Historic Research

And

Phase II Environmental Investigation

1430-1440 & 1458 Main Street
Buffalo, New York

November 2023

Prepared for:

R.E. McNamara
8615 Roll Road
Clarence Center, NY, 14032-9139

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

2283.002Y.110/CV

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Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

1.1 Background and Site Description

Roux Environmental Engineering and Geology, D.P.C. (Roux) performed historical research and a Phase II Environmental Investigation for R.E. McNamara at the parcels addressed as 1430, 1440, and 1458 Main Street in the City of Buffalo, Erie County, New York (Site).

The Site, located in a highly developed residential and commercial area of the City of Buffalo (see Figure 1), is supplied with and has access to all public utilities (i.e., municipal sanitary sewer, electric, natural-gas and public water). As shown on Figure 2, five structures are present on the Site; these existing buildings are further discussed below:

- Building 1 – Storage.
- Building 2 – Storage.
- Building 3 – AAA Safe and Lock Co.
- Building 4 - Diamond Moving & Storage warehouse facilities.
- Building 5 -Vacant.

The Site consisting of three parcels totals approximately 1.71-acres; the parcels are further detailed below:

Parcel Address	Size (acres)	Tax ID No.	Current Owner	Current Use
1430 Main Street	0.28	100.39-2-8.1	Robert & Stephen Sireci	Parking/Vacant Land
1440 Main Street	0.73	100.39-2-6.1	Stephen, Wallis, & Robert Sireci	Storage and Warehouse Facilities
1458 Main Street	0.70	100.39-2-4	Frederick A. Culliton Jr.	Commercial & Storage facilities

1.2 Historical Research

Sanborn Maps

As part of this project, as further discussed below, Roux completed a historical record research, including reviews of Sanborn Fire Insurance Maps, and municipal records (see Appendix A) for additional information relative to the Site. On-Site operations included storage, a plumbing shop, packing, storefronts, and various auto houses/private garages from at least 1925 through at least 1951. In addition, a former radio station (WKBW Studio) was on-Site in at least 1951. One gasoline underground storage tank (UST) was identified west of Building 4 (off the northwest corner) on the 1440 Main Street parcel in at least 1925. One additional gasoline UST was identified on the southwest portion of the 1458 Main Street parcel.

Municipal Records

Records readily available at the City of Buffalo municipal offices (Assessor, Building and Fire Departments) as well as records available online from the Erie County GIS were reviewed for additional

information relative to the Site. Roux also researched historic addresses identified for the Site through review of Sanborn maps. Note that a Freedom of Information Letter (FOIL) was submitted to the City of Buffalo as required to access their records. The following summarizes municipal records provided to Roux at the time of this assessment; copies of the pertinent records are included in Appendix A.

- Past owners were identified as Cold Spring Storage Co., Churchill Evan Association, Powell Moving and Storage Co., H. Knepper and Son (plumbing supplies)
- General building permits on file for the Site apparently associated with a hazardous/regulated material assessment indicates 60-gallons of presumed petroleum and a pump at 1430 Main Street for a plumbing supply store (H. Knepper and Son) and 500-gallons of presumed petroleum at a storage facility (Cold Spring Storage).
- A Survey document of 1432 Main Street, dated 1946, indicates the presence of two 750-gallon gasoline USTs, one of which is identified as being filled with water, in connection with a private filling station; an associated sketch depicts these USTs and a pump to the south of a former shed and between a horse barn and warehouse (this area is presumably west of Building 4).
- An Application to Store or Keep for Sale Inflammable Oils or Explosives document, dated 1927, indicates that the applicant, N. Nielsen and Son, has installed one additional 280-gallon gasoline curb tank and pump, which complies with the application and was approved.

Roux's Phase II Environmental Investigation was completed to further assess subsurface conditions across the Site. This investigation was not intended to be comprehensive in nature, but was intended to collect sufficient data to determine whether the Site is a potential candidate for the New York Brownfield Cleanup Program (NY BCP). Additional information relative to the work completed by Roux is provided below.

2.0 Site Investigation Activities

2.1 Site Geology/Hydrogeology

The overburden geology observed during the investigation activities is generally described as follows:

- Fill materials identified across the Site generally consisted of black fines, ash, cinders, stone, and fragments of brick. Fill materials varied in depths between 0.5 feet below ground surface (fbgs) to 9 fbgs.
- Native soil beneath fill units consisted of sandy lean clay at varying depths and was generally encountered at 0.5 to 4 fbgs. Poorly graded sand units were noted beneath the sandy lean clay layer at varying depths of 4 to 15 fbgs. An underlying lean sandy clay layer was then observed beneath the poorly graded sand at depths of approximately 11 to 16 fbgs.
- Suspect perched groundwater was encountered at SB-2, SB-3, SB-5, SB-6, SB-7, SB-8, and SB-9 at depths between approximately 7 to 15 fbgs. Perched groundwater was observed above a sandy clay layer.
- Additional information on lithology is provided on the Soil Boring Logs included on Table 2.

Groundwater flow is likely to the west towards the Niagara River or north towards Scajaquada Creek. Local groundwater flow, however, may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions.

2.2 Soil Boring Investigation

On October 13, 2023, Roux's subcontractor, Trec Environmental Inc. (Trec), completed drilling activities using a hydraulically driven track-mounted Geoprobe drill rig (Model 66DT) equipped with a 1.5-inch diameter, 48-inch-long macro-core sampler. As shown on Figure 2, seventeen soil borings designated as SB-1 through SB-17 were completed across the Site in accessible exterior areas. The soil borings were advanced to a maximum depth of 16 fbgs.

The sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples by Roux's Environmental Scientist. The physical characteristics of all soil borings were classified using the ASTM D2488 Visual-Manual Procedure Description. Soils from each boring were screened via headspace screening using a MiniRae 3000 Photoionization Detector (PID). Visual and/or olfactory observations were noted. All field observations, including lithology, depths, PID scan results, etc., at each investigation location are summarized in the Soil Boring Log are summarized in Table 1. Photographs taken during the work are included in Appendix B.

Ten soil/fill samples selected for laboratory analysis were transported under chain-of custody command to Eurofins Testing America (Eurofins) in Amherst, New York, for analysis of polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) metals. Two soil/fill samples were selected for analysis of Target Compound List (TCL) plus NYSDEC Commissioner Policy 51 (CP-51) volatile organic compounds (VOCs) in the areas proximate suspect USTs shown on historic Sanborn maps. All samples were collected in laboratory provided sample bottles and were cooled to 4^0 C prior to transport.

3.0 INVESTIGATION FINDINGS

3.1 Qualitative Soil Screening

Soil samples from the soil boring investigation were observed and scanned via headspace screening for volatile organics using a PID. A brief description of the field observations during the boring investigation is presented below:

Investigation Location ID	Parcel	Environmental Concern Assessed	Highest PID Reading (parts per million, ppm) and depth (fbgs)	Other Observations
SB-1	1458 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 1.5 fbgs.
SB-2	1458 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 1.5 fbgs.
SB-3	1458 Main Street	Sanborn gasoline UST location	0 ppm throughout boring.	Fill to 4 fbgs.
SB-4	1458 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 1.5 fbgs.
SB-5	1458 Main Street	Sanborn gasoline UST location	0 ppm throughout boring.	Fill to 4 fbgs.
SB-6	1440 Main Street	Sanborn gasoline UST location	0 ppm throughout boring.	Fill to 1.5 fbgs
SB-7	1440 Main Street	Sanborn gasoline UST location	0 ppm throughout boring.	Fill to 1.5 fbgs
SB-8	1440 Main Street	Sanborn gasoline UST location	0 ppm throughout boring.	Fill to 1.5 fbgs
SB-9	1440 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 1.5 fbgs
SB-10	1440 Main Street	General Site conditions	0 ppm throughout boring	Fill to 2 fbgs. Hit refusal at 2 fbgs.
SB-11	1440 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 9 fbgs. Brick to 8.0 fbgs.
SB-12	1440 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 2 fbgs.
SB-13	1430 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 2 fbgs.
SB-14	1430 Main Street	General Site conditions	0 ppm throughout boring.	No fill material
SB-15	1430 Main Street	Suspect former transformer location.	0 ppm throughout boring	No fill material
SB-16	1430 Main Street	General Site conditions	0 ppm throughout boring.	No fill material
SB-17	1430 Main Street	General Site conditions	0 ppm throughout boring.	Fill to 4 fbgs.

3.2 Soil Analytical Results

Table 2 presents a summary of the detected VOCs, PAHs, and metals for each of the soil/fill samples selected for laboratory analysis from Roux's investigation. For comparative purposes, Table 2 includes 6NYCRR Part 375 Unrestricted, Restricted-Residential, Commercial and Industrial Use Soil Cleanup Objectives (USCOs, RRSCOs, CSCOs, and ISCOs respectively). Based on the anticipated redevelopment plan, USCOs or RRSCOs are the most applicable comparison criteria in that scenario. Figure 3 shows exceedances of detected contaminants above their respective SCOs at their corresponding investigation locations. Appendix C contains a copy of the laboratory analytical data package.

As summarized in Table 2, VOCs, selected for analysis of soil at the water table in borings in Sanborn UST areas, were either not detected at concentrations above laboratory detection limits or concentrations were significantly below their respective USCOs. Numerous PAHs exceeded Part 375

SCOs with multiple individual PAH concentrations exceeding USCOs and RRSCOs in six soil/fill samples collected from across the Site from the 1440 and 1458 Main Street parcels and from an investigation location near the parcel boundary of 1430 Main Street. The highest PAH concentrations in fill materials, exceeding the regulatory threshold of 100 milligrams per kilogram (mg/kg) in a restricted-residential scenario, were 603 mg/kg at SB-2 and 184 mg/kg at SB-10; these areas would be considered “hot spots” requiring remediation if the Site were in a regulatory program.

Metals were identified at concentrations exceeding Part 375 SCOs at all soil/fill sample locations with exceedances of USCOs and RRSCOs in at least one sample from each parcel. Of note, arsenic was identified above its ISCO (16 mg/kg) at SB-3 (22.1 mg/kg) at 1458 Main, SB-8 (16.2 mg/kg) at 1440 Main, and SB-13 (31.9 mg/kg) at 1430 Main, Barium was detected at concentrations exceeding USCOs (350 mg/kg) at SB-1 (367 mg/kg) and SB-8 (311 mg/kg) on the 1458 and 1440 Main Street parcels, respectively. Cadmium was detected at concentrations exceeding its RRSCO (4.3 mg/kg) at SB-8 (7.7 mg/kg). Lead was detected at concentrations exceeding its ISCO (3,900 mg/kg) at SB-3 (4,370 mg.kg) and its CSCO (1,000 mg/kg) at SB-8 (1,610 mg/kg). A significantly elevated mercury concentration of 64.9 mg/kg, exceeding its ISCO of 5.7 mg/kg, was identified at SB-3, and to a lesser extent, mercury exceeded its RRSCO (0.81 mg/kg) at SB-9 (0.84 mg/kg).

4.0 Conclusions and Recommendations

Based on the results of the Phase II investigation at the Site, Roux offers the following conclusions and recommendations:

- As per the review of historical sources by Roux, the Site has a history of petroleum USTs and the Site has been used for a variety of commercial uses.
- Fill materials, generally consisting of black fines, ash, cinders, stone, and fragments of brick, were noted across the Site at varying depths between 0.5 fbgs to 9 fbgs. Laboratory analysis indicates wide-spread environmental impacts in soil/fill, as further discussed below.
- Soil/fill present across the Site is impacted by PAHs and/or metals with concentrations exceeding RRSCOs (the most applicable SCO based on the future intended use of the Site) at sample locations from each Site parcel. Of note, total PAH concentrations of 603 mg/kg at SB-2 and 184 mg/kg at SB-10 would be considered “hot spots” requiring remediation if the Site were in a regulatory program under a restricted residential scenario. Regarding metals, arsenic (up to 31.9 mg/kg), lead (up to 4370 mg/kg), and mercury (up to 64.9 mg/kg) were identified at concentrations exceeding their CSCO and/or ISCO and based on the concentrations identified, would also require remediation if the Site were in a regulatory program.
- No VOCs were detected at concentrations above their respective USCOs in soil samples selected for analysis in Sanborn UST areas.
- We understand the property is being considered for redevelopment. Based on the findings detailed above, the Site is a potential candidate for the BCP. Regardless of whether the BCP is pursued, impacted fill present on-Site will require exposure control, remediation and/or proper management either prior to or during redevelopment.

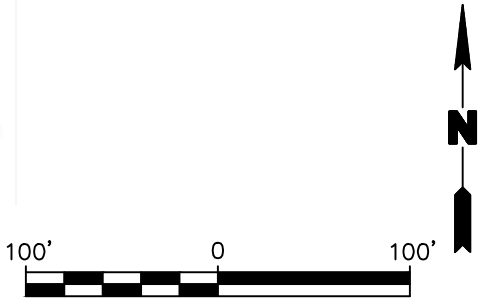
5.0 LIMITATIONS

This report has been prepared for the exclusive use of R.E. McNamara. The contents of this report are limited to information available at the time of the Site investigation activities and to data referenced herein and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of R.E. McNamara. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of Roux.

