--	ND	7.86	--		6.25
Cyclohexane	ND	1.25	--	ND	4.30	--		6.25
1,2-Dichloropropane	ND	1.25	--	ND	5.78	--		6.25
Bromodichloromethane	ND	1.25	--	ND	8.37	--		6.25
1,4-Dioxane	ND	1.25	--	ND	4.50	--		6.25
Trichloroethene	ND	1.25	--	ND	6.72	--		6.25
2,2,4-Trimethylpentane	ND	1.25	--	ND	5.84	--		6.25
Heptane	323	1.25	--	1320	5.12	--		6.25
cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--		6.25
4-Methyl-2-pentanone	10.8	3.12	--	44.3	12.8	--		6.25
trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--		6.25
1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--		6.25
Toluene	ND	1.25	--	ND	4.71	--		6.25
2-Hexanone	ND	1.25	--	ND	5.12	--		6.25
Dibromochloromethane	ND	1.25	--	ND	10.6	--		6.25
1,2-Dibromoethane	ND	1.25	--	ND	9.61	--		6.25
Tetrachloroethene	4.13	1.25	--	28.0	8.48	--		6.25
Chlorobenzene	ND	1.25	--	ND	5.76	--		6.25
Ethylbenzene	ND	1.25	--	ND	5.43	--		6.25





**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-15 D  
 Client ID: SV-4A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 10:15  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	2.50	--	ND	10.9	--		6.25
Bromoform	ND	1.25	--	ND	12.9	--		6.25
Styrene	ND	1.25	--	ND	5.32	--		6.25
1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--		6.25
o-Xylene	ND	1.25	--	ND	5.43	--		6.25
4-Ethyltoluene	ND	1.25	--	ND	6.15	--		6.25
1,3,5-Trimethylbenzene	ND	1.25	--	ND	6.15	--		6.25
1,2,4-Trimethylbenzene	ND	1.25	--	ND	6.15	--		6.25
Benzyl chloride	ND	1.25	--	ND	6.47	--		6.25
1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--		6.25
Hexachlorobutadiene	ND	1.25	--	ND	13.3	--		6.25

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-17  
 Client ID: OA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/20/22 22:23  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.580	0.200	--	2.87	0.989	--		1
Chloromethane	0.733	0.200	--	1.51	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	7.30	5.00	--	13.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	0.640	0.500	--	1.57	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	1.45	0.500	--	5.04	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
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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-17  
 Client ID: OA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.74	0.200	--	6.13	0.705	--		1
Benzene	0.282	0.200	--	0.901	0.639	--		1
Cyclohexane	0.217	0.200	--	0.747	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	0.231	0.200	--	1.08	0.934	--		1
Heptane	0.206	0.200	--	0.844	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	0.636	0.200	--	2.40	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:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-17  
 Client ID: OA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	99		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140



**Project Name:**  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

### SAMPLE RESULTS

Lab ID: L2224094-17  
 Client ID: OA-2A  
 Sample Location: 60 MCLEAN AVE YONKERS NY

Date Collected: 05/04/22 11:35  
 Date Received: 05/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/20/22 22:23  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.090	0.020	--	0.566	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.023	0.020	--	0.156	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140



Project Name: Not Specified

Lab Number: L2224094

Project Number: 15514

Report Date: 05/23/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 05/20/22 16:48

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04,08,12-14,17 Batch: WG1641104-4								
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

Project Name: Not Specified

Lab Number: L2224094

Project Number: 15514

Report Date: 05/23/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 05/20/22 16:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-15,17 Batch: WG1641106-4								
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: Not Specified

Lab Number: L2224094

Project Number: 15514

Report Date: 05/23/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 05/20/22 16:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-15,17 Batch: WG1641106-4								
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: Not Specified

Lab Number: L2224094

Project Number: 15514

Report Date: 05/23/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 05/20/22 16:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-15,17 Batch: WG1641106-4								
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

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** Not Specified  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04,08,12-14,17 Batch: WG1641104-3								
Vinyl chloride	124		-		70-130	-		25
1,1-Dichloroethene	116		-		70-130	-		25
cis-1,2-Dichloroethene	127		-		70-130	-		25
1,1,1-Trichloroethane	119		-		70-130	-		25
Carbon tetrachloride	115		-		70-130	-		25
Trichloroethene	121		-		70-130	-		25
Tetrachloroethene	121		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** Not Specified

