

September 10, 2024

Elizabeth Colvin
Wendel WD Architecture, Engineering, Surveying & Landscape Architecture, P.C.
237 Main Street, Suite 500
Buffalo, NY 14203

**Re: Limited Phase II Environmental Site Assessment Report
631 Northland Avenue
Buffalo, New York**

Dear Ms. Colvin:

Ravi Engineering & Land Surveying, P.C. (RE&LS) conducted additional surficial soil sampling to supplement our Limited Phase II Environmental Site Assessment (ESA) of 631 Northland Avenue, Erie County, Buffalo, New York (the "Site") (Figure 1). This report has been prepared to summarize field activities and observations, and analytical data of soil samples.

BACKGROUND

The subject site is an approximately 2.63-acre parcel on the south side of Northland Avenue in the City of Buffalo, New York (the "Site"). It was reportedly developed in 1953 in association with the Niagara Machine & Tool metal fabricating plant historically located on the eastern adjacent property at 683 Northland Avenue. It operated as a metal fabricating plant under the name Clearing Niagara, and has been vacant since operations ceased in 1992.

RE&LS performed a Phase I ESA in February 2024, and identified the use of the Site and adjacent properties for manufacturing of machinery and sheet metal, household and automotive polish, liquid and cement, electric control panels, and printed circuit boards as a Recognized Environmental Conditions (RECs). Additional investigation was recommended to determine if existing conditions at the Site meet the criteria necessary to enter into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program.

Prior to conducting the Limited Phase II ESA, RE&LS reviewed a 2015 Phase II ESA report prepared by Fisher Associates. Fisher's Phase II was conducted at 631, 683, 741, and 777 Northland Avenue. Soil borings were installed within the subject building and around the eastern and western perimeter of the building as well as on the referenced adjacent properties. One soil sample exhibited exceedances of Benzo(a)pyrene and arsenic above the Industrial Use Soil Cleanup Objective (SCO) at the southeastern portion of the Site. No groundwater samples were collected at the Site.

The results of our Limited Phase II ESA determined that metals detected in three of the four soil samples were at concentrations below 6 NYCRR Part 375 Unrestricted Use SCO. With the exception of arsenic, all concentrations were below the Commercial Use SCO. The arsenic concentration exceeds all Part 375 Restricted Use SCOs.

Two petroleum-related VOCs (m,p-Xylene and methylcyclohexane) were detected in one soil sample, and one solvent-related VOC (trichloroethene) was detected in one soil sample. None of the detections exceed Unrestricted Use SCOs. One SVOC was detected in one soil sample. The concentration is above the Unrestricted Use SCO, but is below the Commercial Use SCO.

PCB-1254 was detected in two soil samples near the southeastern corner of the building above. The concentrations are above the Unrestricted Use SCO, but below the Commercial Use SCO.

Three bedrock wells were installed in April 2024. Groundwater was sampled and analyzed for TCL and CP51 VOCs and CP51 SVOCs. There were no analytes detected in any of the groundwater samples.

METHODOLOGY

Surficial Soil Sampling

RE&LS conducted a surficial soil investigation on August 20, 2024. Fourteen surficial soil samples (SS-1 through SS-14) were collected around the western exterior of the building and southern property boundary (Figure 1). Asphalt, where present, was first cut to expose the soils beneath. A four inch diameter hand auger was then used to bore down to a depth of between six to thirteen inches below ground surface (bgs) for sample collection. Soil samples were screened for volatile organic compounds (VOCs) with a photoionization detector (PID) for evidence of petroleum impacts.

One proposed fifteenth soil sample was attempted to be collected beneath a steel girder in the pit of the interior furnace. A nearly impenetrable layer of steel and cast iron was encountered at the bottom of the furnace pit, and the sample location was abandoned after multiple attempts were made to create an opening within which to expose the soils for sample collection.

Fourteen (14) soil samples were submitted and analyzed by Paradigm Environmental Services, Inc. (Paradigm) for New York State Department of Environmental Conservation (NYSDEC) Target Compound List (TCL) semivolatile organic compounds (SVOCs) by Method 8270, Target Analyte List (TAL) metals by Methods 7471B and 6010C, and polychlorinated biphenyls (PCB) by Method 8082A. Paradigm's Laboratory Analytical reports are provided as Attachment A.

Based on the current zoning of the Site for light industrial use, soil analytical results were compared to 6 NYCRR Part 375 Restricted Use Soil Cleanup Objectives for Commercial and Industrial Use.

RESULTS

Soil Screening Results

Soil borings generally consist of crush and run gravel directly below the asphalt, with sandy loam grading to clay loam with depth. No evidence of impacts, ie odors, staining, or PID readings that would indicate petroleum contamination were noted.

SOIL Analytical Results

TAL Metals

Metals were detected in four of the fourteen soil samples at concentrations above 6 NYCRR Part 375 Commercial Use SCOs (Table 1).

- Seven of the fourteen samples reported concentrations of metals that exceed the Unrestricted Use SCOs.
- SS-1 has a concentration of manganese that exceeds the Industrial Use SCO.
- SS-7 has a concentration of arsenic that exceeds the Industrial Use SCO.
- SS-9 and SS-10 have concentrations of copper that exceed Commercial Use SCOs.

SVOCs

Several SVOCs were detected in multiple locations along the southern boundary of the property and in proximity to the exterior furnace.

- Benzo (a) anthracene was detected at concentrations above the Industrial Use SCOs in sample SS-3. Concentrations exceeded Commercial Use SCOs in sample SS-1 and SS-4.
- Benzo (a) pyrene was detected at concentrations above the Industrial Use SCOs in nine soil samples (SS-1, SS-2, SS-3, SS-4, SS-7, SS-9, SS-10, SS-11, and SS-14).
- Benzo (b) fluoranthene was detected at concentrations above the Industrial Use SCOs in sample SS-3. Concentrations exceeded Commercial Use SCOs in four soil samples (SS-1, SS-4, SS-7, and SS-10)
- Dibenzo (a,h) anthracene was detected at concentrations above the Industrial Use SCOs in six soil samples (SS-1, SS-3, SS-4, SS-7, SS-9, and SS-10). Concentrations exceeded Commercial Use SCOs in sample SS-2.
- Indeno (1,2,3-cd) pyrene was detected at concentrations above the Industrial Use SCOs in soil samples SS-3. Concentrations exceeded Commercial Use SCOs in soil samples SS-1 and SS-9.

PCBs

PCB-1254 was detected in six soil samples (SS-1, SS-3, SS-4, SS-9, SS-10, and SS-12) and PCB-1248 was detected in two soil samples (SS-1 and SS-4). The concentrations are above the Unrestricted Use SCOs, but below the Commercial Use SCOs.

Paradigm's Laboratory Analytical Reports are included as Attachment A.

CONCLUSIONS AND RECOMMENDATION

Soil at the southern portion of the Site and in proximity to the exterior furnace are impacted with SVOCs and TAL metals above Industrial and Commercial Use SCOs.

Based on these and previous Phase II results, we recommend completing the NYSDEC Brownfield Cleanup Program (BCP) Pre-Application Worksheet and submitting it to the Region 9 Environmental Remediation Division of the NYSDEC to determine if environmental site conditions meet the criteria for inclusion in the BCP.