FIGURES

AERIAL FROM USGS NY BUFFALO NE & NW

QUADRANGLE LOCATION



Title:

SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

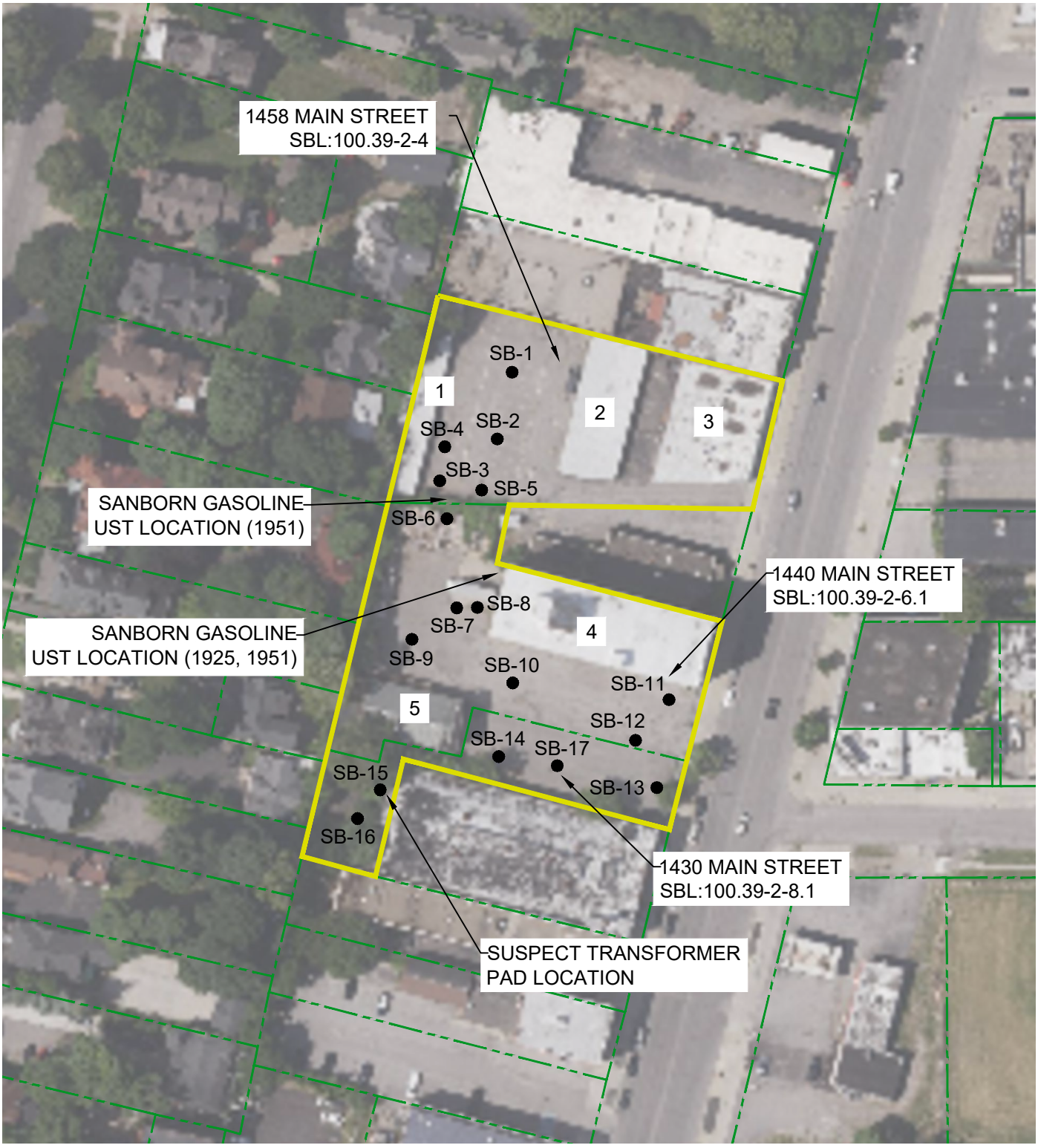
1430-1440 & 1458 MAIN STREET

BUFFALO, NEW YORK

Prepared for:

R.E. MCNAMARA

ROUX	Compiled by: CEH	Date: OCTOBER 2023	FIGURE
	Prepared by: CEH	Scale: AS SHOWN	1
	Project Mgr: BWM	Project: 0717-023-001	
	File: SITEPLAN(AERIAL).DWG		



LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- 1 — BUILDING NUMBER
- SB-1 ● — SOIL BORING LOCATION

AERIAL FROM BING NY83-WF

N

100' 0 100'

Title:

SITE PLAN (AERIAL)

PHASE II ENVIRONMENTAL INVESTIGATION

1430-1440 & 1458 MAIN STREET

BUFFALO, NEW YORK

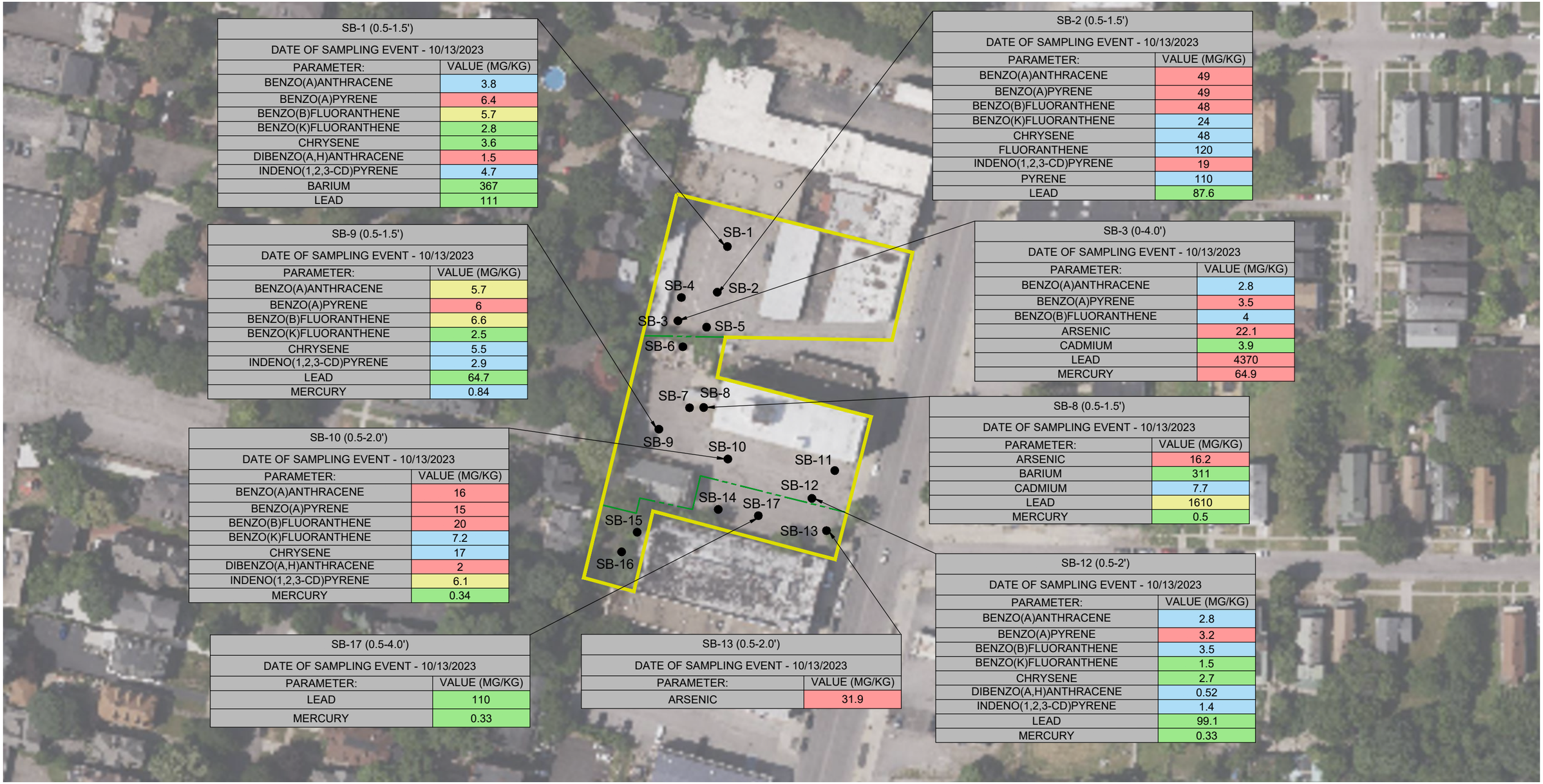
Prepared for:

R.E. MCNAMARA

ROUX

Compiled by: CEH	Date: OCTOBER 2023	FIGURE
Prepared by: CEH	Scale: AS SHOWN	2
Project Mgr: BWM	Project: 0717-023-001	
File: SITEPLAN(AERIAL).DWG		

F:\CAD\0-ROUX\R.E. McNamara\Figure 3 - Investigation Locations and Areas of Concern.dwg, 10/25/2023 10:31:30 AM, DWG To PDF.pc3



SB-1 (0.5-1.5')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	3.8
BENZO(A)PYRENE	6.4
BENZO(B)FLUORANTHENE	5.7
BENZO(K)FLUORANTHENE	2.8
CHRYSENE	3.6
DIBENZO(A,H)ANTHRACENE	1.5
INDENO(1,2,3-CD)PYRENE	4.7
BARIUM	367
LEAD	111

SB-2 (0.5-1.5')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	49
BENZO(A)PYRENE	49
BENZO(B)FLUORANTHENE	48
BENZO(K)FLUORANTHENE	24
CHRYSENE	48
FLUORANTHENE	120
INDENO(1,2,3-CD)PYRENE	19
PYRENE	110
LEAD	87.6

SB-3 (0-4.0')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	2.8
BENZO(A)PYRENE	3.5
BENZO(B)FLUORANTHENE	4
ARSENIC	22.1
CADMIUM	3.9
LEAD	4370
MERCURY	64.9

SB-9 (0.5-1.5')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	5.7
BENZO(A)PYRENE	6
BENZO(B)FLUORANTHENE	6.6
BENZO(K)FLUORANTHENE	2.5
CHRYSENE	5.5
INDENO(1,2,3-CD)PYRENE	2.9
LEAD	64.7
MERCURY	0.84

SB-8 (0.5-1.5')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
ARSENIC	16.2
BARIUM	311
CADMIUM	7.7
LEAD	1610
MERCURY	0.5

SB-10 (0.5-2.0')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	16
BENZO(A)PYRENE	15
BENZO(B)FLUORANTHENE	20
BENZO(K)FLUORANTHENE	7.2
CHRYSENE	17
DIBENZO(A,H)ANTHRACENE	2
INDENO(1,2,3-CD)PYRENE	6.1
MERCURY	0.34

SB-12 (0.5-2')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
BENZO(A)ANTHRACENE	2.8
BENZO(A)PYRENE	3.2
BENZO(B)FLUORANTHENE	3.5
BENZO(K)FLUORANTHENE	1.5
CHRYSENE	2.7
DIBENZO(A,H)ANTHRACENE	0.52
INDENO(1,2,3-CD)PYRENE	1.4
LEAD	99.1
MERCURY	0.33

SB-17 (0.5-4.0')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
LEAD	110
MERCURY	0.33

SB-13 (0.5-2.0')	
DATE OF SAMPLING EVENT - 10/13/2023	
PARAMETER:	VALUE (MG/KG)
ARSENIC	31.9

LEGEND:

PROPERTY BOUNDARY

PARCEL BOUNDARY

SB-1 ● SOIL BORING LOCATION

VALUES PER 6 NYCRR PART 375 SOIL CLEANUP OBJECTIVES (SCOs):

EXCEEDS USCOs

EXCEEDS RRSCOs

EXCEEDS CSCOs

EXCEEDS ISCOs

N

100' 0 100'

Title:

INVESTIGATION LOCATIONS AND AREAS OF CONCERN

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
1430-1440 & 1458 MAIN STREET
BUFFALO, NEW YORK

Prepared for:

R.E. MCNAMARA

ROUX

Compiled by: CEH	Date: OCTOBER 2023	FIGURE
Prepared by: CEH	Scale: AS SHOWN	3
Project Mgr: BWM	Project: 0717-023-001	
File: FIGURE 3 - INVESTIGATION LOCATIONS AND AREAS OF CONCERN.DWG		

TABLES

TABLE 1

SUMMARY OF SOIL BORINGS AND SAMPLE LOCATIONS

1430-1440 & 1458 MAIN STREET
BUFFALO, NEW YORK

Location	Boring Depth (fbgs)	Visually Impacted?	Olfactory Odor	Peak PID Scan (ppm)		Approximate DTW (fbgs)	Depth (fbgs) and Soil Description (ASTM D2488: Visual-Manual Procedure)
				Scan	HSD		
SB-1	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Concrete slab with stone subbase* *0.5 - 1.5 Non-native fill material black, with black sandy fines, ash, cinders, and stone* *1.5 - 8.0 Sandy lean clay (CL) brown, medium plasticity*
SB-2	12.0	no	none	0.0	0.0	7.0 (perched)	*0.0 - 0.5 Concrete slab with stone subbase* *0.5 - 1.5 Non-native fill material white, with ash and cinders* *1.5 - 6.0 Sandy lean clay (CL) brown, medium plasticity* *6.0 - 7.0 Unknown hard layer. Potential concete slab or stone* *7.0 - 12.0 Sandy lean clay (CL) brown, medium plasticity*
SB-3	16.0	no	none	0.0	0.0	14.0 (perched)	*0.0 - 4.0 Non-native fill material black, with black sandy fines, ash, cinders, brick pieces, and stone* *4.0 - 14.0 Poorly graded sand (SP) brown* *14.0 - 16.0 Sandy lean clay (CL) brown, medium plasticity*
SB-4	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Concrete slab with stone subbase* *0.5 - 1.5 Non-native fill material black, with black sandy fines, ash, cinders, and brick pieces* *1.5 - 8.0 Sandy lean clay (CL) brown, medium plasticity*
SB-5	16.0	no	none	0.0	0.0	14.0 (perched)	*0.0 - 4.0 Sandy lean clay (CL), brown, medium plasticity, with non-native intermingled fill material including black sandy fines, ash, cinders, brick pieces, and stone* *4.0 - 6.0 Sandy lean clay (CL) brown, medium plasticity* *6.0 - 14.0 Poorly graded sand (SP) brown* *14.0 - 16.0 Sandy lean clay (CL) brown, medium plasticity with trace amounts of stone*
SB-6	16.0	no	none	0.0	0.0	15.0 (perched)	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 1.5 Non-native fill material white, with ash and cinders* *1.5 - 10.0 Sandy lean clay (CL) brown, medium plasticity* *10.0 - 15.0 Poorly graded sand (SP) brown* *15.0 - 16.0 Sandy lean clay (CL) brown, medium plasticity*
SB-7	12.0	no	none	0.0	0.0	11.5 (perched)	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 1.5 Non-native fill material black, with black sandy fines, with some ash and cinders* *1.5 - 6.0 Sandy lean clay (CL) brown, medium plasticity* *6.0 - 11.5 Poorly graded sand (SP) brown* *11.5 - 12.0 Sandy lean clay (CL) brown, medium plasticity*
SB-8	16.0	no	none	0.0	0.0	11.0 (perched)	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 1.5 Sandy lean clay (CL), brown, medium plasticity, with non-native intermingled fill material including black sandy fines, ash, cinders* *1.5 - 5.0 Sandy lean clay (CL) brown, medium plasticity* *5.0 - 11.0 Poorly graded sand (SP) brown* *14.0 - 16.0 Sandy lean clay (CL) brown, medium plasticity with trace amounts of stone*
SB-9	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 1.5 Non-native fill material black, with black sandy fines, ash, cinders, and brick pieces* *1.5 - 7.0 Sandy lean clay (CL) brown, medium plasticity* *7.0 - 8.0 Poorly graded sand (SP) brown*
SB-10	2.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 2.0 Non-native fill material black, with black sandy fines, ash, cinders, brick pieces, and stone* *2.0 Hit refusal at 2.0 fbgs*
SB-11	12.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 8.0 Non-native fill material, brick* *8.0 - 9.0 Non-native fill material, brick with some intermingled black sandy fines, ash, cinders, and stone* *9.0 - 12.0 Sandy lean clay (CL) brown, medium plasticity*
SB-12	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 2.0 Non-native fill material black, with black sandy fines, ash, cinders, and brick pieces* *2.0 - 5.0 Sandy lean clay (CL) brown, medium plasticity* *5.0 - 8.0 Poorly graded sand (SP) brown*
SB-13	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 2.0 Non-native fill material black, with black sandy fines, ash, cinders, and brick pieces* *2.0 - 8.0 Poorly graded sand (SP) brown*
SB-14	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 5.0 Sandy lean clay (CL) brown, medium plasticity* *5.0 - 8.0 Poorly graded sand (SP) brown*
SB-15	4.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 4.0 Sandy lean clay (CL) brown, medium plasticity*
SB-16	4.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 4.0 Sandy lean clay (CL) brown, medium plasticity*
SB-17	8.0	no	none	0.0	0.0	none	*0.0 - 0.5 Asphalt with stone subbase* *0.5 - 4.0 Non-native fill material black, with black sandy fines, ash, cinders, and brick pieces* *4.0 - 8.0 Sandy lean clay (CL) brown, medium plasticity*