**Project Number:** 15514

**Lab Number:** L2224094

**Report Date:** 05/23/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 Batch: WG1641106-3								
Dichlorodifluoromethane	114		-		70-130	-		
Chloromethane	120		-		70-130	-		
Freon-114	115		-		70-130	-		
Vinyl chloride	112		-		70-130	-		
1,3-Butadiene	127		-		70-130	-		
Bromomethane	111		-		70-130	-		
Chloroethane	110		-		70-130	-		
Ethanol	93		-		40-160	-		
Vinyl bromide	115		-		70-130	-		
Acetone	111		-		40-160	-		
Trichlorofluoromethane	105		-		70-130	-		
Isopropanol	114		-		40-160	-		
1,1-Dichloroethene	116		-		70-130	-		
Tertiary butyl Alcohol	105		-		70-130	-		
Methylene chloride	117		-		70-130	-		
3-Chloropropene	133	Q	-		70-130	-		
Carbon disulfide	95		-		70-130	-		
Freon-113	116		-		70-130	-		
trans-1,2-Dichloroethene	109		-		70-130	-		
1,1-Dichloroethane	114		-		70-130	-		
Methyl tert butyl ether	114		-		70-130	-		
2-Butanone	116		-		70-130	-		
cis-1,2-Dichloroethene	116		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 Batch: WG1641106-3								
Ethyl Acetate	123		-		70-130	-		
Chloroform	113		-		70-130	-		
Tetrahydrofuran	118		-		70-130	-		
1,2-Dichloroethane	102		-		70-130	-		
n-Hexane	108		-		70-130	-		
1,1,1-Trichloroethane	112		-		70-130	-		
Benzene	107		-		70-130	-		
Carbon tetrachloride	122		-		70-130	-		
Cyclohexane	108		-		70-130	-		
1,2-Dichloropropane	117		-		70-130	-		
Bromodichloromethane	119		-		70-130	-		
1,4-Dioxane	120		-		70-130	-		
Trichloroethene	117		-		70-130	-		
2,2,4-Trimethylpentane	110		-		70-130	-		
Heptane	118		-		70-130	-		
cis-1,3-Dichloropropene	128		-		70-130	-		
4-Methyl-2-pentanone	127		-		70-130	-		
trans-1,3-Dichloropropene	118		-		70-130	-		
1,1,2-Trichloroethane	122		-		70-130	-		
Toluene	116		-		70-130	-		
2-Hexanone	124		-		70-130	-		
Dibromochloromethane	132	Q	-		70-130	-		
1,2-Dibromoethane	126		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 Batch: WG1641106-3								
Tetrachloroethene	121		-		70-130	-		
Chlorobenzene	121		-		70-130	-		
Ethylbenzene	120		-		70-130	-		
p/m-Xylene	118		-		70-130	-		
Bromoform	134	Q	-		70-130	-		
Styrene	118		-		70-130	-		
1,1,2,2-Tetrachloroethane	118		-		70-130	-		
o-Xylene	116		-		70-130	-		
4-Ethyltoluene	113		-		70-130	-		
1,3,5-Trimethylbenzene	123		-		70-130	-		
1,2,4-Trimethylbenzene	122		-		70-130	-		
Benzyl chloride	134	Q	-		70-130	-		
1,3-Dichlorobenzene	115		-		70-130	-		
1,4-Dichlorobenzene	115		-		70-130	-		
1,2-Dichlorobenzene	118		-		70-130	-		
1,2,4-Trichlorobenzene	129		-		70-130	-		
Hexachlorobutadiene	126		-		70-130	-		

Project Name: Not Specified

Project Number: 15514

# Lab Duplicate Analysis

Batch Quality Control

Lab Number: L2224094

Report Date: 05/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04,08,12-14,17 QC Batch ID: WG1641104-5 QC Sample: L2224094-04 Client ID: IA-2A						
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	0.087	0.094	ppbV	8		25
Trichloroethene	ND	0.023	ppbV	NC		25
Tetrachloroethene	0.039	0.033	ppbV	17		25

# Lab Duplicate Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 QC Batch ID: WG1641106-5 QC Sample: L2224094-04 Client ID: IA-2A						
Dichlorodifluoromethane	0.576	0.564	ppbV	2		25
Chloromethane	0.796	0.749	ppbV	6		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	35.8	37.9	ppbV	6		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	5.04	5.70	ppbV	12		25
Trichlorofluoromethane	0.228	0.221	ppbV	3		25
Isopropanol	0.793	0.815	ppbV	3		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		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	0.777	0.780	ppbV	0		25
Ethyl Acetate	ND	ND	ppbV	NC		25

# Lab Duplicate Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 QC Batch ID: WG1641106-5 QC Sample: L2224094-04 Client ID: IA-2A						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	6.83	6.64	ppbV	3		25
Benzene	2.10	2.07	ppbV	1		25
Cyclohexane	1.53	1.50	ppbV	2		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	4.29	4.34	ppbV	1		25
Heptane	1.96	1.99	ppbV	2		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	9.40	10.1	ppbV	7		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	1.89	1.90	ppbV	1		25



# Lab Duplicate Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 15514

Lab Number: L2224094

Report Date: 05/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-15,17 QC Batch ID: WG1641106-5 QC Sample: L2224094-04 Client ID: IA-2A						
p/m-Xylene	6.60	6.77	ppbV	3		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	2.68	2.80	ppbV	4		25
4-Ethyltoluene	0.508	0.549	ppbV	8		25
1,3,5-Trimethylbenzene	0.579	0.697	ppbV	18		25
1,2,4-Trimethylbenzene	2.32	2.43	ppbV	5		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