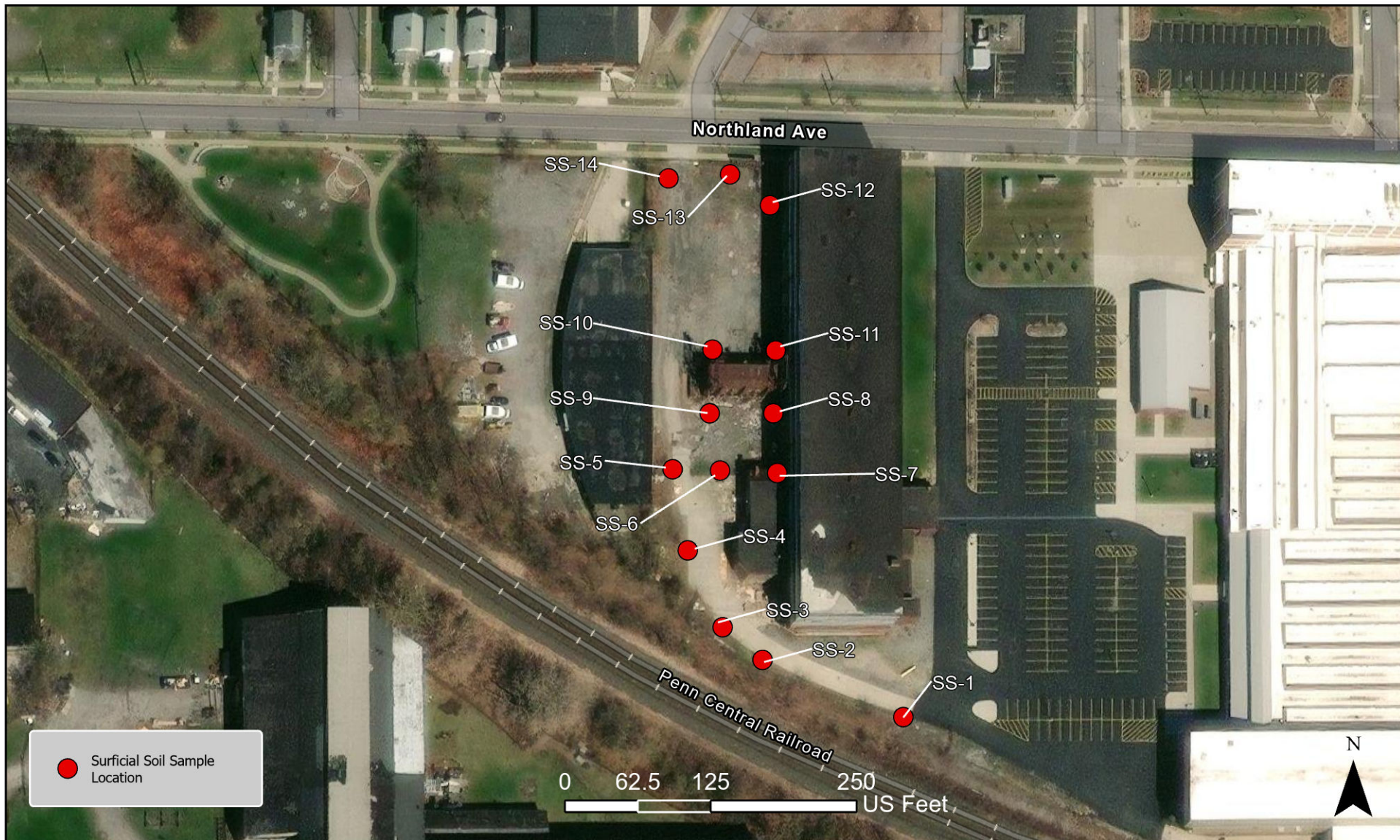
Sincerely,



Lynn Zicari
Environmental Project Manager

ATTACHMENTS

Figure 1	Site Location/Surficial Soil Sampling Locations Map
Figure 2	Surficial Soil Sample Results – Soil Cleanup Objective Exceedances (Metals)
Figure 3	Surficial Soil Sample Results – Soil Cleanup Objective Exceedances (SVOCs)
Table 1	Soil Analytical Results
Attachment A	Laboratory Analytical Report



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SITE LOCATION / SURFICIAL SOIL SAMPLING LOCATIONS

PROJECT NO.

43-24-029

DATE:

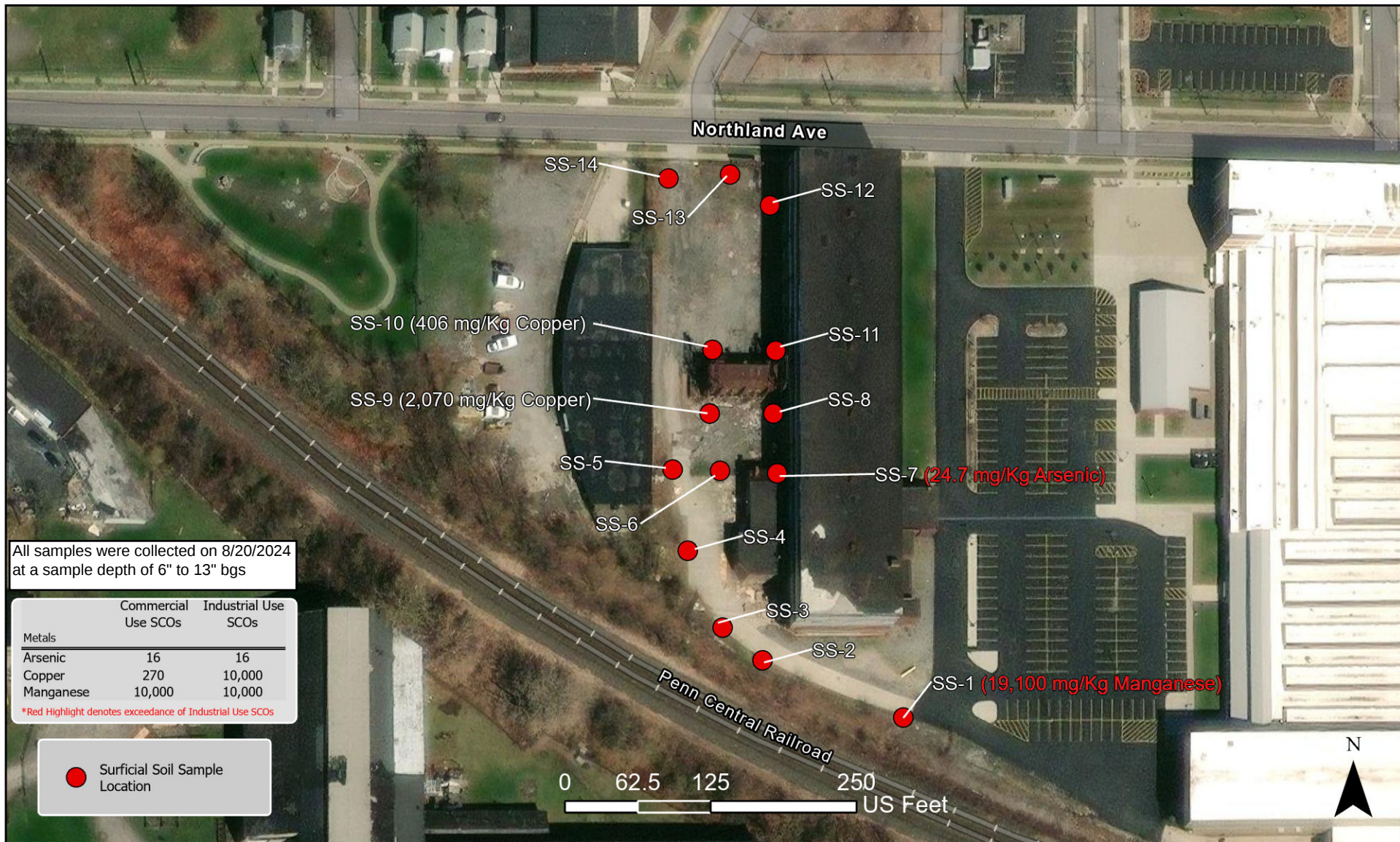
SEP. 2024

SCALE:

N.T.S

DRAWING NO:

1



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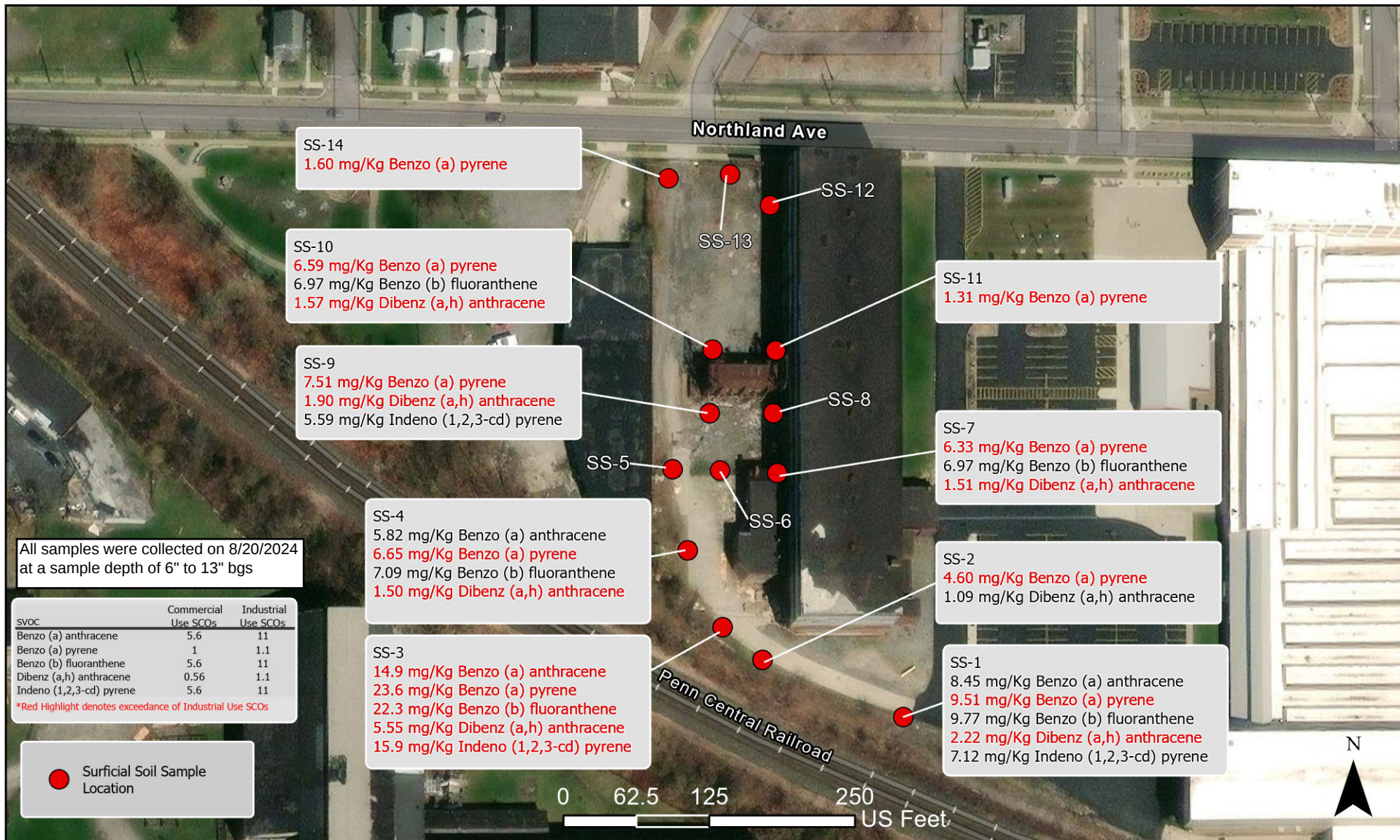
PROJECT NO.
43-24-029