Notes:
1. fbgs = feet below ground surface
2. DTW = depth to water
3. HSD = headspace determination
4. PID = MiniRae photoionization detector equipped with a 10.6 eV lamp
5. ppm = parts per million

TABLE 2

SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT
1430-1440 & 1458 MAIN STREET
BUFFALO, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	Industrial Use SCOs [2]	Sample Location (Depth - ft)											
					SB-1 (0.5-1.5')	SB-2 (0.5-1.5')	SB-3 (0-4')	SB-5 (12-14')	SB-6 (0.5-1.5')	SB-7 (11-12')	SB-8 (0.5-1.5')	SB-9 (0.5-1.5')	SB-10 (0.5-2')	SB-12 (0.5-2')	SB-13 (0.5-2')	SB-17 (0.5-4')
					10/13/2023											
Volatile Organic Compounds (VOCs) - mg/Kg [3]																
Acetone	**0.05**	**100**	**500**	**1000**	--	--	--	ND	--	0.0054 J	--	--	--	--	--	--
Methylene chloride	**0.05**	**100**	**500**	**1000**	--	--	--	ND	--	0.0027 J	--	--	--	--	--	--
Trichloroethene	**0.47**	**21**	**200**	**1000**	--	--	--	0.0017 J	--	ND	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg [3]																
Acenaphthene	**20**	**100**	**500**	**1000**	0.61 J	2 J	ND	--	ND	--	ND	ND	2	0.66 J	ND	ND
Acenaphthylene	**100**	**100**	**500**	**1000**	0.26 J	9.6	ND	--	ND	--	ND	ND	ND	ND	ND	ND
Anthracene	**100**	**100**	**500**	**1000**	1.2	16	ND	--	ND	--	ND	ND	5.3	1.4 J	ND	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	**3.8**	**49**	**2.8 J**	--	ND	--	0.51 J	**5.7 J**	**16**	**2.8**	0.37 J	ND
Benzo(a)pyrene	**1**	**1**	**1**	**1.1**	**6.4**	**49**	**3.5 J**	--	ND	--	0.58 J	**6 J**	**15**	**3.2**	0.45 J	ND
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	**5.7**	**48**	**4 J**	--	ND	--	0.67 J	**6.6 J**	**20**	**3.5**	0.69 J	ND
Benzo(ghi)perylene	**100**	**100**	**500**	**1000**	4.4	18	2.4 J	--	ND	--	0.35 J	2.9 J	5.4	1.3 J	0.27 J	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	**110**	**2.8**	**24**	ND	--	ND	--	ND	**2.5 J**	**7.2**	**1.5 J**	0.27 J	ND
Chrysene	**1**	**3.9**	**56**	**110**	**3.6**	**48**	ND	--	ND	--	0.53 J	**5.5 J**	**17**	**2.7**	0.49 J	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	**1.1**	**1.5**	ND	ND	--	ND	--	ND	ND	**2**	**0.52 J**	ND	ND
Fluoranthene	**100**	**100**	**500**	**1000**	6.5	**120**	5.5 J	--	ND	--	1.2 J	13 J	40	5.8	0.82 J	3.5 J
Fluorene	**30**	**100**	**500**	**1000**	0.48 J	6.3	ND	--	ND	--	ND	ND	1.6 J	0.55 J	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	**4.7**	**19**	ND	--	ND	--	0.32 J	**2.9 J**	**6.1**	**1.4 J**	0.28 J	ND
Naphthalene	**12**	**100**	**500**	**1000**	0.39 J	0.66 J	ND	--	ND	--	ND	ND	ND	0.25 J	ND	ND
Phenanthrene	**100**	**100**	**500**	**1000**	5.2	84	4.3 J	--	ND	--	0.81 J	9.5 J	22	5.3	ND	ND
Pyrene	**100**	**100**	**500**	**1000**	4.9	**110**	4 J	--	ND	--	0.9 J	10 J	25	3.9	0.59 J	2.3 J
Total PAHs	**--**	**--**	**--**	**--**	52.4	603.6	26.5	--	ND	--	5.9	64.6	184.6	34.8	4.2	5.8
Metals - mg/Kg																
Arsenic	**13**	**16**	**16**	**16**	12.7	12.9	**22.1**	--	3.1	--	**16.2**	5.9	12.3	7.7	**31.9**	9.5
Barium	**350**	**400**	**400**	**10000**	**367**	66.1	182	--	40.4 F1	--	**311**	85.9	147	112	35.6	99.7
Cadmium	**2.5**	**4.3**	**9.3**	**60**	0.23 J	0.11 J	**3.9**	--	0.2 J	--	**7.7**	0.39	0.15 J	0.12 J	0.31	1.2
Chromium	**30**	**180**	**1500**	**6800**	11.4	13.1	17.1	--	8.2	--	18.6	12.7	18.6	10.4	8.4	9.7
Lead	**63**	**400**	**1000**	**3900**	**111**	**87.6**	**4370**	--	14.1	--	**1610**	**64.7**	62	**99.1**	31.2	**110**
Mercury	**0.18**	**0.81**	**2.8**	**5.7**	0.15	0.13	**64.9**	--	0.015 J	--	**0.5 F1 F2**	**0.84**	**0.34**	**0.33**	0.018 J	**0.33**
Selenium	**3.9**	**180**	**1500**	**6800**	0.71 J	ND	ND	--	ND	--	ND	ND	ND	ND	1.5 J	ND
Silver	**2**	**180**	**1500**	**6800**	ND	ND	0.3 J	--	ND	--	1.3	ND	0.24 J	ND	0.72 J	ND

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

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
F1 = MS and/or MSD recovery is outside acceptance limits.
F2 = MS/MSD RPD exceeds control limits.

Bold	= Result exceeds Unrestricted Use SCOs
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Industrial use SCOs.

APPENDIX A

HISTORICAL RESEARCH DOCUMENTS

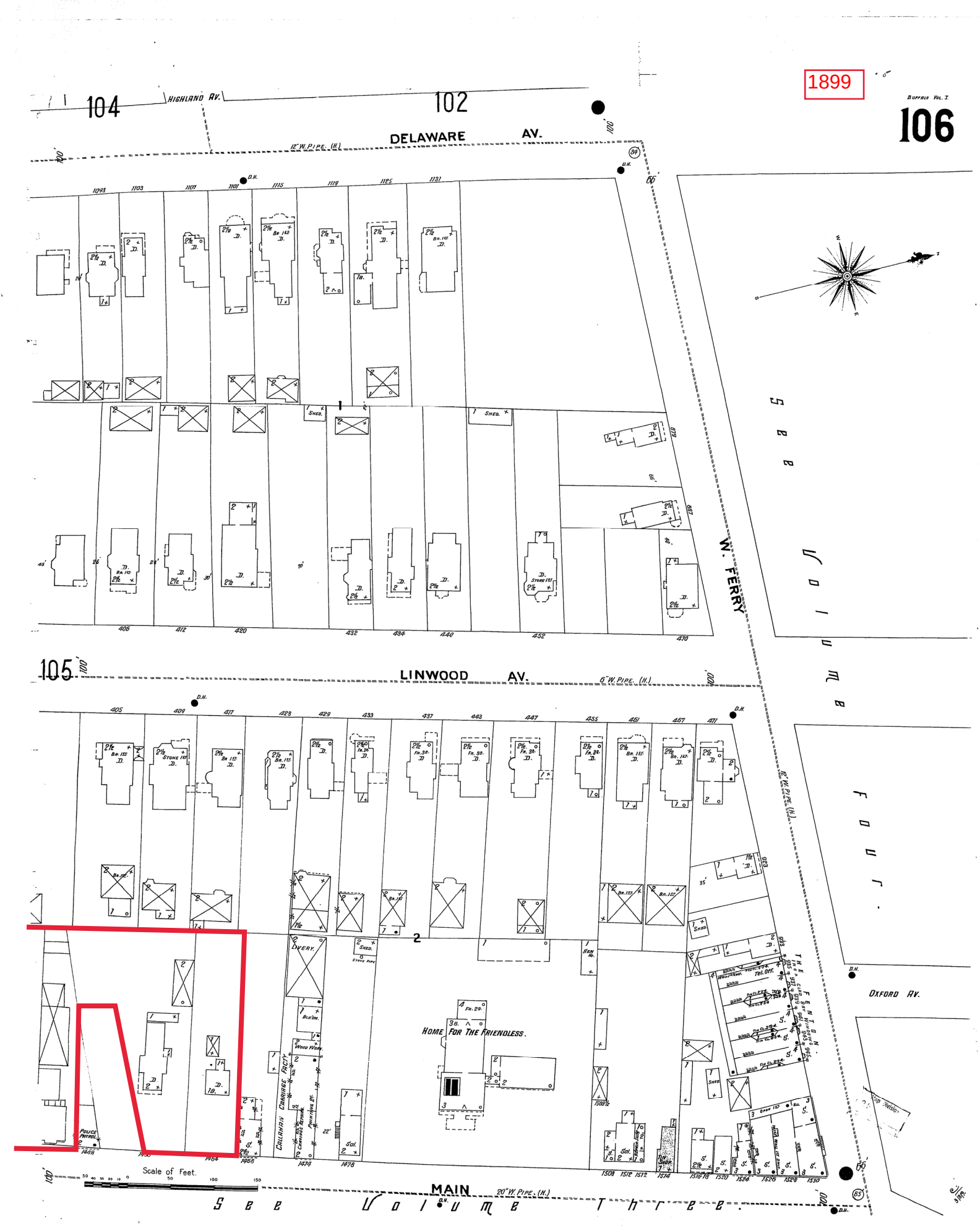
1899


105
104
DELAWARE AV.
LEXINGTON AV.
W. UTICA
70
LINWOOD AV.
106
MAIN
R. C. CHAPEL OF THE BLESSED SACRAMENT
LINWOOD AV. M. E. CHURCH
ENGINE HOUSE No. 16
STORAGE
POLICE STATION
Scale of Feet.
See Volume Three.

1899

Buffalo Vol. I

106



1925


(218) BUFFALO, N.Y. VOL. 11A
77
(105)
102
DELAWARE AV.
98
W UTICA
LINWOOD AV.
76
78
MAIN
80
ST. JOSEPH'S R. C. CATHEDRAL
Built 1913
Fire proof construction
STONE WALLS - STONE & STEEL ARCH ROOF. SUPPORTS: CONCR. FLS. & RF. RF. COVERED BY TILE.
HEAT: STEAM
LIGHTS: ELEC.
CHAPEL OF THE BLESSED SACRAMENT (R. C.)
SACRISTY - 1ST
HEATING BOILER
STONE FRONT
FORMERLY LINWOOD AV. M.E. CHURCH
HEAT: STEAM
LIGHTS: ELEC.
VACANT
STRATFORD ARMS HOTEL
Fire Proof construction
Built 1922
CONCR. FLS. & RF. BRK. WALLS-STEEL FRAME (PROTECTED)
FR. ATTIC
DELLWOOD DANCE HALL
2ND
THE UTICA BUILDING
Bank
Union Court
Union Hall
CHURCHILL TABERNACLE
HEAT: STEAM - LIGHTS: ELEC.
RAISED
BRICK WALLS - CONCR. FL. 1ST
FIRE DEPT. ENGINE HO. 16
FILTERED
Plumbing Shop
HOUSEHOLD STORAGE
SHED
FIRE PROOF CONSTR'N. EXCEPT ROOF
CONCR. FLS. BR'K.
POLICE STORE HO.
STORAGE OF BOZZONI GOODS
POLICE STATION
COLD STORAGE
CELLS
Scale of Feet.
50 40 30 20 10 0 50 100 150
Copyright 1925 by the Sanborn Map Co.

1925

BUFFALO, N.Y. VOL. 1A (218)

78
(106)

DELAWARE 98 AV.

LINWOOD AV.

77

79

MAIN

W. FERRY

FILLMORE

Scale of Feet.

1951

(2/8) BUFFALO, N.Y. VOL. 1A

77

(105)

102

DELAWARE AV.

98

W UTICA

LINWOOD AV.

76

78

MAIN

80

ST. JOSEPH'S NEW CATHEDRAL (R.C.)
BUILT 1914-15
FIRE PROOF CONSTRUCTION

CHAPEL OF THE BLESSED SACRAMENT (R.C.)

CATHEDRAL RECTORY
BUILT: 1928

CATHOLIC DAUGHTERS CLUB NO.

STRATFORD ARMS HOTEL
Fire Proof construction

THE MEDICAL & DENTAL CENTRE BLDG
BUILT 1929

THE UTICA BUILDING

COLD SPRING BRANCH OF THE MARINE TRUST CO.

CHURCHILL TABERNACLE

FIRE DEPT. ENGINE HO. NO. 16
BUILT 1884

RADIO STA WKBW STUDIO

COLD SPRING

POLICE STATION NO. 6

AUTO PARKING

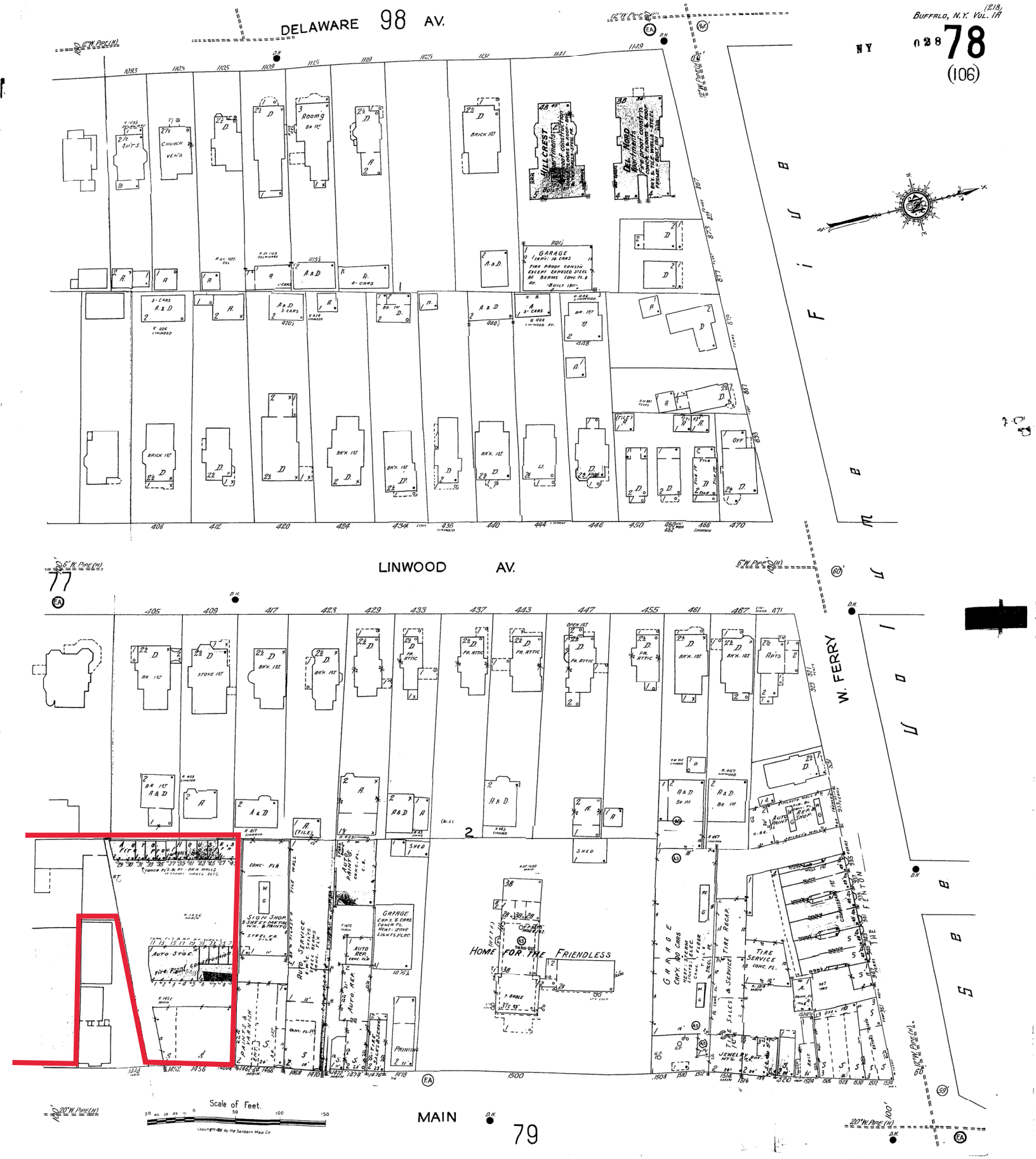
Scale of Feet.