Project Name:

Project Number: 15514

Serial\_No:05232214:59  
Lab Number: L2224094

Report Date: 05/23/22

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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2224094-01	SV-2A	01951	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	16	12
L2224094-01	SV-2A	2190	2.7L Can	04/28/22	386600	L2220971-02	Pass	-29.0	-5.2	-	-	-	-
L2224094-02	SV-3A	01941	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	15	18
L2224094-02	SV-3A	3425	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.8	-6.7	-	-	-	-
L2224094-03	SV-5A	01611	Flow 4	04/28/22	386600		-	-	-	Pass	18.0	13	32
L2224094-03	SV-5A	2043	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-9.4	-	-	-	-
L2224094-04	IA-2A	01802	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	19	5
L2224094-04	IA-2A	325	2.7L Can	04/28/22	386600	L2220971-02	Pass	-29.0	-5.1	-	-	-	-
L2224094-05	SV-6A	01713	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-05	SV-6A	2040	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-7.4	-	-	-	-
L2224094-06	SV-7A	02133	Flow 2	04/28/22	386600		-	-	-	Pass	18.0	16	12
L2224094-06	SV-7A	2382	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.9	-8.6	-	-	-	-
L2224094-07	SV-8A	0801	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-07	SV-8A	3102	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.8	-8.7	-	-	-	-
L2224094-08	OA-1A	01781	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	16	12

Project Name:

Lab Number:

Serial\_No:05232214:59

L2224094

Project Number: 15514

Report Date:

05/23/22

## 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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2224094-08	OA-1A	2210	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.9	-9.4	-	-	-	-
L2224094-09	SV-DUP	01548	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-09	SV-DUP	2201	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-8.6	-	-	-	-
L2224094-10	SV-9A	01806	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	15	18
L2224094-10	SV-9A	2343	2.7L Can	04/28/22	386600	L2220971-01	Pass	-29.0	-10.3	-	-	-	-
L2224094-11	SV-10A	01392	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	11	48
L2224094-11	SV-10A	208	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-9.5	-	-	-	-
L2224094-12	IA-4A	0694	Flow 4	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-12	IA-4A	3449	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.8	-11.0	-	-	-	-
L2224094-13	IA-3A	02098	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-13	IA-3A	3175	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.7	-9.8	-	-	-	-
L2224094-14	IA-1A	01081	Flow 2	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-14	IA-1A	182	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.7	-7.9	-	-	-	-
L2224094-15	SV-4A	01168	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	17	6
L2224094-15	SV-4A	330	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-7.9	-	-	-	-

**Project Name:**

**Project Number:** 15514

Serial\_No:05232214:59  
**Lab Number:** L2224094

**Report Date:** 05/23/22

**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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2224094-16	SV-1A	01797	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	0.0	200
L2224094-16	SV-1A	2279	2.7L Can	04/28/22	386600	L2220971-02	Pass	-28.9	-11.1	-	-	-	-
L2224094-17	OA-2A	01785	Flow 3	04/28/22	386600		-	-	-	Pass	18.0	8	77
L2224094-17	OA-2A	195	2.7L Can	04/28/22	386600	L2220971-01	Pass	-28.9	-11.0	-	-	-	-

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15  
**Analytical Date:** 04/24/22 22:04  
**Analyst:** TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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**Lab Number:** L2220971**Project Number:** CANISTER QC BAT**Report Date:** 05/23/22**Air Canister Certification Results**

Lab ID: L2220971-01

Date Collected: 04/21/22 18:00

Client ID: CAN 2076 SHELF 7

Date Received: 04/22/22

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	95		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15-SIM  
**Analytical Date:** 04/24/22 22:04  
**Analyst:** TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-01  
**Client ID:** CAN 2076 SHELF 7  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	94		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15  
**Analytical Date:** 04/24/22 22:43  
**Analyst:** TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

Lab ID: L2220971-02  
 Client ID: CAN 376 SHELF 8  
 Sample Location:

Date Collected: 04/21/22 18:00  
 Date Received: 04/22/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	95		60-140
chlorobenzene-d5	93		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2220971  
**Report Date:** 05/23/22

### Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15-SIM  
**Analytical Date:** 04/24/22 22:43  
**Analyst:** TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971  
**Report Date:** 05/23/22

## Air Canister Certification Results

**Lab ID:** L2220971-02  
**Client ID:** CAN 376 SHELF 8  
**Sample Location:**

**Date Collected:** 04/21/22 18:00  
**Date Received:** 04/22/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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:** L2220971**Project Number:** CANISTER QC BAT**Report Date:** 05/23/22**Air Canister Certification Results**

Lab ID: L2220971-02

Date Collected: 04/21/22 18:00

Client ID: CAN 376 SHELF 8

Date Received: 04/22/22

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	93		60-140

**Project Name:** Not Specified**Lab Number:** L2224094**Project Number:** 15514**Report Date:** 05/23/22**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
NA	Present/Intact

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2224094-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2224094-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-08A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2224094-09A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-10A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-11A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-12A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2224094-13A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2224094-14A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2224094-15A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2224094-16A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2224094-17A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)

Project Name: Not Specified

Lab Number: L2224094

Project Number: 15514

Report Date: 05/23/22

## 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:** Not Specified**Lab Number:** L2224094**Project Number:** 15514**Report Date:** 05/23/22**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.