DATE:
SEP. 2024

SURFICIAL SOIL SAMPLE RESULTS SOIL CLEANUP OBJECTIVE EXCEEDANCES - Metals

SCALE:
N.T.S

DRAWING NO:
2



 RAVI ENGINEERING & LAND SURVEYING, P.C. 2110 SOUTH CLINTON AVENUE, SUITE 1 ROCHESTER, NEW YORK 14618 TL: (585) 223-3660 FX (585) 697-1794	BUDC Building 631 631 Northland Avenue Buffalo, New York 14211		PROJECT NO. 43-24-029	DATE: SEP. 2024
	SURFICIAL SOIL SAMPLE RESULTS SOIL CLEANUP OBJECTIVE EXCEEDANCES - SVOCs		SCALE: N.T.S	DRAWING NO: 3

Table 1
Soil Analytical Results
631 Northland Avenue
Buffalo, New York

* All Surficial Soil samples were collected on 8/20/2024
at a sampling depth between 6" and 13" below ground surface (bgs)

Sample ID	Unrestricted Use SCOs	Commercial Use SCOs	Industrial Use SCOs														
Analyte				SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14
SVOCs																	
1,1-Biphenyl				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
1,2,4,5-Tetrachlorobenzene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
1,2,4-Trichlorobenzene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
1,2-Dichlorobenzene	1.1	500		< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
1,3-Dichlorobenzene	2.4	280		< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
1,4-Dichlorobenzene	1.8	130		< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,2-Oxybis (1-chloropropane)				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,3,4,6-Tetrachlorophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,4,5-Trichlorophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,4,6-Trichlorophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,4-Dichlorophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,4-Dimethylphenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,4-Dinitrophenol				< 2.430	< 1.130	< 4.560	< 2.310	< 1.190	< 1.120	< 1.210	< 1.150	< 1.220	< 1.200	< 1.110	< 1.220	< 1.140	< 1.180
2,4-Dinitrotoluene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2,6-Dinitrotoluene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2-Chloronaphthalene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2-Chlorophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2-Methylnapthalene				< 0.606	0.342	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	0.333	0.393	< 0.278	< 0.304	< 0.284	< 0.295
2-Methylphenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2-Nitroaniline				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
2-Nitrophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
3&4-Methylphenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
3,3'-Dichlorobenzidine				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
3-Nitroaniline				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4,6-Dinitro-2-methylphenol				< 1.210	< 0.563	< 2.280	< 1.160	< 0.594	< 0.559	< 0.604	< 0.576	< 0.609	< 0.599	< 0.556	< 0.609	< 0.569	< 0.590
4-Bromophenyl phenyl ether				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4-Chloro-3-methylphenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4-Chloroaniline				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4-Chlorophenyl phenyl ether				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4-Nitroaniline				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
4-Nitrophenol				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Acenaphthene	20	500	1000	1.93	< 0.282	< 1.140	1.31	< 0.297	< 0.279	1.13	< 0.288	< 0.304	< 0.299	0.29	< 0.304	< 0.284	< 0.295
Acenaphthylene	100	500	1000	< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Acetophenone				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Anthracene	100	500	1000	2.98	0.375	1.14	2.08	< 0.297	< 0.279	1.71	< 0.288	0.475	< 0.299	0.641	< 0.304	< 0.284	< 0.295
Atrazine				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Benzaldehyde				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Benzo (a) anthracene	1	5.6	11	8.45	2.8	14.9	5.82	0.447	0.532	5.41	< 0.288	4.85	4.12	1.33	0.447	< 0.284	0.592
Benzo (a) pyrene	1	1	1.1	9.51	4.6	23.6	6.65	0.741	0.815	6.33	< 0.288	7.51	6.59	1.31	0.717	< 0.284	1.6
Benzo (b) fluoranthene	1	5.6	11	9.77	4.17	22.3	7.09	0.739	0.722	6.97	< 0.288	5.19	6.97	1.38	0.597	< 0.284	0.997
Benzo (g,h,i) perylene	100	500	1000	6.21	3.31	16	4.47	0.508	0.552	3.98	< 0.288	4.75	4.52	0.836	0.484	< 0.284	0.754
Benzo (k) fluoranthene	0.8	56	110	7.22	3.11	15.6	4.64	0.426	0.528	3.8	< 0.288	< 0.304	3.65	0.987	0.553	< 0.284	0.697
Bis (2-chloroethoxy) methane				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Bis (2-chloroethyl) ether				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Bis (2-ethylhexyl) phthalate				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Butylbenzylphthalate				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Caprolactam				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Carbazole				1.88	0.319	< 1.140	1.38	< 0.297	< 0.279	1.13	< 0.288	0.34	< 0.299	0.418	< 0.304	< 0.284	< 0.295
Chrysene	1	56	110	9.97	3.98	td											

Table 1
Soil Analytical Results
631 Northland Avenue
Buffalo, New York

* All Surficial Soil samples were collected on 8/20/2024
at a sampling depth between 6" and 13" below ground surface (bgs)

Sample ID	Unrestricted Use SCOs	Commercial Use SCOs	Industrial Use SCOs	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14
Analyte																	
SVOCs																	
Indeno (1,2,3-cd) pyrene	0.5	5.6	11	7.12	3.36	15.9	4.95	0.506	0.574	4.43	< 0.288	5.59	4.75	0.964	0.504	< 0.284	0.767
Isophorone				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Naphthalene	12	500	1000	< 0.606	< 0.282	< 1.140	0.655	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	0.3	< 0.278	< 0.304	< 0.284	< 0.295
Nitrobenzene				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
N-Nitroso-di-n-propylamine				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
N-Nitrosodiphenylamine				< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Pentachlorophenol	0.8	6.7	55	< 1.210	< 0.563	< 2.280	< 1.160	< 0.594	< 0.559	< 0.604	< 0.576	< 0.609	< 0.599	< 0.556	< 0.609	< 0.569	< 0.590
Phenanthrene	100	500	1000	17.3	2.31	6.5	8.99	< 0.297	0.297	9.04	< 0.288	2.29	1.51	3.14	< 0.304	< 0.284	< 0.295
Phenol	0.33	500	1000	< 0.606	< 0.282	< 1.140	< 0.578	< 0.297	< 0.279	< 0.302	< 0.288	< 0.304	< 0.299	< 0.278	< 0.304	< 0.284	< 0.295
Pyrene	100	500	1000	18.3	4.93	20.8	11.1	0.661	0.775	10.6	< 0.288	6.97	5.55	2.72	0.606	< 0.284	0.779
Metals																	
Aluminum				5610	2240	2110	7320	2740	1410	3660	856	8320	3120	6480	5180	1740	4810
Antimony				14.4	< 2.94	< 3.22	< 3.35	< 3.20	< 5.71	< 3.10	< 3.03	< 3.18	< 3.38	< 3.18	< 3.19	< 2.91	< 3.01
Arsenic	13	16	16	6.38	3.25	5.81	9.07	7.67	3.09	24.7	2.74	7.3	8.24	4.71	6.32	2.37	8.62
Barium	350	400	10000	136	94.5	255	124	20.8	83.2	79.6	< 5.05	90.9	33.4	44.2	48.8	6.2	21
Beryllium	7.2	590	2700	< 0.759	< 0.245	< 0.268	0.575	< 0.267	< 0.476	< 0.258	< 0.253	0.752	< 0.282	< 0.265	0.421	< 0.243	< 0.251
Cadmium	2.5	9.3	60	4.18	0.82	1.75	2.64	0.475	< 0.476	4.59	< 0.253	0.795	0.895	0.466	0.335	< 0.243	0.281
Calcium				147000	228000	240000	179000	193000	256000	144000	147000	127000	181000	179000	169000	136000	207000
Chromium	30	1500	6800	948	31	83.05	94.9	11.8	9.84	171	3.83	24.9	21.6	9.8	9.48	5.42	9.81
Cobalt				9.74	3.75	4.55	6.32	2.73	< 4.76	11.6	< 2.53	3.38	< 2.82	4.05	< 2.66	< 2.43	< 2.51
Copper	50	270	10000	132	36.1	94.9	196	24.2	13.5	237	6.23	2070	406	16.8	16.3	7.2	10.4
Iron				85700	15100	41700	56000	9590	8670	123000	2670	19400	19300	10000	6170	2940	5200
Lead	63	1000	3900	187	43.4	98.9	101	24.1	7.07	42.2	2.78	33.6	33.4	45.4	34.7	8.32	12
Magnesium				17400	7790	7150	17800	9340	8510	7700	4030	11400	8090	10200	8340	3620	8450
Manganese	1600	10000	10000	19100	1100	1470	1380	147	270	3070	52.2	1770	533	268	651	91.5	96.8
Mercury	0.18	2.8	5.7	0.101	0.0262	0.118	0.0561	0.0135	0.0129	0.0506	< 0.00706	0.0188	0.0264	0.0683	0.0279	0.0206	0.0165
Nickel	30	310	10000	44.7	16.4	33.2	64.2	16.3	7.92	109	7.6	16.4	20.6	11.2	7.42	7.14	9.99
Potassium				597	970	584	895	1100	607	1080	547	927	677	1730	909	836	2540
Selenium	3.9	1500	6800	< 3.04	< 0.982	< 1.07	< 1.12	< 1.07	< 1.90	< 1.03	< 1.01	< 1.06	< 1.13	< 1.06	< 1.06	< 0.971	< 1.00
Silver	2	1500	6800	< 1.52	< 0.491	< 0.537	< 0.558	< 0.533	< 0.952	< 0.517	< 0.505	< 0.530	< 0.563	< 0.530	< 0.532	< 0.485	< 0.502
Sodium				849	396	427	568	250	270	592	204	365	328	240	270	189	265
Thallium				< 3.80	< 1.23	< 1.34	< 1.40	< 1.33	< 2.38	< 1.29	< 1.26	< 1.32	< 1.41	< 1.32	< 1.33	< 1.21	< 1.26
Vanadium				402	14.1	19.4	16.4	7.35	4.42	16.9	3.22	8.56	7.19	13.7	6.94	6.55	12.2
Zinc	109	10000	10000	699	84.2	172	222	55	24.1	115	14.4	54	69.7	100	37.8	35.5	34.7
PCBs																	
PCB-1016	0.1			< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1221	0.1			< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1232	0.1			< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1242	0.1	1		< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1248	0.1	1		0.490	< 0.145	< 0.156	0.172	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1254	0.1	1		0.356	< 0.145	0.218	0.223	< 0.164	< 0.165	< 0.134	< 0.142	0.449	0.179	< 0.150	0.186	< 0.163	< 0.131
PCB-1260	0.1	1		< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1262	0.1	1		< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
PCB-1268	0.1	1		< 0.137	< 0.145	< 0.156	< 0.125	< 0.164	< 0.165	< 0.134	< 0.142	< 0.163	< 0.131	< 0.150	< 0.164	< 0.163	< 0.131
	Unrestricted Use SCOs	Commercial Use SCOs	Industrial Use SCOs	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14