Copyright 1925 by the Sanborn Map Co.

1951

BUFFALO, N.Y. VOL. 11A (218)

NY 028 78 (106)



1164 Main St., E.H. Baker Co., auto sales, 215 gal., private, pump.

1147 Main St., B.L.DANE, auto sales, 550 gallons, street, curb.

~~1176 Main St., ENGEL motor Co., auto sales, 300 gallons, private, drive-in.~~ Filled in Counter

1184 Main St., HERZOG MOTOR CO., auto sales, 120 gal., private, pump.

1195 Main St., E.G.S. Miller, residence, 280 gallons, private, pump.

1220 Main St., WILLIS ST. CLARE Sales, auto sales, 550 gallons, private, drive-in.

1234 Main St., Buffalo Cadillac Corpn., auto sales, 550 gallons, private, drive-in.

1227 Main St., Paige Jewett, auto sales, 560 gallons, private, drive-in.

1221 Main St., Ostendorf Motor Co., auto sales, 280 gallons, private, drive-in.

1233 Main St., Overland-Knight co., auto sales, 550 gal., private, drive-in.

1237 Main St., WNY Motor Sales, auto sales, 300 gal., private, drive-in.

1239 Main St., Mileage Motor Co., auto sales, 280 gal., private, drive-in.

1247 Main St., Nash Buffalo Corpn., auto sales, 280 gallons, private, drive-in.

1259 Main St., Hudson Oliver Sales, auto sales, 550 gal., private, drive-in (not in use).

1265 Main St., Lutz Motor Co., auto sales, 280 gal., private, drive-in.

OK 1275 Main St., Meyer Motor Auto Sales., 500 gallons, private, drive-in.

1276 Main St., Alincoln Sales, auto sales, 200 gal., private, drive-in.

1291 Main St., A.W. HAILE, auto sales, 590 gal. private, drive-in.

1296 Main St., Roesch & Klinck, auto sales, 1,000 gallons, private, drive-in.

1320 Main St., Wm. Simon Est., garage, private pump (not in use).

1335 Main St., Dixon Motor Co., auto sales, 500 gallons, private, drive-in.

1339 Main St., Lee Abrams, auto sales, 275 gallons, private, drive-in.

~~1391 Main St., Markoon Garage, 280 gallons, private, drive-in.~~

1425 Main St., N. Nielsen & Son, gas station, 550 gallons, street, curb.

1430 Main St., H. Knepper & Son, plumbing supplies, 60 gallons, private, pump.

1440 Main St., Cold Spring Storage, storage, 500 gallons, private, drive-in.

1445 Main St., vacant, curb.

FORM 29

1925
2

APPLICATION
INSTALLATION
SURVEY [X]

BUFFALO FIRE DEPARTMENT
VOLATILE FLAMMABLE LIQUID
TANK STORAGE AND USE

Gasolin - I
KIND OF LIQUID - GLASS

BATTALION 9th
COMPANY ENG-16
DATE 12-12-26

COMMISSIONER OF FIRE: Joseph D. Masterson -

LOCATION 1432 Main St
CITY PROPERTY (curb)
PRIVATE PROPERTY [X]

NAME Cold Spring Storage Co.
ZONED USE DISTRICT Business

PURPOSE OF USE: Commercial Filling Station
(Private Filling Station)
Private Storage 280 Gal. or less

TYPE OF SYSTEM
PRESSURE [ ]
SUCTION [X]

APPLICATION NUMBER _____ DATE _____
IS LICENSE REQUIRED? No

PERMIT NUMBER _____ DATE _____

INSTALLATION: DATE Approx - 1922
(FOR TANK IN USE)

CONTRACTOR _____
ADDRESS _____

1432 MAIN

TANKS:

2 NUMBER OF 1 FILLED W/WATER
750 GALS CAPACITY OF EACH
750 GALS CAPACITY TOTAL
NO ABOVE GROUND
NOT KNOWN FEET UNDERGROUND
50 FEET FROM BUILDING LINE
50 FEET FROM STREET LINE
10 FEET FROM CELLAR
NOT KNOWN UNDERWRITERS LABORATORY LABEL

VENT PIPE:

1 NUMBER OF
1" SIZE
YES TERMINATES OUTSIDE
9 FEET ABOVE FILL PIPE
5 FEET FROM BUILDING OPENING
YES WEATHERPROOF HOOD
YES FLAME ARRESTER

FILL PIPE:

YES LOCATED OUTSIDE
15' FEET FROM BUILDING OPENING
YES PROTECTED AGAINST DAMAGE

PUMPS:

ONE QUANITY
50 FEET FROM BUILDING LINE
50 FEET FROM STREET LINE
YES UNDERWRITERS LAB. LABEL

As all tanks, pumps and piping ~~will be~~ (are) ~~are not~~ installed in accordance with the requirements of the City Ordiance and Standards of the National Board of Fire Underwriters, I therefore,

recommend APPROVAL [X]
DISAPPROVAL [ ]

Thomas J. McMahon TITLE Capt Engine #16

APPROVED _____ DATE _____
COMMISSIONER OF FIRE

NOTE: INCLUDE REMARKS AND SKETCH OF TANK AND PUMP LOCATION ON OTHER SIDE.

OLD HORSE BARNS

FILL PIPE

SHED

N

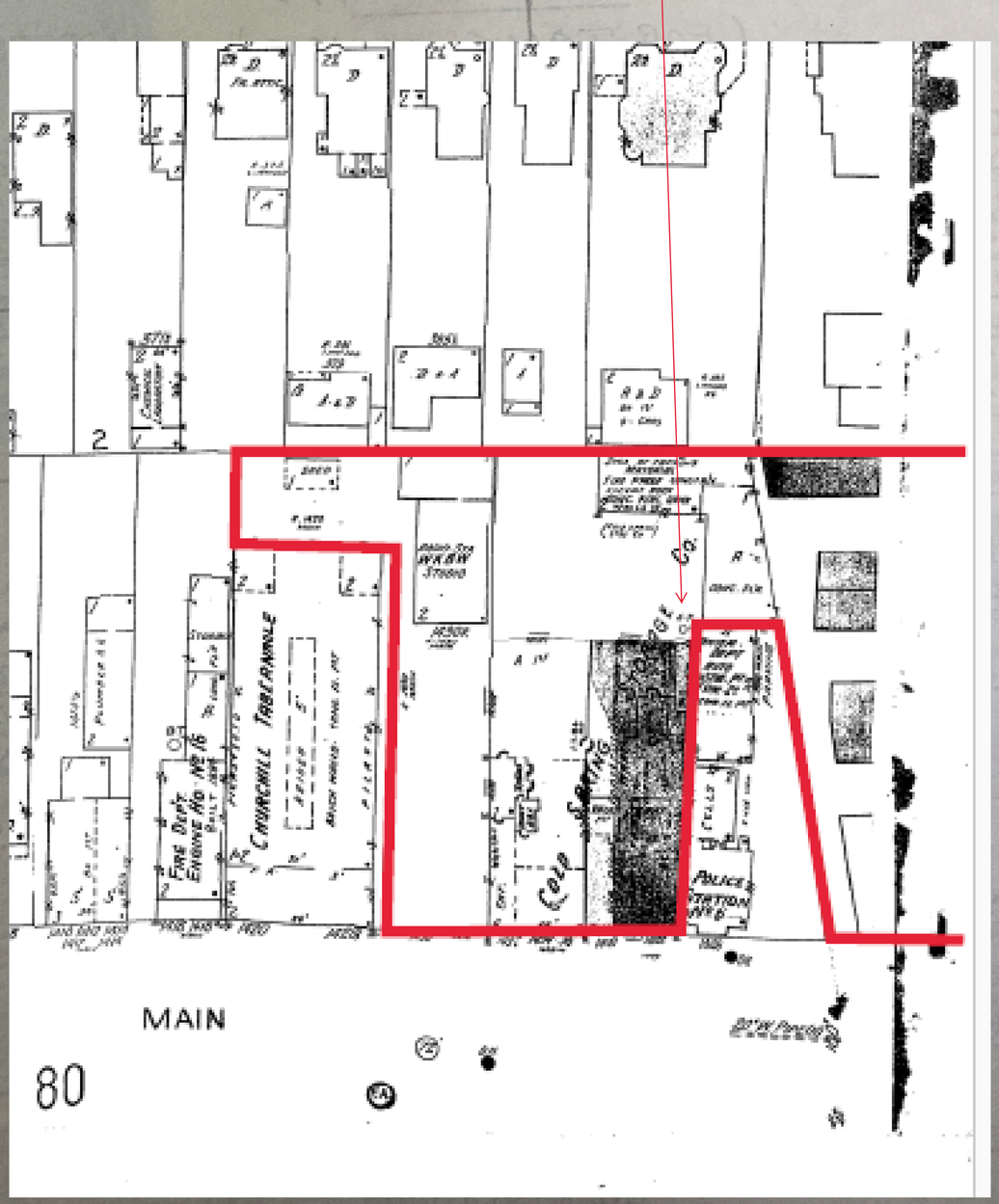
COURT YARD

PUMP

VENT

FILL PIPE OF OLD TANK (NOT IN USE)

WAREHOUSE



License No 2257
Fee $ 10.00

APPLICATION TO STORE OR KEEP FOR SALE INFLAMMABLE OILS OR EXPLOSIVES

Name N. Nielsen & Son.

1445 Main St.

Location

Referred to _____ Battalion Chief for

Investigation and Report _____

_____ 19____, by

_____
Chief of Department

Applicant: N. Nielsen & Son.
1445 Main St.
To Acting Chief of Dept. J.J. Crotty

Returned with the following report:

The applicant has installed one additional 280 gallon gasoline curb tank and pump for which he has a permit No. 271. SSS. from the Dept. of Public Works, granted on July 23. 1927. Ordinance has been complied with and applicant has a license for the sale & storage of gasoline at retail. I recommend that same be approved.

August 3 1927

W. J. Hagerty
Battalion Chief

Approved:

August 3rd 1927

Walter Mahoney
Chief of Department
acting Deputy

1440 Main

1985
No

1440 Main

1985

No

APPLICATION TO STORE OR KEEP FOR SALE INFLAMMABLE OILS OR EXPLOSIVES

Name N. Nielsen & Son.

1445 Main St.

Location _____

_____

_____

_____

Referred to _____ Battalion Chief for

Investigation and Report _____

_____ 19____, by

_____

Chief of Department

Applicant: N. Nielsen & Son.
1445 Main St.

To Acting Chief of Dept. J.J. Crotty

Returned with the following report:

The applicant has installed one additional 280 gallon gasoline curb tank and pump for which he has a permit No. 271. SSS. from the Dept. of Public Works, granted on July 23. 1927. Ordinance has been complied with and applicant has a license for the sale & storage of gasoline at retail. I recommend that same be approved.

August 3 1927

V. J. Hagerty
Battalion Chief

Approved:

August 3rd 1927

Walter Mahoney
Chief of Department
acting Deputy

License # 2257

March 12-24

APPLICATION TO STORE OR KEEP FOR SALE INFLAMMABLE OILS OR EXPLOSIVES

Name N. Nielsen & Son.

1445 Main St.

Location _____

_____

_____

Referred to _____ Battalion Chief for

Investigation and Report _____

_____ 19____, by

_____

Chief of Department

Applicant: N. Nielsen & Son.
1445 Main St.

To Acting Chief of Dept. J.J. Crotty

Returned with the following report:

The applicant has installed one additional 280 gallon gasoline curb tank and pump for which he has a permit No. 271. SSS. from the Dept. of Public Works, granted on July 23. 1927. Ordinance has been complied with and applicant has a license for the sale & storage of gasoline at retail. I recommend that same be approved.

August 3 1927

W. J. Hagerty
Battalion Chief

Approved:

August 3rd 1927

Walter Mahoney
Chief of Department
acting Deputy

1440 Main

1985

NO

NO.

Comm. Manner of Fire

Dept. 1, 1933

APPENDIX B

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: View of the SB-3 location looking east.

Photo 2: View of the fill material from SB-3 at 0-4 fbgs.

Photo 3: View of the SB-6 location in the area of a suspect UST looking north.

Photo 4: View of the subsurface soil from SB-6 at 12-16 fbgs.

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: View of the SB-8 location in the area of a suspect UST looking north.

Photo 6: View of the subsurface soil from SB-8 at 8-12 fbgs.

Photo 7: View of the SB-11 location looking north.

Photo 8: View of the brick fill material observed in SB-11 from 0.5-9 fbgs.

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9: View of the fill material from SB-12 at 0.5-2 fbgs.

Photo 10: View of the fill material from SB-13 at 0.5-2 fbgs.

Photo 11: View of the SB-15 location proximate suspect transformer pad looking east.

Photo 12: View of the soil/fill from SB-15 at 0-4 fbgs.

APPENDIX C

LABORATORY ANALYTICAL DATA SUMMARY PACKAGE

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Lackawanna, New York 14218

Generated 10/18/2023 3:53:23 PM

JOB DESCRIPTION

1430-1440 & 1458 Main St.

JOB NUMBER

480-213509-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

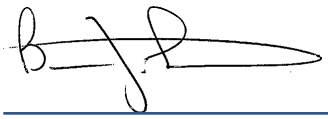
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/18/2023 3:53:23 PM

Authorized for release by
Brian Fischer, Manager of Project Management
Brian.Fischer@et.eurofinsus.com
(716)504-9835

Table of Contents

Definitions/Glossary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-213509-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-213509-1

Receipt
The samples were received on 10/9/2023 2:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-687480 recovered above the upper control limit for Carbon tetrachloride, Cyclohexane, Vinyl chloride, 1,1,2-Trichloro-1,2,2-trifluoroethane, Trichlorofluoromethane and Methylcyclohexane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB-5 12-14 (480-213509-4) and SB-7 11-12 (480-213509-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color and appearance: SB-1 0.5-1.5 (480-213509-1), SB-2 0.5-1.5 (480-213509-2), SB-3 0-4 (480-213509-3), SB-6 0.5-1.5 (480-213509-5), SB-8 0.5-1.5 (480-213509-7), SB-9 0.5-1.5 (480-213509-8), SB-10 0.5-2 (480-213509-9), SB-12 0.5-2 (480-213509-10), SB-13 0.5-2 (480-213509-11), SB-17 0.5-4 (480-213509-12), (480-213509-A-5-F MS) and (480-213509-A-5-G MSD). Elevated reporting limits (RL) are provided.