**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'.

**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.

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.)

**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.
- 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

**Report Format:** Data Usability Report



**Project Name:** Not Specified**Lab Number:** L2224094**Project Number:** 15514**Report Date:** 05/23/22**Data Qualifiers**

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)



**Project Name:** Not Specified  
**Project Number:** 15514

**Lab Number:** L2224094  
**Report Date:** 05/23/22

## 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.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **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), **EPA 600/4-81-045:** PCB-Oil.**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

## CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048  
TEL: 508-822-9300 FAX: 508-822-3288

PAGE 1 OF 2

Date Rec'd in Lab: 5/17/22

ALPHA Job #: L2224094

### Client Information

Client: IEC

Address: 100 PAGE AVE Goshen, NY

Phone:

Fax:

Email: CConnolly@alpha-analytical.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

### Project Information

Project Name:

Project Location: 60 Malcolm Ave  
Yonkers, NY

Project #: 15514

Project Manager: Christopher Connolly

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

### ANALYSIS

TO-15 (VOCs & SVOCs)  
TO-15 SIM  
APH Substr 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						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15 (VOCs & SVOCs)	TO-15 SIM	APH Substr Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
24094-01	SV-2A	5-4-22	0708	0914	-30.16	-6.40	Sub-Slab	CE	2.7L	2190	01951	X						
02	SV-3A		0720	0915	-30.05	-7.87	Sub-Slab				3425	01941	X					
03	SV-5A		0735	0935	-30.16	-10.92	Sub-Slab				2043	01611	X					
04	IA-2A		0738	0929	-30.33	-6.02	Indoor Air				325	01822	X					
05	SV-6A		0750	0940	-30.20	-8.72	Indoor Air				2040	01713	X					
06	SV-7A		0750	0945	-30.04	-10.02	Sub-Slab				2382	02133	X					
07	SV-8A		0805	0955	-30.19	-10.07	Sub-Slab				5102	0801	X					
08	OA-1A		0815	1000	-30.04	-10.11	Outdoor Air				2210	01781	X					
09	SV-DUR		0825	1008	-35.44	-10.18	Sub-Slab				2201	01548	X					
10	SV-9A		0825	1005	-29.32	-10.76	Sub-Slab				2343	01806	X					

### \*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

Container Type

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





Revised CoC DS 5/11/22

ALPHA CHAIN OF CUSTODY		AIR ANALYSIS		PAGE 2 OF 2		Date Rec'd in Lab: 5/17/22		ALPHA Job #: L2224094											
320 Forbes Blvd, Mansfield, MA 02048 TEL 508-822-9300 FAX 508-822-3268		<b>Project Information</b>		<b>Report Information - Data Deliverables</b>		<b>Billing Information</b>		<b>Regulatory Requirements/Report Limits</b>											
<b>Client Information</b>		Project Name:		<input type="checkbox"/> FAX		<input type="checkbox"/> Same as Client info		PO #											
Client: IEC		Project Location: 60 Pelham Ave, Newbury, MA		<input type="checkbox"/> ADEx															
Address: 1000 PACE AVE		Project #: 15514		Criteria Checker:															
City: Lyndeborough, NH		Project Manager: Christopher Connolly		(Default based on Regulatory Criteria indicated)															
Phone:		ALPHA Quote #:		Other Formats:															
Fax:		<b>Turn-Around Time</b>		<input checked="" type="checkbox"/> EMAIL (standard pdf report)															
Email: CConnolly@iepcorp.com		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH (only payment if pre-arranged)		<input type="checkbox"/> Additional Deliverables															
<input type="checkbox"/> These samples have been previously analyzed by Alpha		Date Due:		Time:															
Other Project Specific Requirements/Comments:																			
Project-Specific Target Compound List: <input type="checkbox"/>																			
<b>All Columns Below Must Be Filled Out</b>																			
ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION		Initial Vacuum	Final Vacuum	Sample Matrix	Sampler's Initials	Can Size	TD Can	TD Flow Controller	TO-15 (Active G-1)	TO-15 (Passive G-1)	TO-15 (Passive G-1)	TO-15 (Passive G-1)	TO-15 (Passive G-1)	TO-15 (Passive G-1)	TO-15 (Passive G-1)	Sample Comments (i.e. IPD)	
24094-11	SV-10A	5-4-22	0955	1025	-50.5	-10.71	CE	272	205	01572									
12	IA-4A		0950	1030	-21.80	11.35		244	245	0004									
13	IA-3A		0910	0950	-30.06	-10.49				01572									
14	IA-1A		0714	1100	-25.44	-8.36				01051									
15	SV-4A		0935	1015	-31.24	-9.21				330	-1165								
17	OA-2A		0840	1135	-50.0	-11.59	CE	276	195	01765									
<b>*SAMPLE MATRIX CODES</b>		AA = Ambient Air (Indoor/Outdoor)		SV = Soil Vapor/Landfill Gas/VLE		Other = Please Specify		Container Type		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: <i>Chris</i>		Date/Time: 5-20-2001 1300		Received By: <i>David</i>		Date/Time: 5/16/22 1300													