LEGEND

Units are in mg/kg

NS = No standard listed in NYSDEC Part 375 for the associated analyte

Bold font denotes analyte exceeds Unrestricted Use SCO

Highlighted cell denotes analyte exceeds Commercial Use SCO

Red font denotes analyte exceeds Industrial Use SCO

ATTACHMENT A

Laboratory Analytical Report

**631 Northland Avenue
Buffalo, Erie County, New York
RE&LS PN 43-24-029**



PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For
Ravi Engineering & Land Surveying, P.C.

For Lab Project ID

243844

Referencing

631 Northland Ave

Prepared

Friday, August 30, 2024

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

A handwritten signature in cursive script that reads "Emily Faumen".

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-1

Lab Sample ID: 243844-01

Date Sampled: 8/20/2024 11:00

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.101	mg/Kg		8/26/2024 15:47
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	5610	mg/Kg		8/23/2024 16:29
Antimony	14.4	mg/Kg		8/23/2024 16:29
Arsenic	6.38	mg/Kg		8/23/2024 16:29
Barium	136	mg/Kg		8/23/2024 16:29
Beryllium	< 0.759	mg/Kg		8/23/2024 16:29
Cadmium	4.18	mg/Kg		8/23/2024 16:29
Calcium	147000	mg/Kg		8/23/2024 16:44
Chromium	948	mg/Kg		8/23/2024 16:29
Cobalt	9.74	mg/Kg		8/23/2024 16:29
Copper	132	mg/Kg		8/23/2024 16:29
Iron	85700	mg/Kg		8/23/2024 16:44
Lead	187	mg/Kg		8/23/2024 16:29
Magnesium	17400	mg/Kg		8/23/2024 16:29
Manganese	19100	mg/Kg		8/23/2024 16:44
Nickel	44.7	mg/Kg		8/23/2024 16:29
Potassium	597	mg/Kg		8/23/2024 16:29
Selenium	< 3.04	mg/Kg		8/23/2024 16:29
Silver	< 1.52	mg/Kg		8/23/2024 16:29
Sodium	849	mg/Kg		8/23/2024 16:29
Thallium	< 3.80	mg/Kg		8/23/2024 16:29
Vanadium	402	mg/Kg		8/23/2024 16:29

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-1

Lab Sample ID: 243844-01

Date Sampled: 8/20/2024 11:00

Matrix: Soil

Date Received 8/21/2024

 Zinc **699** mg/Kg 8/23/2024 16:29

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1221	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1232	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1242	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1248	0.490	mg/Kg		8/23/2024 18:05
PCB-1254	0.356	mg/Kg		8/23/2024 18:05
PCB-1260	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1262	< 0.137	mg/Kg		8/23/2024 18:05
PCB-1268	< 0.137	mg/Kg		8/23/2024 18:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	74.3	16.1 - 102		8/23/2024 18:05

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 606	ug/Kg		8/27/2024 18:22
1,2,4,5-Tetrachlorobenzene	< 606	ug/Kg		8/27/2024 18:22
1,2,4-Trichlorobenzene	< 606	ug/Kg		8/27/2024 18:22
1,2-Dichlorobenzene	< 606	ug/Kg		8/27/2024 18:22
1,3-Dichlorobenzene	< 606	ug/Kg		8/27/2024 18:22
1,4-Dichlorobenzene	< 606	ug/Kg		8/27/2024 18:22
2,2-Oxybis (1-chloropropane)	< 606	ug/Kg		8/27/2024 18:22
2,3,4,6-Tetrachlorophenol	< 606	ug/Kg		8/27/2024 18:22

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-1

Lab Sample ID: 243844-01

Date Sampled: 8/20/2024 11:00

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 606	ug/Kg	8/27/2024 18:22
2,4,6-Trichlorophenol	< 606	ug/Kg	8/27/2024 18:22
2,4-Dichlorophenol	< 606	ug/Kg	8/27/2024 18:22
2,4-Dimethylphenol	< 606	ug/Kg	8/27/2024 18:22
2,4-Dinitrophenol	< 2430	ug/Kg	8/27/2024 18:22
2,4-Dinitrotoluene	< 606	ug/Kg	8/27/2024 18:22
2,6-Dinitrotoluene	< 606	ug/Kg	8/27/2024 18:22
2-Chloronaphthalene	< 606	ug/Kg	8/27/2024 18:22
2-Chlorophenol	< 606	ug/Kg	8/27/2024 18:22
2-Methylnapthalene	< 606	ug/Kg	8/27/2024 18:22
2-Methylphenol	< 606	ug/Kg	8/27/2024 18:22
2-Nitroaniline	< 606	ug/Kg	8/27/2024 18:22
2-Nitrophenol	< 606	ug/Kg	8/27/2024 18:22
3&4-Methylphenol	< 606	ug/Kg	8/27/2024 18:22
3,3'-Dichlorobenzidine	< 606	ug/Kg	8/27/2024 18:22
3-Nitroaniline	< 606	ug/Kg	8/27/2024 18:22
4,6-Dinitro-2-methylphenol	< 1210	ug/Kg	8/27/2024 18:22
4-Bromophenyl phenyl ether	< 606	ug/Kg	8/27/2024 18:22
4-Chloro-3-methylphenol	< 606	ug/Kg	8/27/2024 18:22
4-Chloroaniline	< 606	ug/Kg	8/27/2024 18:22
4-Chlorophenyl phenyl ether	< 606	ug/Kg	8/27/2024 18:22
4-Nitroaniline	< 606	ug/Kg	8/27/2024 18:22
4-Nitrophenol	< 606	ug/Kg	8/27/2024 18:22
Acenaphthene	1930	ug/Kg	8/27/2024 18:22
Acenaphthylene	< 606	ug/Kg	8/27/2024 18:22
Acetophenone	< 606	ug/Kg	8/27/2024 18:22
Anthracene	2980	ug/Kg	8/27/2024 18:22
Atrazine	< 606	ug/Kg	8/27/2024 18:22
Benzaldehyde	< 606	ug/Kg	8/27/2024 18:22
Benzo (a) anthracene	8450	ug/Kg	8/27/2024 18:22