Method 8270D: The following samples required a dilution due to the nature of the sample matrix: SB-3 0-4 (480-213509-3), SB-9 0.5-1.5 (480-213509-8) and SB-17 0.5-4 (480-213509-12). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: SB-8 0.5-1.5 (480-213509-7). These results have been reported and qualified.

Method 8270D: The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-2 0.5-1.5 (480-213509-2). Elevated reporting limits (RLs) are provided.

Method 8270D: The following sample was diluted due to the abundance of target analytes: SB-2 0.5-1.5 (480-213509-2). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SB-3 0-4 (480-213509-3), SB-9 0.5-1.5 (480-213509-8) and SB-17 0.5-4 (480-213509-12). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-1 0.5-1.5
Lab Sample ID: 480-213509-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	610	J	990	150	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	260	J	990	130	ug/Kg	5	☼	8270D	Total/NA
Anthracene	1200		990	240	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	3800		990	99	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	6400		990	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	5700		990	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	4400		990	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	2800		990	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	3600		990	220	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	1500		990	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	6500		990	100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	480	J	990	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	4700		990	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	390	J	990	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	5200		990	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	4900		990	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	12.7		2.4	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	367		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.23	J	0.24	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.4		0.61	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	111		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.71	J	4.9	0.49	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.15		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 0.5-1.5
Lab Sample ID: 480-213509-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	2000	J	2100	300	ug/Kg	10	☼	8270D	Total/NA
Acenaphthylene	9600		2100	270	ug/Kg	10	☼	8270D	Total/NA
Anthracene	16000		2100	510	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	49000		2100	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	49000		2100	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	48000		2100	330	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	18000		2100	220	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	24000		2100	270	ug/Kg	10	☼	8270D	Total/NA
Chrysene	48000		2100	460	ug/Kg	10	☼	8270D	Total/NA
Fluorene	6300		2100	240	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	19000		2100	250	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	660	J	2100	270	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene - DL	120000		10000	1100	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene - DL	84000		10000	1500	ug/Kg	50	☼	8270D	Total/NA
Pyrene - DL	110000		10000	1200	ug/Kg	50	☼	8270D	Total/NA
Arsenic	12.9		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	66.1		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.11	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.1		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	87.6		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13		0.025	0.0056	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-3 0-4 — Lab Sample ID: 480-213509-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	2800	J	20000	2000	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	3500	J	20000	3000	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	4000	J	20000	3200	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2400	J	20000	2100	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	5500	J	20000	2100	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	4300	J	20000	3000	ug/Kg	10	☼	8270D	Total/NA
Pyrene	4000	J	20000	2400	ug/Kg	10	☼	8270D	Total/NA
Arsenic	22.1		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	182		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	3.9		0.24	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.1		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	4370		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Silver	0.30	J	0.71	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	64.9		1.2	0.28	mg/Kg	50	☼	7471B	Total/NA

Client Sample ID: SB-5 12-14 — Lab Sample ID: 480-213509-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.7	J	6.0	0.80	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-6 0.5-1.5 — Lab Sample ID: 480-213509-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	40.4	F1	0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.2		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Lead	14.1		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.015	J	0.023	0.0053	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-7 11-12 — Lab Sample ID: 480-213509-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.4	J	29	5.0	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.7	J	5.9	2.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-8 0.5-1.5 — Lab Sample ID: 480-213509-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	510	J	2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	580	J	2000	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	670	J	2000	320	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	350	J	2000	210	ug/Kg	10	☼	8270D	Total/NA
Chrysene	530	J	2000	450	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	1200	J	2000	210	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	320	J	2000	250	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	810	J	2000	300	ug/Kg	10	☼	8270D	Total/NA
Pyrene	900	J	2000	240	ug/Kg	10	☼	8270D	Total/NA
Arsenic	16.2		2.4	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	311		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	7.7		0.24	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.6		0.61	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	1610		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: SB-8 0.5-1.5 (Continued)
Lab Sample ID: 480-213509-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	1.3		0.73	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.50	F1 F2	0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-9 0.5-1.5
Lab Sample ID: 480-213509-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	5700	J	19000	1900	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	6000	J	19000	2800	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	6600	J	19000	3000	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2900	J	19000	2000	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2500	J	19000	2500	ug/Kg	10	☼	8270D	Total/NA
Chrysene	5500	J	19000	4300	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	13000	J	19000	2000	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2900	J	19000	2400	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	9500	J	19000	2800	ug/Kg	10	☼	8270D	Total/NA
Pyrene	10000	J	19000	2200	ug/Kg	10	☼	8270D	Total/NA
Arsenic	5.9		2.2	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	85.9		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.39		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.7		0.54	0.22	mg/Kg	1	☼	6010C	Total/NA
Lead	64.7		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.84		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-10 0.5-2
Lab Sample ID: 480-213509-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	2000		2000	290	ug/Kg	10	☼	8270D	Total/NA
Anthracene	5300		2000	490	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	16000		2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	15000		2000	290	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	20000		2000	310	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	5400		2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	7200		2000	260	ug/Kg	10	☼	8270D	Total/NA
Chrysene	17000		2000	440	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	2000		2000	350	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	40000		2000	210	ug/Kg	10	☼	8270D	Total/NA
Fluorene	1600	J	2000	230	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	6100		2000	240	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	22000		2000	290	ug/Kg	10	☼	8270D	Total/NA
Pyrene	25000		2000	230	ug/Kg	10	☼	8270D	Total/NA
Arsenic	12.3		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	147		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.15	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.6		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	62.0		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Silver	0.24	J	0.73	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.34		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-12 0.5-2
Lab Sample ID: 480-213509-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	660	J	1900	280	ug/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-12 0.5-2 (Continued)
Lab Sample ID: 480-213509-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	1400	J	1900	470	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	2800		1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	3200		1900	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	3500		1900	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1300	J	1900	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	1500	J	1900	250	ug/Kg	10	☼	8270D	Total/NA
Chrysene	2700		1900	430	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	520	J	1900	340	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	5800		1900	200	ug/Kg	10	☼	8270D	Total/NA
Fluorene	550	J	1900	230	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1400	J	1900	240	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	250	J	1900	250	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	5300		1900	280	ug/Kg	10	☼	8270D	Total/NA
Pyrene	3900		1900	230	ug/Kg	10	☼	8270D	Total/NA
Arsenic	7.7		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	112		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	10.4		0.59	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	99.1		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.33		0.023	0.0053	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-13 0.5-2
Lab Sample ID: 480-213509-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	370	J	2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	450	J	2000	290	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	690	J	2000	310	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	270	J	2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	270	J	2000	250	ug/Kg	10	☼	8270D	Total/NA
Chrysene	490	J	2000	440	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	820	J	2000	210	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	280	J	2000	240	ug/Kg	10	☼	8270D	Total/NA
Pyrene	590	J	2000	230	ug/Kg	10	☼	8270D	Total/NA
Arsenic	31.9		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	35.6		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.31		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.4		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	31.2		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.5	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Silver	0.72		0.72	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.018	J	0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-17 0.5-4
Lab Sample ID: 480-213509-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	3500	J	19000	2100	ug/Kg	10	☼	8270D	Total/NA
Pyrene	2300	J	19000	2300	ug/Kg	10	☼	8270D	Total/NA
Arsenic	9.5		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	99.7		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.2		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.7		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	110		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-17 0.5-4 (Continued)
Lab Sample ID: 480-213509-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.33		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-1 0.5-1.5
Lab Sample ID: 480-213509-1
Date Collected: 10/06/23 12:57
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	610	J	990	150	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Acenaphthylene	260	J	990	130	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Anthracene	1200		990	240	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Benzo[a]anthracene	3800		990	99	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Benzo[a]pyrene	6400		990	150	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Benzo[b]fluoranthene	5700		990	160	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Benzo[g,h,i]perylene	4400		990	100	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Benzo[k]fluoranthene	2800		990	130	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Chrysene	3600		990	220	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Dibenz(a,h)anthracene	1500		990	170	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Fluoranthene	6500		990	100	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Fluorene	480	J	990	120	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Indeno[1,2,3-cd]pyrene	4700		990	120	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Naphthalene	390	J	990	130	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Phenanthrene	5200		990	150	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5
Pyrene	4900		990	120	ug/Kg	☼	10/11/23 15:53	10/12/23 20:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*10/11/23 15:53*	*10/12/23 20:53*	*5*
Nitrobenzene-d5 (Surr)	*77*		*53 - 120*	*10/11/23 15:53*	*10/12/23 20:53*	*5*
p-Terphenyl-d14 (Surr)	*87*		*79 - 130*	*10/11/23 15:53*	*10/12/23 20:53*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.7		2.4	0.49	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Barium	367		0.61	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Cadmium	0.23	J	0.24	0.037	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Chromium	11.4		0.61	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Lead	111		1.2	0.29	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Selenium	0.71	J	4.9	0.49	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1
Silver	ND		0.73	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:22	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.024	0.0055	mg/Kg	☼	10/11/23 10:21	10/11/23 13:20	1

Client Sample ID: SB-2 0.5-1.5
Date Collected: 10/06/23 13:05
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-2
Matrix: Solid
Percent Solids: 81.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2000	J	2100	300	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Acenaphthylene	9600		2100	270	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Anthracene	16000		2100	510	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Benzo[a]anthracene	49000		2100	210	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Benzo[a]pyrene	49000		2100	300	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Benzo[b]fluoranthene	48000		2100	330	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Benzo[g,h,i]perylene	18000		2100	220	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Benzo[k]fluoranthene	24000		2100	270	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Chrysene	48000		2100	460	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Dibenz(a,h)anthracene	ND		2100	360	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Fluorene	6300		2100	240	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Indeno[1,2,3-cd]pyrene	19000		2100	250	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10
Naphthalene	660	J	2100	270	ug/Kg	☼	10/11/23 15:53	10/12/23 21:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*60 - 120*	*10/11/23 15:53*	*10/12/23 21:18*	*10*
Nitrobenzene-d5 (Surr)	*70*		*53 - 120*	*10/11/23 15:53*	*10/12/23 21:18*	*10*
p-Terphenyl-d14 (Surr)	*87*		*79 - 130*	*10/11/23 15:53*	*10/12/23 21:18*	*10*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	120000		10000	1100	ug/Kg	☼	10/11/23 15:53	10/16/23 15:03	50
Phenanthrene	84000		10000	1500	ug/Kg	☼	10/11/23 15:53	10/16/23 15:03	50
Pyrene	110000		10000	1200	ug/Kg	☼	10/11/23 15:53	10/16/23 15:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*S1-*	*60 - 120*	*10/11/23 15:53*	*10/16/23 15:03*	*50*
Nitrobenzene-d5 (Surr)	*0*	*S1-*	*53 - 120*	*10/11/23 15:53*	*10/16/23 15:03*	*50*
p-Terphenyl-d14 (Surr)	*101*		*79 - 130*	*10/11/23 15:53*	*10/16/23 15:03*	*50*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.9		2.4	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Barium	66.1		0.60	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Cadmium	0.11	J	0.24	0.036	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Chromium	13.1		0.60	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Lead	87.6		1.2	0.29	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Selenium	ND		4.8	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1
Silver	ND		0.72	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:35	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.025	0.0056	mg/Kg	☼	10/11/23 10:21	10/11/23 13:21	1

Client Sample ID: SB-3 0-4
Lab Sample ID: 480-213509-3
Date Collected: 10/06/23 13:20
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 83.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		20000	3000	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Acenaphthylene	ND		20000	2600	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Anthracene	ND		20000	5000	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Benzo[a]anthracene	**2800**	**J**	20000	2000	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Benzo[a]pyrene	**3500**	**J**	20000	3000	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Benzo[b]fluoranthene	**4000**	**J**	20000	3200	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Benzo[g,h,i]perylene	**2400**	**J**	20000	2100	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Benzo[k]fluoranthene	ND		20000	2600	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Chrysene	ND		20000	4500	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Dibenz(a,h)anthracene	ND		20000	3600	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Fluoranthene	**5500**	**J**	20000	2100	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Fluorene	ND		20000	2400	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Indeno[1,2,3-cd]pyrene	ND		20000	2500	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Naphthalene	ND		20000	2600	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Phenanthrene	**4300**	**J**	20000	3000	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10
Pyrene	**4000**	**J**	20000	2400	ug/Kg	☼	10/11/23 15:53	10/12/23 21:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*60 - 120*	*10/11/23 15:53*	*10/12/23 21:42*	*10*
Nitrobenzene-d5 (Surr)	*160*	*S1+*	*53 - 120*	*10/11/23 15:53*	*10/12/23 21:42*	*10*
p-Terphenyl-d14 (Surr)	*87*		*79 - 130*	*10/11/23 15:53*	*10/12/23 21:42*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**22.1**		2.4	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Barium	**182**		0.59	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Cadmium	**3.9**		0.24	0.035	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Chromium	**17.1**		0.59	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Lead	**4370**		1.2	0.28	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Selenium	ND		4.7	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1
Silver	**0.30**	**J**	0.71	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 19:39	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**64.9**		1.2	0.28	mg/Kg	☼	10/11/23 10:21	10/11/23 14:02	50

Client: Roux Environmental Engineering and Geology DPC
Project/Site: 1430-1440 & 1458 Main St.