# Appendix J

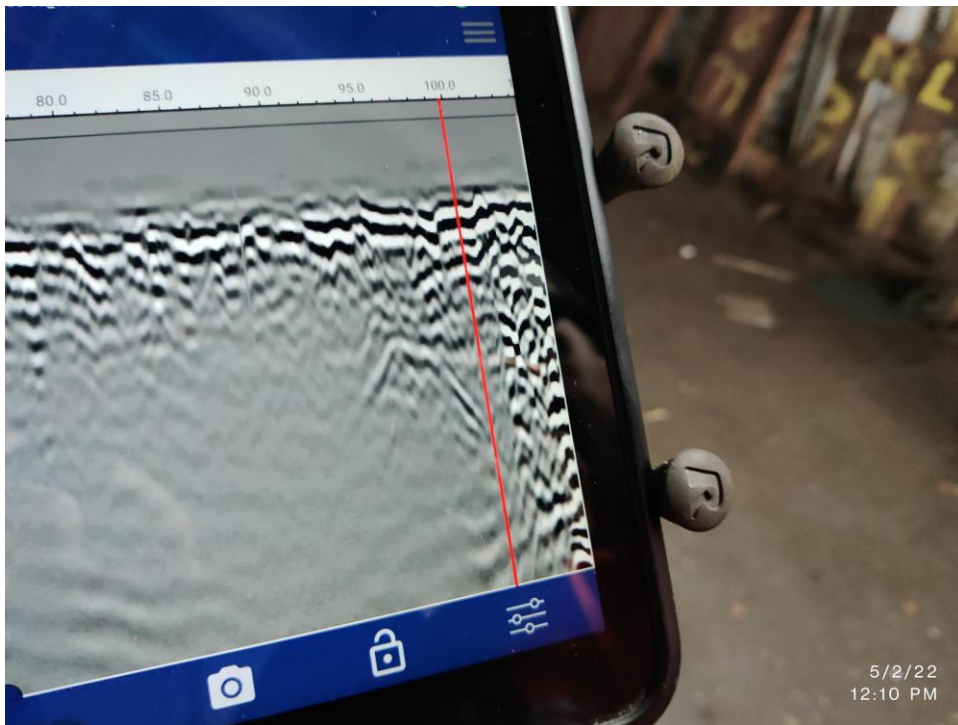
60 McLean Avenue, Yonkers, NY

Photographic Log



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599





**Photograph No. 1:** View of GPR detection of UST on ramp



**Photograph No. 2:** View of typical weathered bedrock in soil boring





**Photograph No. 3:** View of shallow groundwater in borehole



**Photograph No. 4:** View of typical installed permanent groundwater monitoring well







**Photograph No. 5:** View of typical installation of soil vapor monitoring pin setup



**Photograph No. 6:** View of typical installed soil vapor sample location





**Photograph No. 7:** View of fill port on east side of building



# Appendix K

60 McLean Avenue, Yonkers, NY

Baseline Air Logs



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599



### **Baseline RI Dust and Volatile Organic Vapor Monitoring**

Project:	60 McLean Avenue Yonkers, NY	Job No.:	15514
Location:		On-site Personnel:	AK
Day & Date:	5/2/2022	Weather:	Sunny, 60 degrees
	AM	PM	Sample Interval: 15 minutes
Wind Direction	9 mph S		Background Reading (particulates) <b>0.005 mg/m<sup>3</sup></b>
Temperature Range:	55-60°F		Background Reading (organic vapors) <b>0.0 ppm</b>
Calibration Dates:	Particulate Meters:		Photoionization Detector:
Action	Organic vapors: > 5ppm above background levels/ 15 minute readings		
Level/Response:	Particulates: 0.100 mg/m <sup>3</sup> above up wind reading/15 minute period		

Time	Particulate levels:		ORGANIC VAPOR LEVELS  (ppm)	NOTES
	DOWNWIND (mg/m <sup>3</sup> )			
0700	0.003		0.1	RI Drilling Activity Begins
0715	0.003		0.0	
0730	0.007		0.0	
0745	0.005		0.0	
0800	0.007		0.0	
0815	0.007		0.1	
0830	0.011		0.0	
0845	0.010		0.0	
0900	0.007		0.2	
0915	0.007		0.2	
0930	0.005		0.0	
0945	0.007		0.0	
1000	0.007		0.1	
1015	0.007		0.1	
1030	0.008		0.1	
1045	0.008		0.1	
1100	0.012		0.2	
1115	0.011		0.0	