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-1

Lab Sample ID: 243844-01

Date Sampled: 8/20/2024 11:00

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	9510	ug/Kg	8/27/2024 18:22
Benzo (b) fluoranthene	9770	ug/Kg	8/27/2024 18:22
Benzo (g,h,i) perylene	6210	ug/Kg	8/27/2024 18:22
Benzo (k) fluoranthene	7220	ug/Kg	8/27/2024 18:22
Bis (2-chloroethoxy) methane	< 606	ug/Kg	8/27/2024 18:22
Bis (2-chloroethyl) ether	< 606	ug/Kg	8/27/2024 18:22
Bis (2-ethylhexyl) phthalate	< 606	ug/Kg	8/27/2024 18:22
Butylbenzylphthalate	< 606	ug/Kg	8/27/2024 18:22
Caprolactam	< 606	ug/Kg	8/27/2024 18:22
Carbazole	1880	ug/Kg	8/27/2024 18:22
Chrysene	9970	ug/Kg	8/27/2024 18:22
Dibenz (a,h) anthracene	2220	ug/Kg	8/27/2024 18:22
Dibenzofuran	1010	ug/Kg	8/27/2024 18:22
Diethyl phthalate	< 606	ug/Kg	8/27/2024 18:22
Dimethyl phthalate	< 606	ug/Kg	8/27/2024 18:22
Di-n-butyl phthalate	< 606	ug/Kg	8/27/2024 18:22
Di-n-octylphthalate	< 606	ug/Kg	8/27/2024 18:22
Fluoranthene	22100	ug/Kg	8/27/2024 18:22
Fluorene	1890	ug/Kg	8/27/2024 18:22
Hexachlorobenzene	< 606	ug/Kg	8/27/2024 18:22
Hexachlorobutadiene	< 606	ug/Kg	8/27/2024 18:22
Hexachlorocyclopentadiene	< 2430	ug/Kg	8/27/2024 18:22
Hexachloroethane	< 606	ug/Kg	8/27/2024 18:22
Indeno (1,2,3-cd) pyrene	7120	ug/Kg	8/27/2024 18:22
Isophorone	< 606	ug/Kg	8/27/2024 18:22
Naphthalene	< 606	ug/Kg	8/27/2024 18:22
Nitrobenzene	< 606	ug/Kg	8/27/2024 18:22
N-Nitroso-di-n-propylamine	< 606	ug/Kg	8/27/2024 18:22
N-Nitrosodiphenylamine	< 606	ug/Kg	8/27/2024 18:22
Pentachlorophenol	< 1210	ug/Kg	8/27/2024 18:22

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-1

Lab Sample ID: 243844-01

Date Sampled: 8/20/2024 11:00

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	17300	ug/Kg		8/27/2024	18:22
Phenol	< 606	ug/Kg		8/27/2024	18:22
Pyrene	18300	ug/Kg		8/27/2024	18:22
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	75.0	34.3 - 95.6		8/27/2024	18:22
2-Fluorobiphenyl	73.0	37.9 - 87.2		8/27/2024	18:22
2-Fluorophenol	73.2	34.4 - 80.5		8/27/2024	18:22
Nitrobenzene-d5	70.1	33.2 - 82.1		8/27/2024	18:22
Phenol-d5	80.2	36.4 - 85.4		8/27/2024	18:22
Terphenyl-d14	83.2	45.9 - 96		8/27/2024	18:22

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/22/2024

Data File: B73441.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-2

Lab Sample ID: 243844-02

Date Sampled: 8/20/2024 11:10

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0262	mg/Kg		8/26/2024 15:49
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	2240	mg/Kg		8/23/2024 13:50
Antimony	< 2.94	mg/Kg		8/23/2024 13:50
Arsenic	3.25	mg/Kg		8/23/2024 13:50
Barium	94.5	mg/Kg		8/23/2024 13:50
Beryllium	< 0.245	mg/Kg		8/23/2024 13:50
Cadmium	0.820	mg/Kg		8/23/2024 13:50
Calcium	228000	mg/Kg		8/23/2024 15:40
Chromium	31.0	mg/Kg		8/23/2024 13:50
Cobalt	3.75	mg/Kg		8/23/2024 13:50
Copper	36.1	mg/Kg		8/23/2024 13:50
Iron	15100	mg/Kg		8/23/2024 13:50
Lead	43.4	mg/Kg		8/23/2024 13:50
Magnesium	7790	mg/Kg		8/23/2024 13:50
Manganese	1100	mg/Kg		8/23/2024 15:40
Nickel	16.4	mg/Kg		8/23/2024 13:50
Potassium	970	mg/Kg		8/23/2024 13:50
Selenium	< 0.982	mg/Kg		8/23/2024 13:50
Silver	< 0.491	mg/Kg		8/23/2024 13:50
Sodium	396	mg/Kg		8/23/2024 13:50
Thallium	< 1.23	mg/Kg		8/23/2024 13:50
Vanadium	14.1	mg/Kg		8/23/2024 13:50

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-2

Lab Sample ID: 243844-02

Date Sampled: 8/20/2024 11:10

Matrix: Soil

Date Received 8/21/2024

 Zinc **84.2** mg/Kg 8/23/2024 13:50

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1221	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1232	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1242	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1248	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1254	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1260	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1262	< 0.145	mg/Kg		8/23/2024 18:28
PCB-1268	< 0.145	mg/Kg		8/23/2024 18:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	77.2	16.1 - 102		8/23/2024 18:28

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 282	ug/Kg		8/23/2024 17:48
1,2,4,5-Tetrachlorobenzene	< 282	ug/Kg		8/23/2024 17:48
1,2,4-Trichlorobenzene	< 282	ug/Kg		8/23/2024 17:48
1,2-Dichlorobenzene	< 282	ug/Kg		8/23/2024 17:48
1,3-Dichlorobenzene	< 282	ug/Kg		8/23/2024 17:48
1,4-Dichlorobenzene	< 282	ug/Kg		8/23/2024 17:48
2,2-Oxybis (1-chloropropane)	< 282	ug/Kg		8/23/2024 17:48
2,3,4,6-Tetrachlorophenol	< 282	ug/Kg		8/23/2024 17:48

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-2

Lab Sample ID: 243844-02

Date Sampled: 8/20/2024 11:10

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 282	ug/Kg	8/23/2024 17:48
2,4,6-Trichlorophenol	< 282	ug/Kg	8/23/2024 17:48
2,4-Dichlorophenol	< 282	ug/Kg	8/23/2024 17:48
2,4-Dimethylphenol	< 282	ug/Kg	8/23/2024 17:48
2,4-Dinitrophenol	< 1130	ug/Kg	8/23/2024 17:48
2,4-Dinitrotoluene	< 282	ug/Kg	8/23/2024 17:48
2,6-Dinitrotoluene	< 282	ug/Kg	8/23/2024 17:48
2-Chloronaphthalene	< 282	ug/Kg	8/23/2024 17:48
2-Chlorophenol	< 282	ug/Kg	8/23/2024 17:48
2-Methylnapthalene	342	ug/Kg	8/23/2024 17:48
2-Methylphenol	< 282	ug/Kg	8/23/2024 17:48
2-Nitroaniline	< 282	ug/Kg	8/23/2024 17:48
2-Nitrophenol	< 282	ug/Kg	8/23/2024 17:48
3&4-Methylphenol	< 282	ug/Kg	8/23/2024 17:48
3,3'-Dichlorobenzidine	< 282	ug/Kg	8/23/2024 17:48
3-Nitroaniline	< 282	ug/Kg	8/23/2024 17:48
4,6-Dinitro-2-methylphenol	< 563	ug/Kg	8/23/2024 17:48
4-Bromophenyl phenyl ether	< 282	ug/Kg	8/23/2024 17:48
4-Chloro-3-methylphenol	< 282	ug/Kg	8/23/2024 17:48
4-Chloroaniline	< 282	ug/Kg	8/23/2024 17:48
4-Chlorophenyl phenyl ether	< 282	ug/Kg	8/23/2024 17:48
4-Nitroaniline	< 282	ug/Kg	8/23/2024 17:48
4-Nitrophenol	< 282	ug/Kg	8/23/2024 17:48
Acenaphthene	< 282	ug/Kg	8/23/2024 17:48
Acenaphthylene	< 282	ug/Kg	8/23/2024 17:48
Acetophenone	< 282	ug/Kg	8/23/2024 17:48
Anthracene	375	ug/Kg	8/23/2024 17:48
Atrazine	< 282	ug/Kg	8/23/2024 17:48
Benzaldehyde	< 282	ug/Kg	8/23/2024 17:48
Benzo (a) anthracene	2800	ug/Kg	8/23/2024 17:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-2

Lab Sample ID: 243844-02

Date Sampled: 8/20/2024 11:10

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	4600	ug/Kg	8/23/2024 17:48
Benzo (b) fluoranthene	4170	ug/Kg	8/23/2024 17:48
Benzo (g,h,i) perylene	3310	ug/Kg	8/23/2024 17:48
Benzo (k) fluoranthene	3110	ug/Kg	8/23/2024 17:48
Bis (2-chloroethoxy) methane	< 282	ug/Kg	8/23/2024 17:48
Bis (2-chloroethyl) ether	< 282	ug/Kg	8/23/2024 17:48
Bis (2-ethylhexyl) phthalate	< 282	ug/Kg	8/23/2024 17:48
Butylbenzylphthalate	< 282	ug/Kg	8/23/2024 17:48
Caprolactam	< 282	ug/Kg	8/23/2024 17:48
Carbazole	319	ug/Kg	8/23/2024 17:48
Chrysene	3980	ug/Kg	8/23/2024 17:48
Dibenz (a,h) anthracene	1090	ug/Kg	8/23/2024 17:48
Dibenzofuran	< 282	ug/Kg	8/23/2024 17:48
Diethyl phthalate	< 282	ug/Kg	8/23/2024 17:48
Dimethyl phthalate	< 282	ug/Kg	8/23/2024 17:48
Di-n-butyl phthalate	< 282	ug/Kg	8/23/2024 17:48
Di-n-octylphthalate	< 282	ug/Kg	8/23/2024 17:48
Fluoranthene	4360	ug/Kg	8/23/2024 17:48
Fluorene	< 282	ug/Kg	8/23/2024 17:48
Hexachlorobenzene	< 282	ug/Kg	8/23/2024 17:48
Hexachlorobutadiene	< 282	ug/Kg	8/23/2024 17:48
Hexachlorocyclopentadiene	< 1130	ug/Kg	8/23/2024 17:48
Hexachloroethane	< 282	ug/Kg	8/23/2024 17:48
Indeno (1,2,3-cd) pyrene	3360	ug/Kg	8/23/2024 17:48
Isophorone	< 282	ug/Kg	8/23/2024 17:48
Naphthalene	< 282	ug/Kg	8/23/2024 17:48
Nitrobenzene	< 282	ug/Kg	8/23/2024 17:48
N-Nitroso-di-n-propylamine	< 282	ug/Kg	8/23/2024 17:48
N-Nitrosodiphenylamine	< 282	ug/Kg	8/23/2024 17:48
Pentachlorophenol	< 563	ug/Kg	8/23/2024 17:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-2