Job ID: 480-213509-1

Client Sample ID: SB-5 12-14
Date Collected: 10/06/23 13:50
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-4
Matrix: Solid
Percent Solids: 82.6

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.43	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.97	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,1,2-Trichloroethane	ND		6.0	0.78	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,1-Dichloroethene	ND		6.0	0.73	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2,4-Trichlorobenzene	ND		6.0	0.36	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2,4-Trimethylbenzene	ND		6.0	1.1	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2-Dibromo-3-Chloropropane	ND		6.0	3.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2-Dibromoethane	ND		6.0	0.77	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2-Dichlorobenzene	ND		6.0	0.47	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,3,5-Trimethylbenzene	ND		6.0	0.39	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,3-Dichlorobenzene	ND		6.0	0.31	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
1,4-Dichlorobenzene	ND		6.0	0.84	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
4-Isopropyltoluene	ND		6.0	0.48	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Acetone	ND		30	5.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Benzene	ND		6.0	0.29	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Bromodichloromethane	ND		6.0	0.80	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Bromoform	ND		6.0	3.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Chlorobenzene	ND		6.0	0.79	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Chloroethane	ND		6.0	1.4	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
cis-1,2-Dichloroethene	ND		6.0	0.77	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
cis-1,3-Dichloropropene	ND		6.0	0.86	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Dibromochloromethane	ND		6.0	0.77	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Dichlorodifluoromethane	ND		6.0	0.49	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Ethylbenzene	ND		6.0	0.41	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Isopropylbenzene	ND		6.0	0.90	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
m,p-Xylene	ND		12	1.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Methyl acetate	ND		30	3.6	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Methylcyclohexane	ND		6.0	0.91	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Methylene Chloride	ND		6.0	2.8	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Naphthalene	ND		6.0	0.80	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
n-Butylbenzene	ND		6.0	0.52	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
N-Propylbenzene	ND		6.0	0.48	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
o-Xylene	ND		6.0	0.78	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
sec-Butylbenzene	ND		6.0	0.52	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Styrene	ND		6.0	0.30	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-5 12-14
Lab Sample ID: 480-213509-4
Date Collected: 10/06/23 13:50
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 82.6

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		6.0	0.62	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Tetrachloroethene	**1.7**	**J**	6.0	0.80	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Toluene	ND		6.0	0.45	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
trans-1,3-Dichloropropene	ND		6.0	2.6	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Trichlorofluoromethane	ND		6.0	0.57	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	10/13/23 10:32	10/15/23 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*	*10/13/23 10:32*	*10/15/23 13:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*10/13/23 10:32*	*10/15/23 13:51*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*10/13/23 10:32*	*10/15/23 13:51*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*10/13/23 10:32*	*10/15/23 13:51*	*1*

Client Sample ID: SB-6 0.5-1.5
Lab Sample ID: 480-213509-5
Date Collected: 10/06/23 14:20
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 87.0

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		970	140	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Acenaphthylene	ND		970	130	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Anthracene	ND		970	240	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Benzo[a]anthracene	ND		970	97	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Benzo[a]pyrene	ND		970	140	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Benzo[b]fluoranthene	ND		970	150	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Benzo[g,h,i]perylene	ND		970	100	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Benzo[k]fluoranthene	ND		970	130	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Chrysene	ND		970	220	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Dibenz(a,h)anthracene	ND		970	170	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Fluoranthene	ND		970	100	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Fluorene	ND		970	110	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Indeno[1,2,3-cd]pyrene	ND		970	120	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Naphthalene	ND		970	130	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Phenanthrene	ND		970	140	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5
Pyrene	ND		970	110	ug/Kg	☼	10/11/23 15:53	10/12/23 22:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*10/11/23 15:53*	*10/12/23 22:07*	*5*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*	*10/11/23 15:53*	*10/12/23 22:07*	*5*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*	*10/11/23 15:53*	*10/12/23 22:07*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.1**		2.2	0.44	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Barium	**40.4**	**F1**	0.55	0.12	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Cadmium	**0.20**	**J**	0.22	0.033	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Chromium	**8.2**		0.55	0.22	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Lead	**14.1**		1.1	0.26	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Selenium	ND		4.4	0.44	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1
Silver	ND		0.66	0.22	mg/Kg	☼	10/10/23 15:18	10/12/23 19:42	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.023	0.0053	mg/Kg	☼	10/11/23 10:21	10/11/23 13:28	1

Client: Roux Environmental Engineering and Geology DPC
Project/Site: 1430-1440 & 1458 Main St.

Job ID: 480-213509-1

Client Sample ID: SB-7 11-12
Date Collected: 10/06/23 14:40
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-6
Matrix: Solid
Percent Solids: 84.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,1,2,2-Tetrachloroethane	ND		5.9	0.96	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.3	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,1,2-Trichloroethane	ND		5.9	0.77	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,1-Dichloroethene	ND		5.9	0.72	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2,4-Trichlorobenzene	ND		5.9	0.36	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2,4-Trimethylbenzene	ND		5.9	1.1	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2-Dibromo-3-Chloropropane	ND		5.9	2.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2-Dibromoethane	ND		5.9	0.76	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2-Dichloroethane	ND		5.9	0.30	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,2-Dichloropropane	ND		5.9	2.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,3,5-Trimethylbenzene	ND		5.9	0.38	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,3-Dichlorobenzene	ND		5.9	0.30	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
1,4-Dichlorobenzene	ND		5.9	0.82	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
2-Butanone (MEK)	ND		29	2.2	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
4-Isopropyltoluene	ND		5.9	0.47	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Acetone	**5.4**	**J**	29	5.0	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Benzene	ND		5.9	0.29	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Bromoform	ND		5.9	2.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Carbon disulfide	ND		5.9	2.9	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Chlorobenzene	ND		5.9	0.78	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Chloroform	ND		5.9	0.36	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Chloromethane	ND		5.9	0.36	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
cis-1,2-Dichloroethene	ND		5.9	0.75	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
cis-1,3-Dichloropropene	ND		5.9	0.85	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Cyclohexane	ND		5.9	0.82	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Dibromochloromethane	ND		5.9	0.75	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Dichlorodifluoromethane	ND		5.9	0.49	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Ethylbenzene	ND		5.9	0.41	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Isopropylbenzene	ND		5.9	0.89	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
m,p-Xylene	ND		12	0.99	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Methyl acetate	ND		29	3.6	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Methylcyclohexane	ND		5.9	0.90	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Methylene Chloride	**2.7**	**J**	5.9	2.7	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Naphthalene	ND		5.9	0.79	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
n-Butylbenzene	ND		5.9	0.51	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
N-Propylbenzene	ND		5.9	0.47	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
o-Xylene	ND		5.9	0.77	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
sec-Butylbenzene	ND		5.9	0.51	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Styrene	ND		5.9	0.29	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-7 11-12
Lab Sample ID: 480-213509-6
Date Collected: 10/06/23 14:40
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.9	0.61	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Tetrachloroethene	ND		5.9	0.79	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Toluene	ND		5.9	0.45	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Trichlorofluoromethane	ND		5.9	0.56	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1
Xylenes, Total	ND		12	0.99	ug/Kg	☼	10/13/23 10:32	10/15/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*10/13/23 10:32*	*10/15/23 14:15*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*10/13/23 10:32*	*10/15/23 14:15*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*	*10/13/23 10:32*	*10/15/23 14:15*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*10/13/23 10:32*	*10/15/23 14:15*	*1*

Client: Roux Environmental Engineering and Geology DPC
Project/Site: 1430-1440 & 1458 Main St.

Job ID: 480-213509-1

Client Sample ID: SB-8 0.5-1.5
Date Collected: 10/06/23 15:00
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-7
Matrix: Solid
Percent Solids: 83.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2000	300	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Acenaphthylene	ND		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Anthracene	ND		2000	500	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Benzo[a]anthracene	**510**	**J**	2000	200	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Benzo[a]pyrene	**580**	**J**	2000	300	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Benzo[b]fluoranthene	**670**	**J**	2000	320	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Benzo[g,h,i]perylene	**350**	**J**	2000	210	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Benzo[k]fluoranthene	ND		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Chrysene	**530**	**J**	2000	450	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Dibenz(a,h)anthracene	ND		2000	360	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Fluoranthene	**1200**	**J**	2000	210	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Fluorene	ND		2000	240	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Indeno[1,2,3-cd]pyrene	**320**	**J**	2000	250	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Naphthalene	ND		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Phenanthrene	**810**	**J**	2000	300	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10
Pyrene	**900**	**J**	2000	240	ug/Kg	☼	10/11/23 15:53	10/12/23 22:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*60 - 120*	*10/11/23 15:53*	*10/12/23 22:32*	*10*
Nitrobenzene-d5 (Surr)	*67*		*53 - 120*	*10/11/23 15:53*	*10/12/23 22:32*	*10*
p-Terphenyl-d14 (Surr)	*67*	*S1-*	*79 - 130*	*10/11/23 15:53*	*10/12/23 22:32*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16.2**		2.4	0.49	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Barium	**311**		0.61	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Cadmium	**7.7**		0.24	0.037	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Chromium	**18.6**		0.61	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Lead	**1610**		1.2	0.29	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Selenium	ND		4.9	0.49	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1
Silver	**1.3**		0.73	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 20:00	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.50**	**F1 F2**	0.024	0.0055	mg/Kg	☼	10/11/23 13:33	10/11/23 17:51	1

Client: Roux Environmental Engineering and Geology DPC
Project/Site: 1430-1440 & 1458 Main St.

Job ID: 480-213509-1

Client Sample ID: SB-9 0.5-1.5

Date Collected: 10/06/23 15:30
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-8

Matrix: Solid
Percent Solids: 89.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		19000	2800	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Acenaphthylene	ND		19000	2500	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Anthracene	ND		19000	4700	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Benzo[a]anthracene	**5700**	**J**	19000	1900	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Benzo[a]pyrene	**6000**	**J**	19000	2800	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Benzo[b]fluoranthene	**6600**	**J**	19000	3000	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Benzo[g,h,i]perylene	**2900**	**J**	19000	2000	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Benzo[k]fluoranthene	**2500**	**J**	19000	2500	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Chrysene	**5500**	**J**	19000	4300	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Dibenz(a,h)anthracene	ND		19000	3400	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Fluoranthene	**13000**	**J**	19000	2000	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Fluorene	ND		19000	2200	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Indeno[1,2,3-cd]pyrene	**2900**	**J**	19000	2400	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Naphthalene	ND		19000	2500	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Phenanthrene	**9500**	**J**	19000	2800	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10
Pyrene	**10000**	**J**	19000	2200	ug/Kg	☼	10/11/23 15:53	10/12/23 22:57	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*60 - 120*	*10/11/23 15:53*	*10/12/23 22:57*	*10*
Nitrobenzene-d5 (Surr)	*162*	*S1+*	*53 - 120*	*10/11/23 15:53*	*10/12/23 22:57*	*10*
p-Terphenyl-d14 (Surr)	*94*		*79 - 130*	*10/11/23 15:53*	*10/12/23 22:57*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.9**		2.2	0.43	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Barium	**85.9**		0.54	0.12	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Cadmium	**0.39**		0.22	0.033	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Chromium	**12.7**		0.54	0.22	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Lead	**64.7**		1.1	0.26	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Selenium	ND		4.3	0.43	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1
Silver	ND		0.65	0.22	mg/Kg	☼	10/10/23 15:18	10/12/23 20:04	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.84**		0.021	0.0049	mg/Kg	☼	10/11/23 10:21	10/11/23 13:42	1

Client Sample ID: SB-10 0.5-2
Lab Sample ID: 480-213509-9
Date Collected: 10/06/23 15:50
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 85.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2000		2000	290	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Acenaphthylene	ND		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Anthracene	5300		2000	490	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Benzo[a]anthracene	16000		2000	200	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Benzo[a]pyrene	15000		2000	290	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Benzo[b]fluoranthene	20000		2000	310	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Benzo[g,h,i]perylene	5400		2000	210	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Benzo[k]fluoranthene	7200		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Chrysene	17000		2000	440	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Dibenz(a,h)anthracene	2000		2000	350	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Fluoranthene	40000		2000	210	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Fluorene	1600	J	2000	230	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Indeno[1,2,3-cd]pyrene	6100		2000	240	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Naphthalene	ND		2000	260	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Phenanthrene	22000		2000	290	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10
Pyrene	25000		2000	230	ug/Kg	☼	10/11/23 15:53	10/12/23 23:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*87*		*60 - 120*	*10/11/23 15:53*	*10/12/23 23:22*	*10*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*	*10/11/23 15:53*	*10/12/23 23:22*	*10*
p-Terphenyl-d14 (Surr)	*86*		*79 - 130*	*10/11/23 15:53*	*10/12/23 23:22*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.3		2.4	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Barium	147		0.60	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Cadmium	0.15	J	0.24	0.036	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Chromium	18.6		0.60	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Lead	62.0		1.2	0.29	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Selenium	ND		4.8	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 20:17	1
Silver	0.24	J	0.73	0.24	mg/Kg	☼	10/10/23 15:18	10/13/23 17:28	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34		0.024	0.0055	mg/Kg	☼	10/11/23 10:21	10/11/23 13:43	1

Client: Roux Environmental Engineering and Geology DPC
Project/Site: 1430-1440 & 1458 Main St.

Job ID: 480-213509-1

Client Sample ID: SB-12 0.5-2

Date Collected: 10/06/23 16:10
Date Received: 10/09/23 14:00

Lab Sample ID: 480-213509-10

Matrix: Solid
Percent Solids: 88.6

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	660	J	1900	280	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Acenaphthylene	ND		1900	250	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Anthracene	1400	J	1900	470	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Benzo[a]anthracene	2800		1900	190	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Benzo[a]pyrene	3200		1900	280	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Benzo[b]fluoranthene	3500		1900	300	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Benzo[g,h,i]perylene	1300	J	1900	200	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Benzo[k]fluoranthene	1500	J	1900	250	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Chrysene	2700		1900	430	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Dibenz(a,h)anthracene	520	J	1900	340	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Fluoranthene	5800		1900	200	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Fluorene	550	J	1900	230	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Indeno[1,2,3-cd]pyrene	1400	J	1900	240	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Naphthalene	250	J	1900	250	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Phenanthrene	5300		1900	280	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10
Pyrene	3900		1900	230	ug/Kg	☼	10/11/23 15:53	10/12/23 23:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*60 - 120*	*10/11/23 15:53*	*10/12/23 23:47*	*10*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*	*10/11/23 15:53*	*10/12/23 23:47*	*10*
p-Terphenyl-d14 (Surr)	*84*		*79 - 130*	*10/11/23 15:53*	*10/12/23 23:47*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.7		2.3	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Barium	112		0.59	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Cadmium	0.12	J	0.23	0.035	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Chromium	10.4		0.59	0.23	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Lead	99.1		1.2	0.28	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Selenium	ND		4.7	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 20:21	1
Silver	ND		0.70	0.23	mg/Kg	☼	10/10/23 15:18	10/13/23 17:32	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33		0.023	0.0053	mg/Kg	☼	10/11/23 10:21	10/11/23 13:44	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-13 0.5-2
Lab Sample ID: 480-213509-11
Date Collected: 10/06/23 16:30
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2000	290	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Acenaphthylene	ND		2000	250	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Anthracene	ND		2000	490	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Benzo[a]anthracene	**370**	**J**	2000	200	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Benzo[a]pyrene	**450**	**J**	2000	290	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Benzo[b]fluoranthene	**690**	**J**	2000	310	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Benzo[g,h,i]perylene	**270**	**J**	2000	210	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Benzo[k]fluoranthene	**270**	**J**	2000	250	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Chrysene	**490**	**J**	2000	440	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Dibenz(a,h)anthracene	ND		2000	350	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Fluoranthene	**820**	**J**	2000	210	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Fluorene	ND		2000	230	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Indeno[1,2,3-cd]pyrene	**280**	**J**	2000	240	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Naphthalene	ND		2000	250	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Phenanthrene	ND		2000	290	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10
Pyrene	**590**	**J**	2000	230	ug/Kg	☼	10/11/23 15:53	10/13/23 00:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*60 - 120*	*10/11/23 15:53*	*10/13/23 00:12*	*10*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*	*10/11/23 15:53*	*10/13/23 00:12*	*10*
p-Terphenyl-d14 (Surr)	*86*		*79 - 130*	*10/11/23 15:53*	*10/13/23 00:12*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**31.9**		2.4	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Barium	**35.6**		0.60	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Cadmium	**0.31**		0.24	0.036	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Chromium	**8.4**		0.60	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Lead	**31.2**		1.2	0.29	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Selenium	**1.5**	**J**	4.8	0.48	mg/Kg	☼	10/10/23 15:18	10/12/23 20:24	1
Silver	**0.72**		0.72	0.24	mg/Kg	☼	10/10/23 15:18	10/13/23 17:36	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.024	0.0056	mg/Kg	☼	10/11/23 10:21	10/11/23 13:46	1