Time	Particulate levels:		ORGANIC VAPOR LEVELS  (ppm)	NOTES
	DOWNWIND (mg/m <sup>3</sup> )			
1215	0.011		0.1	
1230	0.007		0.1	
1245	0.007		0.1	
1300	0.009		0.1	
1315				
1330				
1345				
1400				
1415				
1430				
1445				
1500				
1515				
1530				
1545				
1600				
1615				
1630				
1645				
1700				

# Appendix L

60 McLean Avenue, Yonkers, NY

NYSDOH Checklist



IMPACT ENVIRONMENTAL  
170 Keyland Court  
Bohemia, New York 11716  
TEL: (631) 268-8800  
FAX: (631) 269-1599

**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Chris Evertz Date/Time Prepared 3/4/22

Preparer's Affiliation Environmental Field Scientist Phone No.

Purpose of Investigation NYSDEC BCP Remedial Investigation

**1. OCCUPANT:**

Interviewed: Y / **N**

Last Name: NA First Name: NA

Address:

County:

Home Phone:  Office Phone:

Number of Occupants/persons at this location  Age of Occupants

**2. OWNER OR LANDLORD:** (Check if same as occupant    )

Interviewed: Y / **N**

Last Name:  First Name:

Address:

County:

Home Phone:  Office Phone:

**3. BUILDING CHARACTERISTICS**

**Type of Building:** (Circle appropriate response)

Residential  
Industrial

School  
Church

**Commercial/Multi-use**  
Other:



**If the property is residential, type?** (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: _____

**If multiple units, how many?** \_\_\_\_\_

**If the property is commercial, type?**

Business Type(s) Auto Repair and Minor Manufacturing/Printing

Does it include residences (i.e., multi-use)? Y ☒ N If yes, how many? \_\_\_\_\_

**Other characteristics:**

Number of floors 2

Building age 80 years

Is the building insulated? Y ☒ N

How air tight? Tight / Average ☒ Not Tight

#### 4. AIRFLOW

**Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:**

Airflow between floors

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Airflow near source

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Outdoor air infiltration

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Infiltration into air ducts

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### 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: full crawlspace slab other \_\_\_\_\_
- c. Basement floor: concrete dirt stone other \_\_\_\_\_
- d. Basement floor: uncovered covered covered with \_\_\_\_\_
- e. Concrete floor: unsealed sealed sealed with \_\_\_\_\_
- f. Foundation walls: poured block stone other \_\_\_\_\_
- g. Foundation walls: unsealed sealed sealed with \_\_\_\_\_
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: \_\_\_\_\_ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

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### 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard
Space Heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
		<u>Other</u> _ Ceiling Heaters

The primary type of fuel used is:

Natural Gas	<u>Fuel Oil</u>	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: \_\_\_\_\_

Boiler/furnace located in: Basement Outdoors Main Floor Other \_\_\_\_\_

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

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## 7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement	Boiler Room
1 <sup>st</sup> Floor	Auto Repair Shops
2 <sup>nd</sup> Floor	Manufacturing
3 <sup>rd</sup> Floor	
4 <sup>th</sup> Floor	

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage? Y / N
- b. Does the garage have a separate heating unit? Y / N / NA
- c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA  
Please specify \_\_\_\_\_
- d. Has the building ever had a fire? Y / N When? \_\_\_\_\_
- e. Is a kerosene or unvented gas space heater present? Y / N Where? \_\_\_\_\_
- f. Is there a workshop or hobby/craft area? Y / N Where & Type? \_\_\_\_\_
- g. Is there smoking in the building? Y / N How frequently? \_\_\_\_\_
- h. Have cleaning products been used recently? Y / N When & Type? \_\_\_\_\_
- i. Have cosmetic products been used recently? Y / N When & Type? \_\_\_\_\_

- j. Has painting/staining been done in the last 6 months? Y / N Where & When? \_\_\_\_\_
- k. Is there new carpet, drapes or other textiles? Y / N Where & When? \_\_\_\_\_
- l. Have air fresheners been used recently? Y / N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y / N When & Type? \_\_\_\_\_

Are there odors in the building?

Y / N

If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work?

☒ Y / ☐ N

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? \_\_\_\_\_ Automotive lubricants and cleaners

If yes, are their clothes washed at work?

Y ☒ N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)

No

Yes, use dry-cleaning infrequently (monthly or less)

Unknown

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y ☒ N Date of Installation: \_\_\_\_\_

Is the system active or passive?