Lab Sample ID: 243844-02

Date Sampled: 8/20/2024 11:10

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	2310	ug/Kg	8/23/2024 17:48
Phenol	< 282	ug/Kg	8/23/2024 17:48
Pyrene	4930	ug/Kg	8/23/2024 17:48

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	67.1	34.3 - 95.6		8/23/2024 17:48
2-Fluorobiphenyl	69.2	37.9 - 87.2		8/23/2024 17:48
2-Fluorophenol	66.4	34.4 - 80.5		8/23/2024 17:48
Nitrobenzene-d5	64.0	33.2 - 82.1		8/23/2024 17:48
Phenol-d5	71.1	36.4 - 85.4		8/23/2024 17:48
Terphenyl-d14	76.8	45.9 - 96		8/23/2024 17:48

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/22/2024

Data File: B73391.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-3

Lab Sample ID: 243844-03

Date Sampled: 8/20/2024 11:20

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.118	mg/Kg		8/26/2024 15:51

Method Reference(s): EPA 7471B

Preparation Date: 8/26/2024

Data File: Hg240826B

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	2110	mg/Kg		8/23/2024 13:54
Antimony	< 3.22	mg/Kg		8/23/2024 13:54
Arsenic	5.81	mg/Kg		8/23/2024 13:54
Barium	255	mg/Kg		8/23/2024 13:54
Beryllium	< 0.268	mg/Kg		8/23/2024 13:54
Cadmium	1.75	mg/Kg		8/23/2024 13:54
Calcium	240000	mg/Kg		8/23/2024 15:44
Chromium	83.5	mg/Kg		8/23/2024 13:54
Cobalt	4.55	mg/Kg		8/23/2024 13:54
Copper	94.9	mg/Kg		8/23/2024 13:54
Iron	41700	mg/Kg		8/23/2024 15:44
Lead	98.9	mg/Kg		8/23/2024 13:54
Magnesium	7150	mg/Kg		8/23/2024 13:54
Manganese	1470	mg/Kg		8/23/2024 15:44
Nickel	33.2	mg/Kg		8/23/2024 13:54
Potassium	584	mg/Kg		8/23/2024 13:54
Selenium	< 1.07	mg/Kg		8/23/2024 13:54
Silver	< 0.537	mg/Kg		8/23/2024 13:54
Sodium	427	mg/Kg		8/23/2024 13:54
Thallium	< 1.34	mg/Kg		8/23/2024 13:54
Vanadium	19.4	mg/Kg		8/23/2024 13:54

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-3

Lab Sample ID: 243844-03

Date Sampled: 8/20/2024 11:20

Matrix: Soil

Date Received 8/21/2024

Zinc 172 mg/Kg 8/23/2024 13:54

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1221	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1232	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1242	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1248	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1254	0.218	mg/Kg		8/23/2024 18:51
PCB-1260	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1262	< 0.156	mg/Kg		8/23/2024 18:51
PCB-1268	< 0.156	mg/Kg		8/23/2024 18:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	84.6	16.1 - 102		8/23/2024 18:51

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 1140	ug/Kg		8/28/2024 12:52
1,2,4,5-Tetrachlorobenzene	< 1140	ug/Kg		8/28/2024 12:52
1,2,4-Trichlorobenzene	< 1140	ug/Kg		8/28/2024 12:52
1,2-Dichlorobenzene	< 1140	ug/Kg		8/28/2024 12:52
1,3-Dichlorobenzene	< 1140	ug/Kg		8/28/2024 12:52
1,4-Dichlorobenzene	< 1140	ug/Kg		8/28/2024 12:52
2,2-Oxybis (1-chloropropane)	< 1140	ug/Kg		8/28/2024 12:52
2,3,4,6-Tetrachlorophenol	< 1140	ug/Kg		8/28/2024 12:52

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-3

Lab Sample ID: 243844-03

Date Sampled: 8/20/2024 11:20

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 1140	ug/Kg	8/28/2024 12:52
2,4,6-Trichlorophenol	< 1140	ug/Kg	8/28/2024 12:52
2,4-Dichlorophenol	< 1140	ug/Kg	8/28/2024 12:52
2,4-Dimethylphenol	< 1140	ug/Kg	8/28/2024 12:52
2,4-Dinitrophenol	< 4560	ug/Kg	8/28/2024 12:52
2,4-Dinitrotoluene	< 1140	ug/Kg	8/28/2024 12:52
2,6-Dinitrotoluene	< 1140	ug/Kg	8/28/2024 12:52
2-Chloronaphthalene	< 1140	ug/Kg	8/28/2024 12:52
2-Chlorophenol	< 1140	ug/Kg	8/28/2024 12:52
2-Methylnapthalene	< 1140	ug/Kg	8/28/2024 12:52
2-Methylphenol	< 1140	ug/Kg	8/28/2024 12:52
2-Nitroaniline	< 1140	ug/Kg	8/28/2024 12:52
2-Nitrophenol	< 1140	ug/Kg	8/28/2024 12:52
3&4-Methylphenol	< 1140	ug/Kg	8/28/2024 12:52
3,3'-Dichlorobenzidine	< 1140	ug/Kg	8/28/2024 12:52
3-Nitroaniline	< 1140	ug/Kg	8/28/2024 12:52
4,6-Dinitro-2-methylphenol	< 2280	ug/Kg	8/28/2024 12:52
4-Bromophenyl phenyl ether	< 1140	ug/Kg	8/28/2024 12:52
4-Chloro-3-methylphenol	< 1140	ug/Kg	8/28/2024 12:52
4-Chloroaniline	< 1140	ug/Kg	8/28/2024 12:52
4-Chlorophenyl phenyl ether	< 1140	ug/Kg	8/28/2024 12:52
4-Nitroaniline	< 1140	ug/Kg	8/28/2024 12:52
4-Nitrophenol	< 1140	ug/Kg	8/28/2024 12:52
Acenaphthene	< 1140	ug/Kg	8/28/2024 12:52
Acenaphthylene	< 1140	ug/Kg	8/28/2024 12:52
Acetophenone	< 1140	ug/Kg	8/28/2024 12:52
Anthracene	1140	ug/Kg	8/28/2024 12:52
Atrazine	< 1140	ug/Kg	8/28/2024 12:52
Benzaldehyde	< 1140	ug/Kg	8/28/2024 12:52
Benzo (a) anthracene	14900	ug/Kg	8/28/2024 12:52

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-3

Lab Sample ID: 243844-03

Date Sampled: 8/20/2024 11:20

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	23600	ug/Kg	8/28/2024 12:52
Benzo (b) fluoranthene	22300	ug/Kg	8/28/2024 12:52
Benzo (g,h,i) perylene	16000	ug/Kg	8/28/2024 12:52
Benzo (k) fluoranthene	15600	ug/Kg	8/28/2024 12:52
Bis (2-chloroethoxy) methane	< 1140	ug/Kg	8/28/2024 12:52
Bis (2-chloroethyl) ether	< 1140	ug/Kg	8/28/2024 12:52
Bis (2-ethylhexyl) phthalate	< 1140	ug/Kg	8/28/2024 12:52
Butylbenzylphthalate	< 1140	ug/Kg	8/28/2024 12:52
Caprolactam	< 1140	ug/Kg	8/28/2024 12:52
Carbazole	< 1140	ug/Kg	8/28/2024 12:52
Chrysene	19400	ug/Kg	8/28/2024 12:52
Dibenz (a,h) anthracene	5550	ug/Kg	8/28/2024 12:52
Dibenzofuran	< 1140	ug/Kg	8/28/2024 12:52
Diethyl phthalate	< 1140	ug/Kg	8/28/2024 12:52
Dimethyl phthalate	< 1140	ug/Kg	8/28/2024 12:52
Di-n-butyl phthalate	< 1140	ug/Kg	8/28/2024 12:52
Di-n-octylphthalate	< 1140	ug/Kg	8/28/2024 12:52
Fluoranthene	17900	ug/Kg	8/28/2024 12:52
Fluorene	< 1140	ug/Kg	8/28/2024 12:52
Hexachlorobenzene	< 1140	ug/Kg	8/28/2024 12:52
Hexachlorobutadiene	< 1140	ug/Kg	8/28/2024 12:52
Hexachlorocyclopentadiene	< 4560	ug/Kg	8/28/2024 12:52
Hexachloroethane	< 1140	ug/Kg	8/28/2024 12:52
Indeno (1,2,3-cd) pyrene	15900	ug/Kg	8/28/2024 12:52
Isophorone	< 1140	ug/Kg	8/28/2024 12:52
Naphthalene	< 1140	ug/Kg	8/28/2024 12:52
Nitrobenzene	< 1140	ug/Kg	8/28/2024 12:52
N-Nitroso-di-n-propylamine	< 1140	ug/Kg	8/28/2024 12:52
N-Nitrosodiphenylamine	< 1140	ug/Kg	8/28/2024 12:52
Pentachlorophenol	< 2280	ug/Kg	8/28/2024 12:52