Client Sample ID: SB-17 0.5-4
Lab Sample ID: 480-213509-12

Date Collected: 10/06/23 17:20
Matrix: Solid

Date Received: 10/09/23 14:00
Percent Solids: 85.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		19000	2900	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Acenaphthylene	ND		19000	2500	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Anthracene	ND		19000	4800	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Benzo[a]anthracene	ND		19000	1900	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Benzo[a]pyrene	ND		19000	2900	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Benzo[b]fluoranthene	ND		19000	3100	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Benzo[g,h,i]perylene	ND		19000	2100	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Benzo[k]fluoranthene	ND		19000	2500	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Chrysene	ND		19000	4400	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Dibenz(a,h)anthracene	ND		19000	3400	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Fluoranthene	**3500**	**J**	19000	2100	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Fluorene	ND		19000	2300	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Indeno[1,2,3-cd]pyrene	ND		19000	2400	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Naphthalene	ND		19000	2500	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Phenanthrene	ND		19000	2900	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10
Pyrene	**2300**	**J**	19000	2300	ug/Kg	☼	10/11/23 15:53	10/13/23 00:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*10/11/23 15:53*	*10/13/23 00:38*	*10*
Nitrobenzene-d5 (Surr)	*153*	*S1+*	*53 - 120*	*10/11/23 15:53*	*10/13/23 00:38*	*10*
p-Terphenyl-d14 (Surr)	*76*	*S1-*	*79 - 130*	*10/11/23 15:53*	*10/13/23 00:38*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.5**		2.4	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Barium	**99.7**		0.59	0.13	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Cadmium	**1.2**		0.24	0.036	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Chromium	**9.7**		0.59	0.24	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Lead	**110**		1.2	0.28	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Selenium	ND		4.7	0.47	mg/Kg	☼	10/10/23 15:18	10/12/23 20:28	1
Silver	ND		0.71	0.24	mg/Kg	☼	10/10/23 15:18	10/13/23 17:40	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.33**		0.024	0.0055	mg/Kg	☼	10/11/23 10:21	10/11/23 13:47	1

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-213509-4	SB-5 12-14	99	99	97	99
480-213509-6	SB-7 11-12	104	98	100	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(60-120)	(53-120)	(79-130)
480-213509-1	SB-1 0.5-1.5	84	77	87
480-213509-2	SB-2 0.5-1.5	78	70	87
480-213509-2 - DL	SB-2 0.5-1.5	0 S1-	0 S1-	101
480-213509-3	SB-3 0-4	89	160 S1+	87
480-213509-5	SB-6 0.5-1.5	84	74	89
480-213509-5 MS	SB-6 0.5-1.5	86	75	93
480-213509-5 MSD	SB-6 0.5-1.5	79	71	83
480-213509-7	SB-8 0.5-1.5	69	67	67 S1-
480-213509-8	SB-9 0.5-1.5	98	162 S1+	94
480-213509-9	SB-10 0.5-2	87	74	86
480-213509-10	SB-12 0.5-2	82	74	84
480-213509-11	SB-13 0.5-2	89	78	86
480-213509-12	SB-17 0.5-4	84	153 S1+	76 S1-
LCS 480-687022/2-A	Lab Control Sample	92	78	105
MB 480-687022/1-A	Method Blank	84	72	94

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-687022/1-A
Matrix: Solid
Analysis Batch: 687072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Acenaphthylene	ND		170	22	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Anthracene	ND		170	42	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Benzo[a]anthracene	ND		170	17	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Benzo[a]pyrene	ND		170	25	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Chrysene	ND		170	38	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Fluoranthene	ND		170	18	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Fluorene	ND		170	20	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Naphthalene	ND		170	22	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Phenanthrene	ND		170	25	ug/Kg		10/11/23 15:53	10/12/23 18:48	1
Pyrene	ND		170	20	ug/Kg		10/11/23 15:53	10/12/23 18:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*10/11/23 15:53*	*10/12/23 18:48*	*1*
Nitrobenzene-d5 (Surr)	*72*		*53 - 120*	*10/11/23 15:53*	*10/12/23 18:48*	*1*
p-Terphenyl-d14 (Surr)	*94*		*79 - 130*	*10/11/23 15:53*	*10/12/23 18:48*	*1*

Lab Sample ID: LCS 480-687022/2-A
Matrix: Solid
Analysis Batch: 687072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1620	1430		ug/Kg		88	62 - 120
Acenaphthylene	1620	1420		ug/Kg		88	58 - 121
Anthracene	1620	1470		ug/Kg		90	62 - 120
Benzo[a]anthracene	1620	1510		ug/Kg		93	65 - 120
Benzo[a]pyrene	1620	1570		ug/Kg		97	64 - 120
Benzo[b]fluoranthene	1620	1410		ug/Kg		87	64 - 120
Benzo[g,h,i]perylene	1620	1580		ug/Kg		97	45 - 145
Benzo[k]fluoranthene	1620	1540		ug/Kg		95	65 - 120
Chrysene	1620	1510		ug/Kg		93	64 - 120
Dibenz(a,h)anthracene	1620	1570		ug/Kg		97	54 - 132
Fluoranthene	1620	1440		ug/Kg		89	62 - 120
Fluorene	1620	1430		ug/Kg		88	63 - 120
Indeno[1,2,3-cd]pyrene	1620	1670		ug/Kg		103	56 - 134
Naphthalene	1620	1340		ug/Kg		83	55 - 120
Phenanthrene	1620	1480		ug/Kg		91	60 - 120
Pyrene	1620	1580		ug/Kg		97	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*92*		*60 - 120*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*
p-Terphenyl-d14 (Surr)	*105*		*79 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: 480-213509-5 MS
Matrix: Solid
Analysis Batch: 687072

Client Sample ID: SB-6 0.5-1.5
Prep Type: Total/NA
Prep Batch: 687022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		1890	1620		ug/Kg	☼	86	60 - 120
Acenaphthylene	ND		1890	1550		ug/Kg	☼	82	58 - 121
Anthracene	ND		1890	1640		ug/Kg	☼	86	62 - 120
Benzo[a]anthracene	ND		1890	1730		ug/Kg	☼	91	65 - 120
Benzo[a]pyrene	ND		1890	1860		ug/Kg	☼	98	64 - 120
Benzo[b]fluoranthene	ND		1890	1760		ug/Kg	☼	93	10 - 150
Benzo[g,h,i]perylene	ND		1890	1830		ug/Kg	☼	96	45 - 145
Benzo[k]fluoranthene	ND		1890	1640		ug/Kg	☼	87	23 - 150
Chrysene	ND		1890	1730		ug/Kg	☼	91	64 - 120
Dibenz(a,h)anthracene	ND		1890	1820		ug/Kg	☼	96	54 - 132
Fluoranthene	ND		1890	1840		ug/Kg	☼	97	62 - 120
Fluorene	ND		1890	1660		ug/Kg	☼	88	63 - 120
Indeno[1,2,3-cd]pyrene	ND		1890	1970		ug/Kg	☼	104	56 - 134
Naphthalene	ND		1890	1510		ug/Kg	☼	80	46 - 120
Phenanthrene	ND		1890	1670		ug/Kg	☼	88	60 - 122
Pyrene	ND		1890	1720		ug/Kg	☼	91	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*60 - 120*
Nitrobenzene-d5 (Surr)	*75*		*53 - 120*
p-Terphenyl-d14 (Surr)	*93*		*79 - 130*

Lab Sample ID: 480-213509-5 MSD
Matrix: Solid
Analysis Batch: 687072

Client Sample ID: SB-6 0.5-1.5
Prep Type: Total/NA
Prep Batch: 687022

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		1900	1530		ug/Kg	☼	81	60 - 120	6	35
Acenaphthylene	ND		1900	1480		ug/Kg	☼	78	58 - 121	5	18
Anthracene	ND		1900	1530		ug/Kg	☼	80	62 - 120	7	15
Benzo[a]anthracene	ND		1900	1570		ug/Kg	☼	83	65 - 120	10	15
Benzo[a]pyrene	ND		1900	1690		ug/Kg	☼	89	64 - 120	9	15
Benzo[b]fluoranthene	ND		1900	1590		ug/Kg	☼	84	10 - 150	10	15
Benzo[g,h,i]perylene	ND		1900	1720		ug/Kg	☼	91	45 - 145	6	15
Benzo[k]fluoranthene	ND		1900	1420		ug/Kg	☼	75	23 - 150	14	22
Chrysene	ND		1900	1610		ug/Kg	☼	85	64 - 120	7	15
Dibenz(a,h)anthracene	ND		1900	1670		ug/Kg	☼	88	54 - 132	8	15
Fluoranthene	ND		1900	1670		ug/Kg	☼	88	62 - 120	10	15
Fluorene	ND		1900	1570		ug/Kg	☼	83	63 - 120	6	15
Indeno[1,2,3-cd]pyrene	ND		1900	1830		ug/Kg	☼	97	56 - 134	7	15
Naphthalene	ND		1900	1440		ug/Kg	☼	76	46 - 120	5	29
Phenanthrene	ND		1900	1560		ug/Kg	☼	82	60 - 122	7	15
Pyrene	ND		1900	1540		ug/Kg	☼	81	61 - 133	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*79*		*60 - 120*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*
p-Terphenyl-d14 (Surr)	*83*		*79 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-686817/1-A
Matrix: Solid
Analysis Batch: 687267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1	0.42	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Barium	ND		0.52	0.12	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Cadmium	ND		0.21	0.031	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Chromium	ND		0.52	0.21	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Lead	ND		1.0	0.25	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Selenium	ND		4.2	0.42	mg/Kg		10/10/23 15:18	10/12/23 19:15	1
Silver	ND		0.63	0.21	mg/Kg		10/10/23 15:18	10/12/23 19:15	1

Lab Sample ID: LCSSRM 480-686817/2-A
Matrix: Solid
Analysis Batch: 687267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686817

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	218	169.6		mg/Kg		77.8	57.8 - 110.1
Barium	388	346.4		mg/Kg		89.3	68.3 - 113.9
Cadmium	118	102.2		mg/Kg		86.6	67.0 - 111.9
Chromium	255	214.6		mg/Kg		84.2	63.5 - 118.4
Lead	155	152.6		mg/Kg		98.4	67.7 - 119.4
Selenium	107	87.61		mg/Kg		81.9	58.3 - 121.5
Silver	51.0	42.18		mg/Kg		82.7	64.7 - 120.8

Lab Sample ID: 480-213509-5 MS
Matrix: Solid
Analysis Batch: 687267

Client Sample ID: SB-6 0.5-1.5
Prep Type: Total/NA
Prep Batch: 686817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	3.1		45.5	45.32		mg/Kg	☼	93	75 - 125
Barium	40.4	F1	45.5	101.0	F1	mg/Kg	☼	133	75 - 125
Cadmium	0.20	J	45.5	41.50		mg/Kg	☼	91	75 - 125
Chromium	8.2		45.5	50.76		mg/Kg	☼	94	75 - 125
Lead	14.1		45.5	63.67		mg/Kg	☼	109	75 - 125
Selenium	ND		45.5	40.07		mg/Kg	☼	88	75 - 125
Silver	ND		11.4	9.79		mg/Kg	☼	86	75 - 125

Lab Sample ID: 480-213509-5 MSD
Matrix: Solid
Analysis Batch: 687267

Client Sample ID: SB-6 0.5-1.5
Prep Type: Total/NA
Prep Batch: 686817

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	3.1		46.6	45.35		mg/Kg	☼	91	75 - 125	0	20
Barium	40.4	F1	46.6	96.21		mg/Kg	☼	120	75 - 125	5	20
Cadmium	0.20	J	46.6	41.74		mg/Kg	☼	89	75 - 125	1	20
Chromium	8.2		46.6	50.80		mg/Kg	☼	91	75 - 125	0	20
Lead	14.1		46.6	59.08		mg/Kg	☼	97	75 - 125	7	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-213509-5 MSD
Matrix: Solid
Analysis Batch: 687267

Client Sample ID: SB-6 0.5-1.5
Prep Type: Total/NA
Prep Batch: 686817

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		46.6	39.95		mg/Kg	☼	86	75 - 125	0	20
Silver	ND		11.7	9.79		mg/Kg	☼	84	75 - 125	0	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-686897/1-A
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0045	mg/Kg		10/11/23 10:21	10/11/23 12:47	1

Lab Sample ID: LCSSRM 480-686897/2-A ^10
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686897

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	17.1	9.24		mg/Kg		54.0	36.0 - 109.9

Lab Sample ID: MB 480-686901/1-A
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686901

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		10/11/23 10:21	10/11/23 13:30	1

Lab Sample ID: LCSSRM 480-686901/2-A ^10
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686901

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	17.1	9.89		mg/Kg		57.8	36.0 - 109.9

Lab Sample ID: 480-213509-A-7-C MS
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: 480-213509-A-7-C MS
Prep Type: Total/NA
Prep Batch: 686901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	3.0	E	0.390	1.54	4	mg/Kg	☼	-374	80 - 120

Lab Sample ID: 480-213509-A-7-D MSD
Matrix: Solid
Analysis Batch: 686996

Client Sample ID: 480-213509-A-7-D MSD
Prep Type: Total/NA
Prep Batch: 686901

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	3.0	E	0.416	1.64	4	mg/Kg	☼	-327	80 - 120	6	20

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 480-686972/1-A
Matrix: Solid
Analysis Batch: 687047

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0045	mg/Kg		10/11/23 13:33	10/11/23 17:57	1

Lab Sample ID: LCSSRM 480-686972/2-A ^10
Matrix: Solid
Analysis Batch: 687047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686972

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			17.1	9.92		mg/Kg		58.0	36.0 - 109.9		

Lab Sample ID: 480-213509-7 MS
Matrix: Solid
Analysis Batch: 687047

Client Sample ID: SB-8 0.5-1.5
Prep Type: Total/NA
Prep Batch: 686972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.50	F1 F2	0.417	3.09	E F1	mg/Kg	☼	622	80 - 120		

Lab Sample ID: 480-213509-7 MSD
Matrix: Solid
Analysis Batch: 687047

Client Sample ID: SB-8 0.5-1.5
Prep Type: Total/NA
Prep Batch: 686972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.50	F1 F2	0.415	1.28	F1 F2	mg/Kg	☼	190	80 - 120	83	20

GC/MS VOA

Prep Batch: 687304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-4	SB-5 12-14	Total/NA	Solid	5035A_L	
480-213509-6	SB-7 11-12	Total/NA	Solid	5035A_L	

Analysis Batch: 687480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-4	SB-5 12-14	Total/NA	Solid	8260C	687304
480-213509-6	SB-7 11-12	Total/NA	Solid	8260C	687304