Active/Passive

## 9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well Other: \_\_\_\_\_

Sewage Disposal: ☒ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well Other: \_\_\_\_\_

## 10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: \_\_\_\_\_

b. Residents choose to: remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel ☐

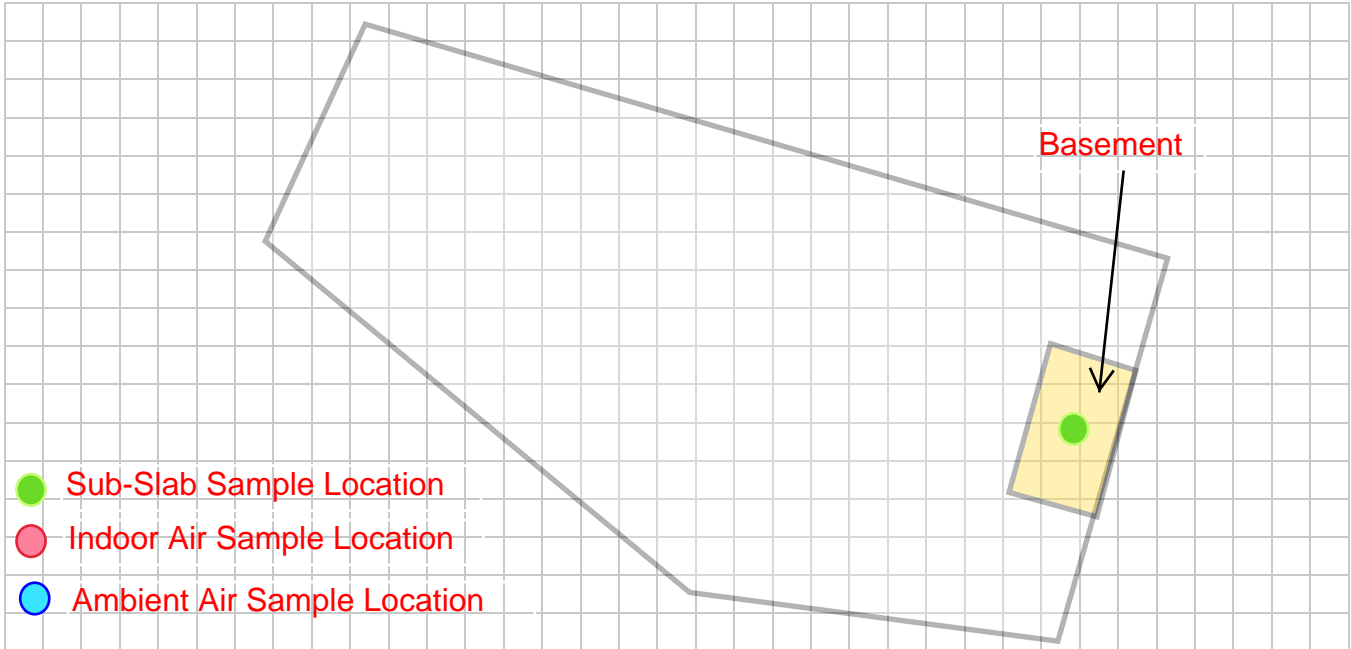
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

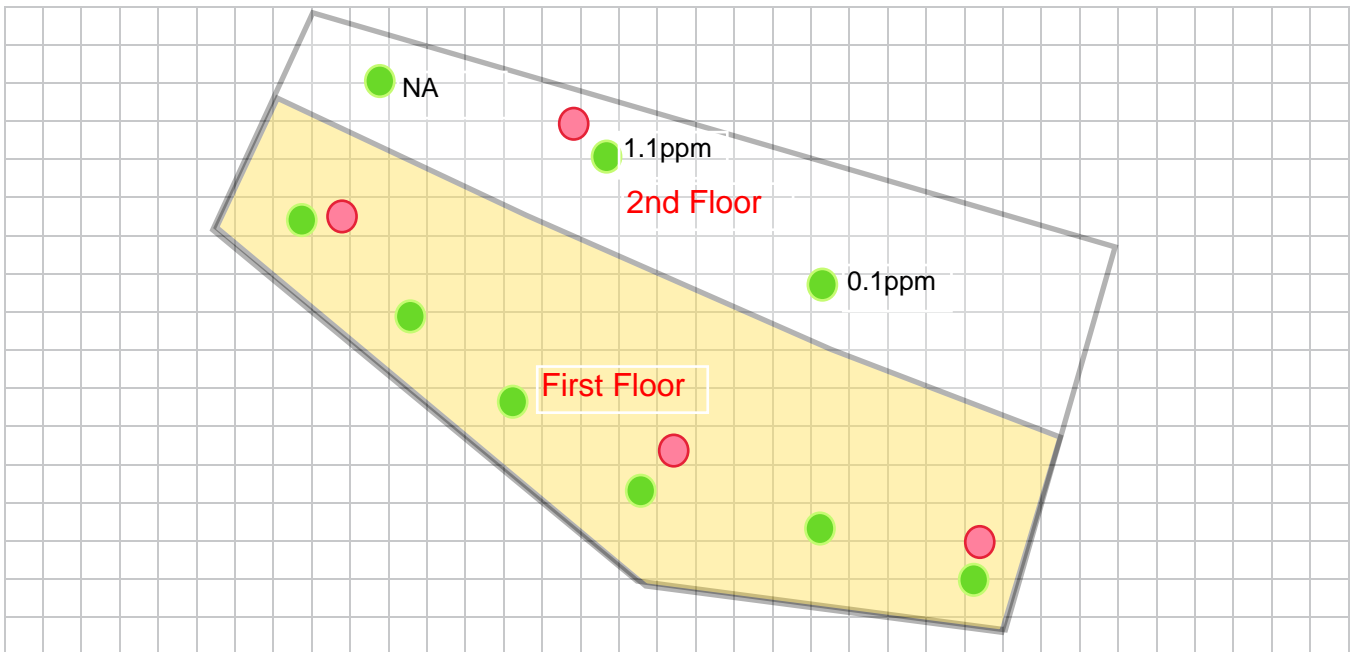
## 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