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-3

Lab Sample ID: 243844-03

Date Sampled: 8/20/2024 11:20

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	6500	ug/Kg		8/28/2024	12:52
Phenol	< 1140	ug/Kg		8/28/2024	12:52
Pyrene	20800	ug/Kg		8/28/2024	12:52
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	72.3	34.3 - 95.6		8/28/2024	12:52
2-Fluorobiphenyl	74.9	37.9 - 87.2		8/28/2024	12:52
2-Fluorophenol	75.7	34.4 - 80.5		8/28/2024	12:52
Nitrobenzene-d5	72.2	33.2 - 82.1		8/28/2024	12:52
Phenol-d5	81.7	36.4 - 85.4		8/28/2024	12:52
Terphenyl-d14	83.7	45.9 - 96		8/28/2024	12:52

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/22/2024

Data File: B73479.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-4

Lab Sample ID: 243844-04

Date Sampled: 8/20/2024 11:30

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0561	mg/Kg		8/26/2024 15:53
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	7320	mg/Kg		8/23/2024 13:58
Antimony	< 3.35	mg/Kg		8/23/2024 13:58
Arsenic	9.07	mg/Kg		8/23/2024 13:58
Barium	124	mg/Kg		8/23/2024 13:58
Beryllium	0.575	mg/Kg		8/23/2024 13:58
Cadmium	2.64	mg/Kg		8/23/2024 13:58
Calcium	179000	mg/Kg		8/23/2024 15:47
Chromium	94.9	mg/Kg		8/23/2024 13:58
Cobalt	6.32	mg/Kg		8/23/2024 13:58
Copper	196	mg/Kg		8/23/2024 13:58
Iron	56000	mg/Kg		8/23/2024 15:47
Lead	101	mg/Kg		8/23/2024 13:58
Magnesium	17800	mg/Kg		8/23/2024 13:58
Manganese	1380	mg/Kg		8/23/2024 15:47
Nickel	64.2	mg/Kg		8/23/2024 13:58
Potassium	895	mg/Kg		8/23/2024 13:58
Selenium	< 1.12	mg/Kg		8/23/2024 13:58
Silver	< 0.558	mg/Kg		8/23/2024 13:58
Sodium	568	mg/Kg		8/23/2024 13:58
Thallium	< 1.40	mg/Kg		8/23/2024 13:58
Vanadium	16.4	mg/Kg		8/23/2024 13:58

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-4

Lab Sample ID: 243844-04

Date Sampled: 8/20/2024 11:30

Matrix: Soil

Date Received 8/21/2024

 Zinc **222** mg/Kg 8/23/2024 13:58

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1221	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1232	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1242	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1248	0.172	mg/Kg		8/23/2024 19:14
PCB-1254	0.223	mg/Kg		8/23/2024 19:14
PCB-1260	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1262	< 0.125	mg/Kg		8/23/2024 19:14
PCB-1268	< 0.125	mg/Kg		8/23/2024 19:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	73.7	16.1 - 102		8/23/2024 19:14

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 578	ug/Kg		8/27/2024 22:15
1,2,4,5-Tetrachlorobenzene	< 578	ug/Kg		8/27/2024 22:15
1,2,4-Trichlorobenzene	< 578	ug/Kg		8/27/2024 22:15
1,2-Dichlorobenzene	< 578	ug/Kg		8/27/2024 22:15
1,3-Dichlorobenzene	< 578	ug/Kg		8/27/2024 22:15
1,4-Dichlorobenzene	< 578	ug/Kg		8/27/2024 22:15
2,2-Oxybis (1-chloropropane)	< 578	ug/Kg		8/27/2024 22:15
2,3,4,6-Tetrachlorophenol	< 578	ug/Kg		8/27/2024 22:15

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-4

Lab Sample ID: 243844-04

Date Sampled: 8/20/2024 11:30

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 578	ug/Kg	8/27/2024 22:15
2,4,6-Trichlorophenol	< 578	ug/Kg	8/27/2024 22:15
2,4-Dichlorophenol	< 578	ug/Kg	8/27/2024 22:15
2,4-Dimethylphenol	< 578	ug/Kg	8/27/2024 22:15
2,4-Dinitrophenol	< 2310	ug/Kg	8/27/2024 22:15
2,4-Dinitrotoluene	< 578	ug/Kg	8/27/2024 22:15
2,6-Dinitrotoluene	< 578	ug/Kg	8/27/2024 22:15
2-Chloronaphthalene	< 578	ug/Kg	8/27/2024 22:15
2-Chlorophenol	< 578	ug/Kg	8/27/2024 22:15
2-Methylnapthalene	< 578	ug/Kg	8/27/2024 22:15
2-Methylphenol	< 578	ug/Kg	8/27/2024 22:15
2-Nitroaniline	< 578	ug/Kg	8/27/2024 22:15
2-Nitrophenol	< 578	ug/Kg	8/27/2024 22:15
3&4-Methylphenol	< 578	ug/Kg	8/27/2024 22:15
3,3'-Dichlorobenzidine	< 578	ug/Kg	8/27/2024 22:15
3-Nitroaniline	< 578	ug/Kg	8/27/2024 22:15
4,6-Dinitro-2-methylphenol	< 1160	ug/Kg	8/27/2024 22:15
4-Bromophenyl phenyl ether	< 578	ug/Kg	8/27/2024 22:15
4-Chloro-3-methylphenol	< 578	ug/Kg	8/27/2024 22:15
4-Chloroaniline	< 578	ug/Kg	8/27/2024 22:15
4-Chlorophenyl phenyl ether	< 578	ug/Kg	8/27/2024 22:15
4-Nitroaniline	< 578	ug/Kg	8/27/2024 22:15
4-Nitrophenol	< 578	ug/Kg	8/27/2024 22:15
Acenaphthene	1310	ug/Kg	8/27/2024 22:15
Acenaphthylene	< 578	ug/Kg	8/27/2024 22:15
Acetophenone	< 578	ug/Kg	8/27/2024 22:15
Anthracene	2080	ug/Kg	8/27/2024 22:15
Atrazine	< 578	ug/Kg	8/27/2024 22:15
Benzaldehyde	< 578	ug/Kg	8/27/2024 22:15
Benzo (a) anthracene	5820	ug/Kg	8/27/2024 22:15

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-4

Lab Sample ID: 243844-04

Date Sampled: 8/20/2024 11:30

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	6650	ug/Kg	8/27/2024 22:15
Benzo (b) fluoranthene	7090	ug/Kg	8/27/2024 22:15
Benzo (g,h,i) perylene	4470	ug/Kg	8/27/2024 22:15
Benzo (k) fluoranthene	4640	ug/Kg	8/27/2024 22:15
Bis (2-chloroethoxy) methane	< 578	ug/Kg	8/27/2024 22:15
Bis (2-chloroethyl) ether	< 578	ug/Kg	8/27/2024 22:15
Bis (2-ethylhexyl) phthalate	< 578	ug/Kg	8/27/2024 22:15
Butylbenzylphthalate	< 578	ug/Kg	8/27/2024 22:15
Caprolactam	< 578	ug/Kg	8/27/2024 22:15
Carbazole	1380	ug/Kg	8/27/2024 22:15
Chrysene	6640	ug/Kg	8/27/2024 22:15
Dibenz (a,h) anthracene	1500	ug/Kg	8/27/2024 22:15
Dibenzofuran	599	ug/Kg	8/27/2024 22:15
Diethyl phthalate	< 578	ug/Kg	8/27/2024 22:15
Dimethyl phthalate	< 578	ug/Kg	8/27/2024 22:15
Di-n-butyl phthalate	< 578	ug/Kg	8/27/2024 22:15
Di-n-octylphthalate	< 578	ug/Kg	8/27/2024 22:15
Fluoranthene	12700	ug/Kg	8/27/2024 22:15
Fluorene	953	ug/Kg	8/27/2024 22:15
Hexachlorobenzene	< 578	ug/Kg	8/27/2024 22:15
Hexachlorobutadiene	< 578	ug/Kg	8/27/2024 22:15
Hexachlorocyclopentadiene	< 2310	ug/Kg	8/27/2024 22:15
Hexachloroethane	< 578	ug/Kg	8/27/2024 22:15
Indeno (1,2,3-cd) pyrene	4950	ug/Kg	8/27/2024 22:15
Isophorone	< 578	ug/Kg	8/27/2024 22:15
Naphthalene	655	ug/Kg	8/27/2024 22:15
Nitrobenzene	< 578	ug/Kg	8/27/2024 22:15
N-Nitroso-di-n-propylamine	< 578	ug/Kg	8/27/2024 22:15
N-Nitrosodiphenylamine	< 578	ug/Kg	8/27/2024 22:15
Pentachlorophenol	< 1160	ug/Kg	8/27/2024 22:15