GC/MS Semi VOA

Prep Batch: 687022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	3550C	
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	3550C	
480-213509-2 - DL	SB-2 0.5-1.5	Total/NA	Solid	3550C	
480-213509-3	SB-3 0-4	Total/NA	Solid	3550C	
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	3550C	
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	3550C	
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	3550C	
480-213509-9	SB-10 0.5-2	Total/NA	Solid	3550C	
480-213509-10	SB-12 0.5-2	Total/NA	Solid	3550C	
480-213509-11	SB-13 0.5-2	Total/NA	Solid	3550C	
480-213509-12	SB-17 0.5-4	Total/NA	Solid	3550C	
MB 480-687022/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-687022/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-213509-5 MS	SB-6 0.5-1.5	Total/NA	Solid	3550C	
480-213509-5 MSD	SB-6 0.5-1.5	Total/NA	Solid	3550C	

Analysis Batch: 687072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-3	SB-3 0-4	Total/NA	Solid	8270D	687022
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-9	SB-10 0.5-2	Total/NA	Solid	8270D	687022
480-213509-10	SB-12 0.5-2	Total/NA	Solid	8270D	687022
480-213509-11	SB-13 0.5-2	Total/NA	Solid	8270D	687022
480-213509-12	SB-17 0.5-4	Total/NA	Solid	8270D	687022
MB 480-687022/1-A	Method Blank	Total/NA	Solid	8270D	687022
LCS 480-687022/2-A	Lab Control Sample	Total/NA	Solid	8270D	687022
480-213509-5 MS	SB-6 0.5-1.5	Total/NA	Solid	8270D	687022
480-213509-5 MSD	SB-6 0.5-1.5	Total/NA	Solid	8270D	687022

Analysis Batch: 687609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-2 - DL	SB-2 0.5-1.5	Total/NA	Solid	8270D	687022

Metals

Prep Batch: 686817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	3050B	
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	3050B	
480-213509-3	SB-3 0-4	Total/NA	Solid	3050B	
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	3050B	
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	3050B	
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	3050B	
480-213509-9	SB-10 0.5-2	Total/NA	Solid	3050B	
480-213509-10	SB-12 0.5-2	Total/NA	Solid	3050B	
480-213509-11	SB-13 0.5-2	Total/NA	Solid	3050B	
480-213509-12	SB-17 0.5-4	Total/NA	Solid	3050B	
MB 480-686817/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-686817/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-213509-5 MS	SB-6 0.5-1.5	Total/NA	Solid	3050B	
480-213509-5 MSD	SB-6 0.5-1.5	Total/NA	Solid	3050B	

Prep Batch: 686897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	7471B	
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	7471B	
480-213509-3	SB-3 0-4	Total/NA	Solid	7471B	
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	7471B	
MB 480-686897/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-686897/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 686901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	7471B	
480-213509-9	SB-10 0.5-2	Total/NA	Solid	7471B	
480-213509-10	SB-12 0.5-2	Total/NA	Solid	7471B	
480-213509-11	SB-13 0.5-2	Total/NA	Solid	7471B	
480-213509-12	SB-17 0.5-4	Total/NA	Solid	7471B	
MB 480-686901/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-686901/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-213509-A-7-C MS	480-213509-A-7-C MS	Total/NA	Solid	7471B	
480-213509-A-7-D MSD	480-213509-A-7-D MSD	Total/NA	Solid	7471B	

Prep Batch: 686972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	7471B	
MB 480-686972/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-686972/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-213509-7 MS	SB-8 0.5-1.5	Total/NA	Solid	7471B	
480-213509-7 MSD	SB-8 0.5-1.5	Total/NA	Solid	7471B	

Analysis Batch: 686996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	7471B	686897
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	7471B	686897
480-213509-3	SB-3 0-4	Total/NA	Solid	7471B	686897
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	7471B	686897
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	7471B	686901

Metals (Continued)

Analysis Batch: 686996 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-9	SB-10 0.5-2	Total/NA	Solid	7471B	686901
480-213509-10	SB-12 0.5-2	Total/NA	Solid	7471B	686901
480-213509-11	SB-13 0.5-2	Total/NA	Solid	7471B	686901
480-213509-12	SB-17 0.5-4	Total/NA	Solid	7471B	686901
MB 480-686897/1-A	Method Blank	Total/NA	Solid	7471B	686897
MB 480-686901/1-A	Method Blank	Total/NA	Solid	7471B	686901
LCSSRM 480-686897/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	686897
LCSSRM 480-686901/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	686901
480-213509-A-7-C MS	480-213509-A-7-C MS	Total/NA	Solid	7471B	686901
480-213509-A-7-D MSD	480-213509-A-7-D MSD	Total/NA	Solid	7471B	686901

Analysis Batch: 687047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	7471B	686972
MB 480-686972/1-A	Method Blank	Total/NA	Solid	7471B	686972
LCSSRM 480-686972/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	686972
480-213509-7 MS	SB-8 0.5-1.5	Total/NA	Solid	7471B	686972
480-213509-7 MSD	SB-8 0.5-1.5	Total/NA	Solid	7471B	686972

Analysis Batch: 687267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-3	SB-3 0-4	Total/NA	Solid	6010C	686817
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-9	SB-10 0.5-2	Total/NA	Solid	6010C	686817
480-213509-10	SB-12 0.5-2	Total/NA	Solid	6010C	686817
480-213509-11	SB-13 0.5-2	Total/NA	Solid	6010C	686817
480-213509-12	SB-17 0.5-4	Total/NA	Solid	6010C	686817
MB 480-686817/1-A	Method Blank	Total/NA	Solid	6010C	686817
LCSSRM 480-686817/2-A	Lab Control Sample	Total/NA	Solid	6010C	686817
480-213509-5 MS	SB-6 0.5-1.5	Total/NA	Solid	6010C	686817
480-213509-5 MSD	SB-6 0.5-1.5	Total/NA	Solid	6010C	686817

Analysis Batch: 687466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-9	SB-10 0.5-2	Total/NA	Solid	6010C	686817
480-213509-10	SB-12 0.5-2	Total/NA	Solid	6010C	686817
480-213509-11	SB-13 0.5-2	Total/NA	Solid	6010C	686817
480-213509-12	SB-17 0.5-4	Total/NA	Solid	6010C	686817

General Chemistry

Analysis Batch: 686835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-1	SB-1 0.5-1.5	Total/NA	Solid	Moisture	
480-213509-2	SB-2 0.5-1.5	Total/NA	Solid	Moisture	
480-213509-3	SB-3 0-4	Total/NA	Solid	Moisture	
480-213509-4	SB-5 12-14	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 686835 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213509-5	SB-6 0.5-1.5	Total/NA	Solid	Moisture	
480-213509-6	SB-7 11-12	Total/NA	Solid	Moisture	
480-213509-7	SB-8 0.5-1.5	Total/NA	Solid	Moisture	
480-213509-8	SB-9 0.5-1.5	Total/NA	Solid	Moisture	
480-213509-9	SB-10 0.5-2	Total/NA	Solid	Moisture	
480-213509-10	SB-12 0.5-2	Total/NA	Solid	Moisture	
480-213509-11	SB-13 0.5-2	Total/NA	Solid	Moisture	
480-213509-12	SB-17 0.5-4	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-1 0.5-1.5
Lab Sample ID: 480-213509-1
Date Collected: 10/06/23 12:57
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-1 0.5-1.5
Lab Sample ID: 480-213509-1
Date Collected: 10/06/23 12:57
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		5	687072	RJS	EET BUF	10/12/23 20:53
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 19:22
Total/NA	Prep	7471B			686897	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:20

Client Sample ID: SB-2 0.5-1.5
Lab Sample ID: 480-213509-2
Date Collected: 10/06/23 13:05
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-2 0.5-1.5
Lab Sample ID: 480-213509-2
Date Collected: 10/06/23 13:05
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 21:18
Total/NA	Prep	3550C	DL		687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D	DL	50	687609	JMM	EET BUF	10/16/23 15:03
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 19:35
Total/NA	Prep	7471B			686897	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:21

Client Sample ID: SB-3 0-4
Lab Sample ID: 480-213509-3
Date Collected: 10/06/23 13:20
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-3 0-4
Lab Sample ID: 480-213509-3
Date Collected: 10/06/23 13:20
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 21:42
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 19:39
Total/NA	Prep	7471B			686897	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		50	686996	NVK	EET BUF	10/11/23 14:02

Client Sample ID: SB-5 12-14
Lab Sample ID: 480-213509-4
Date Collected: 10/06/23 13:50
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-5 12-14
Lab Sample ID: 480-213509-4
Date Collected: 10/06/23 13:50
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			687304	LCH	EET BUF	10/13/23 10:32
Total/NA	Analysis	8260C		1	687480	LCH	EET BUF	10/15/23 13:51

Client Sample ID: SB-6 0.5-1.5
Lab Sample ID: 480-213509-5
Date Collected: 10/06/23 14:20
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-6 0.5-1.5
Lab Sample ID: 480-213509-5
Date Collected: 10/06/23 14:20
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		5	687072	RJS	EET BUF	10/12/23 22:07
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 19:42
Total/NA	Prep	7471B			686897	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:28

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-7 11-12
Lab Sample ID: 480-213509-6
Date Collected: 10/06/23 14:40
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-7 11-12
Lab Sample ID: 480-213509-6
Date Collected: 10/06/23 14:40
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			687304	LCH	EET BUF	10/13/23 10:32
Total/NA	Analysis	8260C		1	687480	LCH	EET BUF	10/15/23 14:15

Client Sample ID: SB-8 0.5-1.5
Lab Sample ID: 480-213509-7
Date Collected: 10/06/23 15:00
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-8 0.5-1.5
Lab Sample ID: 480-213509-7
Date Collected: 10/06/23 15:00
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 22:32
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:00
Total/NA	Prep	7471B			686972	NVK	EET BUF	10/11/23 13:33
Total/NA	Analysis	7471B		1	687047	NVK	EET BUF	10/11/23 17:51

Client Sample ID: SB-9 0.5-1.5
Lab Sample ID: 480-213509-8
Date Collected: 10/06/23 15:30
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-9 0.5-1.5
Lab Sample ID: 480-213509-8
Date Collected: 10/06/23 15:30
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 22:57
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:04

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-9 0.5-1.5
Lab Sample ID: 480-213509-8
Date Collected: 10/06/23 15:30
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			686901	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:42

Client Sample ID: SB-10 0.5-2
Lab Sample ID: 480-213509-9
Date Collected: 10/06/23 15:50
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-10 0.5-2
Lab Sample ID: 480-213509-9
Date Collected: 10/06/23 15:50
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 23:22
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:17
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687466	LMH	EET BUF	10/13/23 17:28
Total/NA	Prep	7471B			686901	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:43

Client Sample ID: SB-12 0.5-2
Lab Sample ID: 480-213509-10
Date Collected: 10/06/23 16:10
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-12 0.5-2
Lab Sample ID: 480-213509-10
Date Collected: 10/06/23 16:10
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/12/23 23:47
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:21
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687466	LMH	EET BUF	10/13/23 17:32
Total/NA	Prep	7471B			686901	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:44

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Client Sample ID: SB-13 0.5-2
Lab Sample ID: 480-213509-11
Date Collected: 10/06/23 16:30
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:00

Client Sample ID: SB-13 0.5-2
Lab Sample ID: 480-213509-11
Date Collected: 10/06/23 16:30
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/13/23 00:12
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:24
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687466	LMH	EET BUF	10/13/23 17:36
Total/NA	Prep	7471B			686901	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:46

Client Sample ID: SB-17 0.5-4
Lab Sample ID: 480-213509-12
Date Collected: 10/06/23 17:20
Matrix: Solid
Date Received: 10/09/23 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	686835	JMM	EET BUF	10/10/23 16:02

Client Sample ID: SB-17 0.5-4
Lab Sample ID: 480-213509-12
Date Collected: 10/06/23 17:20
Matrix: Solid
Date Received: 10/09/23 14:00
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			687022	SJM	EET BUF	10/11/23 15:53
Total/NA	Analysis	8270D		10	687072	RJS	EET BUF	10/13/23 00:38
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687267	LMH	EET BUF	10/12/23 20:28
Total/NA	Prep	3050B			686817	MP	EET BUF	10/10/23 15:18
Total/NA	Analysis	6010C		1	687466	LMH	EET BUF	10/13/23 17:40
Total/NA	Prep	7471B			686901	NVK	EET BUF	10/11/23 10:21
Total/NA	Analysis	7471B		1	686996	NVK	EET BUF	10/11/23 13:47

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-213509-1
Project/Site: 1430-1440 & 1458 Main St.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-213509-1	SB-1 0.5-1.5	Solid	10/06/23 12:57	10/09/23 14:00
480-213509-2	SB-2 0.5-1.5	Solid	10/06/23 13:05	10/09/23 14:00
480-213509-3	SB-3 0-4	Solid	10/06/23 13:20	10/09/23 14:00
480-213509-4	SB-5 12-14	Solid	10/06/23 13:50	10/09/23 14:00
480-213509-5	SB-6 0.5-1.5	Solid	10/06/23 14:20	10/09/23 14:00
480-213509-6	SB-7 11-12	Solid	10/06/23 14:40	10/09/23 14:00
480-213509-7	SB-8 0.5-1.5	Solid	10/06/23 15:00	10/09/23 14:00
480-213509-8	SB-9 0.5-1.5	Solid	10/06/23 15:30	10/09/23 14:00
480-213509-9	SB-10 0.5-2	Solid	10/06/23 15:50	10/09/23 14:00
480-213509-10	SB-12 0.5-2	Solid	10/06/23 16:10	10/09/23 14:00
480-213509-11	SB-13 0.5-2	Solid	10/06/23 16:30	10/09/23 14:00
480-213509-12	SB-17 0.5-4	Solid	10/06/23 17:20	10/09/23 14:00

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Eurofins Environment Testing Ameri

Client Contact	Project Manager: Bryan Mayback	Site Contact:	Date:	COC No:
Roux Inc.	Email: bmayback@rouxinc.com	Lab Contact:	Carrier:	____ of ____ COCs
2558 Hamburg Turnpike	Tel/Fax: 716-856-0599			TALS Project #:
Buffalo/NY/14218	**Analysis Turnaround Time**			Sampler:
(716) 856-0599	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
	TAT if different from Below Standard			Walk-in Client:
Project Name: 1430-1440 + 1458 Main Street	☐ 2 weeks			Lab Sampling:
Site:	☐ 1 week			
P O # 0717-023-001	☐ 2 days			Job / SDG No.:
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)*	Perform MS / MSD (Y/N)	PAHs	RCRA 8 Metals	TCL + CP-51 VOCs	Sample Specific Notes:
SB-1 0.5-1.5	10-6-23	1257	G	Soil	1			X	X		
SB-2 0.5-1.5		1305						X	X		
SB-3 0-4		1320						X	X		
SB-5 12-14		1350								X	
SB-6 0.5-1.5		1420						X	X		
SB-7 11-12		1440								X	
SB-8 0.5-1.5		1500						X	X		
SB-9 0.5-1.5		1530						X	X		
SB-10 0.5-2		1550						X	X		
SB-12 0.5-2		1610						X	X		
SB-13 0.5-2		1630						X	X		
SB-17 0.5-4		1720						X	X		

480-213509 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

8, 9 # ICE

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____
Relinquished by: Chester Hochwalt	Company: Roux	Date/Time: 10-9-23 1200	Received by:	Company: / Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company: / Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA / Date/Time: 10/9/23 1400

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-213509-1

Login Number: 213509
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ROUX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	