**Basement:**



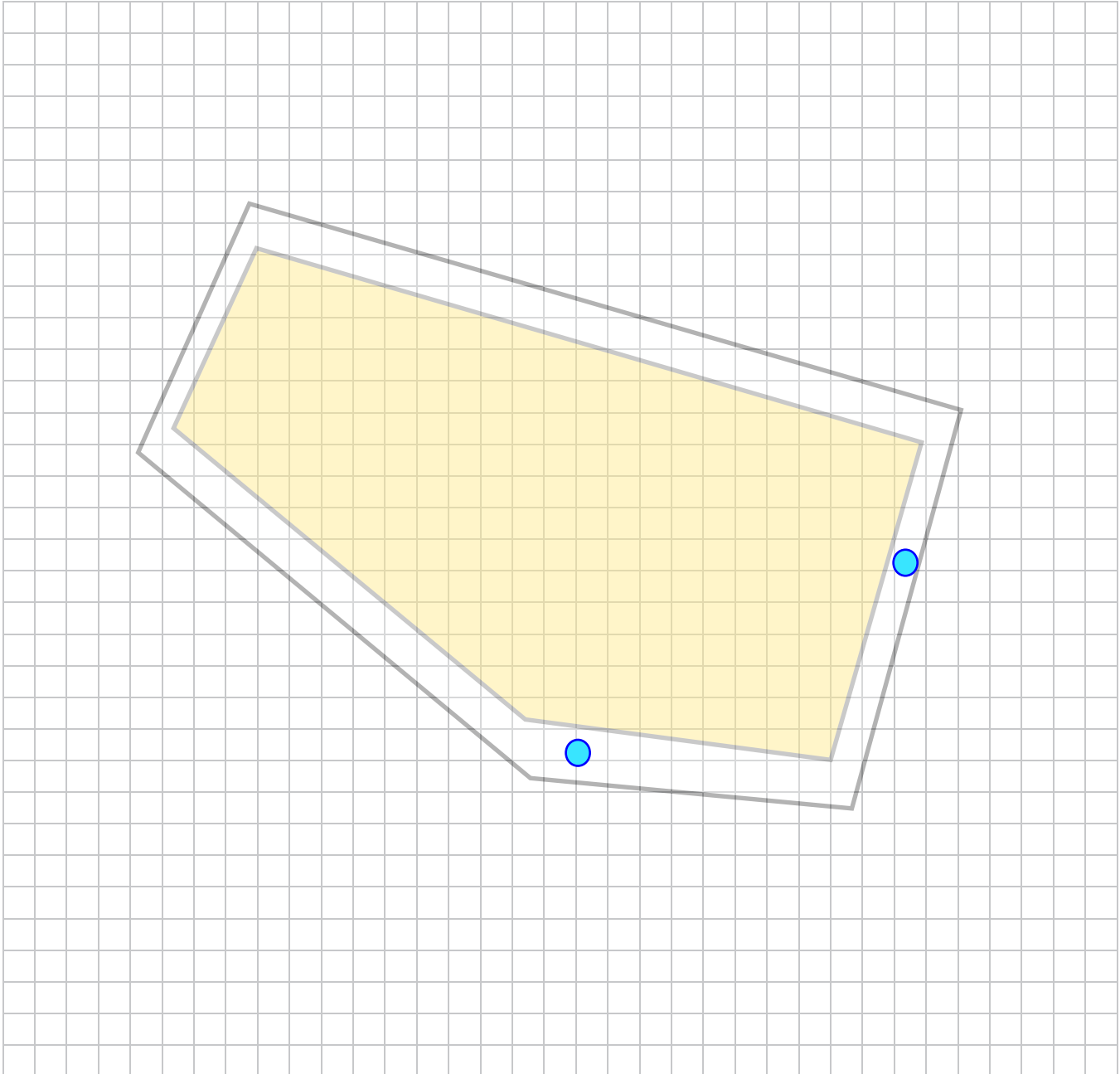
**First Floor:**



## 12. OUTDOOR PLOT

**Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.**

**Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.**



### 13. PRODUCT INVENTORY FORM

**Make & Model of field instrument used:** \_\_\_\_\_

**List specific products found in the residence that have the potential to affect indoor air quality.**

[illegible]

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

**\*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.**