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-4

Lab Sample ID: 243844-04

Date Sampled: 8/20/2024 11:30

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	8990	ug/Kg		8/27/2024	22:15
Phenol	< 578	ug/Kg		8/27/2024	22:15
Pyrene	11100	ug/Kg		8/27/2024	22:15
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	58.8	34.3 - 95.6		8/27/2024	22:15
2-Fluorobiphenyl	57.0	37.9 - 87.2		8/27/2024	22:15
2-Fluorophenol	57.0	34.4 - 80.5		8/27/2024	22:15
Nitrobenzene-d5	53.9	33.2 - 82.1		8/27/2024	22:15
Phenol-d5	62.5	36.4 - 85.4		8/27/2024	22:15
Terphenyl-d14	63.9	45.9 - 96		8/27/2024	22:15

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/22/2024

Data File: B73449.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-5

Lab Sample ID: 243844-05

Date Sampled: 8/20/2024 11:35

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0135	mg/Kg		8/26/2024 15:55
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	2740	mg/Kg		8/23/2024 14:01
Antimony	< 3.20	mg/Kg		8/23/2024 14:01
Arsenic	7.67	mg/Kg		8/23/2024 14:01
Barium	20.8	mg/Kg		8/23/2024 14:01
Beryllium	< 0.267	mg/Kg		8/23/2024 14:01
Cadmium	0.475	mg/Kg		8/23/2024 14:01
Calcium	193000	mg/Kg		8/23/2024 15:50
Chromium	11.8	mg/Kg		8/23/2024 14:01
Cobalt	2.73	mg/Kg		8/23/2024 14:01
Copper	24.2	mg/Kg		8/23/2024 14:01
Iron	9590	mg/Kg		8/23/2024 14:01
Lead	24.1	mg/Kg		8/23/2024 14:01
Magnesium	9340	mg/Kg		8/23/2024 14:01
Manganese	147	mg/Kg		8/23/2024 14:01
Nickel	16.3	mg/Kg		8/23/2024 14:01
Potassium	1100	mg/Kg		8/23/2024 14:01
Selenium	< 1.07	mg/Kg		8/23/2024 14:01
Silver	< 0.533	mg/Kg		8/23/2024 14:01
Sodium	250	mg/Kg		8/23/2024 14:01
Thallium	< 1.33	mg/Kg		8/23/2024 14:01
Vanadium	7.35	mg/Kg		8/23/2024 14:01

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-5

Lab Sample ID: 243844-05

Date Sampled: 8/20/2024 11:35

Matrix: Soil

Date Received 8/21/2024

Zinc 55.0 mg/Kg 8/23/2024 14:01

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1221	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1232	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1242	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1248	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1254	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1260	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1262	< 0.164	mg/Kg		8/23/2024 19:37
PCB-1268	< 0.164	mg/Kg		8/23/2024 19:37

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	94.8	16.1 - 102		8/23/2024 19:37

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 297	ug/Kg		8/23/2024 19:15
1,2,4,5-Tetrachlorobenzene	< 297	ug/Kg		8/23/2024 19:15
1,2,4-Trichlorobenzene	< 297	ug/Kg		8/23/2024 19:15
1,2-Dichlorobenzene	< 297	ug/Kg		8/23/2024 19:15
1,3-Dichlorobenzene	< 297	ug/Kg		8/23/2024 19:15
1,4-Dichlorobenzene	< 297	ug/Kg		8/23/2024 19:15
2,2-Oxybis (1-chloropropane)	< 297	ug/Kg		8/23/2024 19:15
2,3,4,6-Tetrachlorophenol	< 297	ug/Kg		8/23/2024 19:15

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-5

Lab Sample ID: 243844-05

Date Sampled: 8/20/2024 11:35

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 297	ug/Kg	8/23/2024 19:15
2,4,6-Trichlorophenol	< 297	ug/Kg	8/23/2024 19:15
2,4-Dichlorophenol	< 297	ug/Kg	8/23/2024 19:15
2,4-Dimethylphenol	< 297	ug/Kg	8/23/2024 19:15
2,4-Dinitrophenol	< 1190	ug/Kg	8/23/2024 19:15
2,4-Dinitrotoluene	< 297	ug/Kg	8/23/2024 19:15
2,6-Dinitrotoluene	< 297	ug/Kg	8/23/2024 19:15
2-Chloronaphthalene	< 297	ug/Kg	8/23/2024 19:15
2-Chlorophenol	< 297	ug/Kg	8/23/2024 19:15
2-Methylnapthalene	< 297	ug/Kg	8/23/2024 19:15
2-Methylphenol	< 297	ug/Kg	8/23/2024 19:15
2-Nitroaniline	< 297	ug/Kg	8/23/2024 19:15
2-Nitrophenol	< 297	ug/Kg	8/23/2024 19:15
3&4-Methylphenol	< 297	ug/Kg	8/23/2024 19:15
3,3'-Dichlorobenzidine	< 297	ug/Kg	8/23/2024 19:15
3-Nitroaniline	< 297	ug/Kg	8/23/2024 19:15
4,6-Dinitro-2-methylphenol	< 594	ug/Kg	8/23/2024 19:15
4-Bromophenyl phenyl ether	< 297	ug/Kg	8/23/2024 19:15
4-Chloro-3-methylphenol	< 297	ug/Kg	8/23/2024 19:15
4-Chloroaniline	< 297	ug/Kg	8/23/2024 19:15
4-Chlorophenyl phenyl ether	< 297	ug/Kg	8/23/2024 19:15
4-Nitroaniline	< 297	ug/Kg	8/23/2024 19:15
4-Nitrophenol	< 297	ug/Kg	8/23/2024 19:15
Acenaphthene	< 297	ug/Kg	8/23/2024 19:15
Acenaphthylene	< 297	ug/Kg	8/23/2024 19:15
Acetophenone	< 297	ug/Kg	8/23/2024 19:15
Anthracene	< 297	ug/Kg	8/23/2024 19:15
Atrazine	< 297	ug/Kg	8/23/2024 19:15
Benzaldehyde	< 297	ug/Kg	8/23/2024 19:15
Benzo (a) anthracene	447	ug/Kg	8/23/2024 19:15

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-5

Lab Sample ID: 243844-05

Date Sampled: 8/20/2024 11:35

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	741	ug/Kg	8/23/2024 19:15
Benzo (b) fluoranthene	739	ug/Kg	8/23/2024 19:15
Benzo (g,h,i) perylene	508	ug/Kg	8/23/2024 19:15
Benzo (k) fluoranthene	426	ug/Kg	8/23/2024 19:15
Bis (2-chloroethoxy) methane	< 297	ug/Kg	8/23/2024 19:15
Bis (2-chloroethyl) ether	< 297	ug/Kg	8/23/2024 19:15
Bis (2-ethylhexyl) phthalate	< 297	ug/Kg	8/23/2024 19:15
Butylbenzylphthalate	< 297	ug/Kg	8/23/2024 19:15
Caprolactam	< 297	ug/Kg	8/23/2024 19:15
Carbazole	< 297	ug/Kg	8/23/2024 19:15
Chrysene	656	ug/Kg	8/23/2024 19:15
Dibenz (a,h) anthracene	< 297	ug/Kg	8/23/2024 19:15
Dibenzofuran	< 297	ug/Kg	8/23/2024 19:15
Diethyl phthalate	< 297	ug/Kg	8/23/2024 19:15
Dimethyl phthalate	< 297	ug/Kg	8/23/2024 19:15
Di-n-butyl phthalate	< 297	ug/Kg	8/23/2024 19:15
Di-n-octylphthalate	< 297	ug/Kg	8/23/2024 19:15
Fluoranthene	534	ug/Kg	8/23/2024 19:15
Fluorene	< 297	ug/Kg	8/23/2024 19:15
Hexachlorobenzene	< 297	ug/Kg	8/23/2024 19:15
Hexachlorobutadiene	< 297	ug/Kg	8/23/2024 19:15
Hexachlorocyclopentadiene	< 1190	ug/Kg	8/23/2024 19:15
Hexachloroethane	< 297	ug/Kg	8/23/2024 19:15
Indeno (1,2,3-cd) pyrene	506	ug/Kg	8/23/2024 19:15
Isophorone	< 297	ug/Kg	8/23/2024 19:15
Naphthalene	< 297	ug/Kg	8/23/2024 19:15
Nitrobenzene	< 297	ug/Kg	8/23/2024 19:15
N-Nitroso-di-n-propylamine	< 297	ug/Kg	8/23/2024 19:15
N-Nitrosodiphenylamine	< 297	ug/Kg	8/23/2024 19:15
Pentachlorophenol	< 594	ug/Kg	8/23/2024 19:15

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-5

Lab Sample ID: 243844-05

Date Sampled: 8/20/2024 11:35

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	< 297	ug/Kg	8/23/2024 19:15
Phenol	< 297	ug/Kg	8/23/2024 19:15
Pyrene	661	ug/Kg	8/23/2024 19:15

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	77.8	34.3 - 95.6		8/23/2024 19:15
2-Fluorobiphenyl	79.9	37.9 - 87.2		8/23/2024 19:15
2-Fluorophenol	75.6	34.4 - 80.5		8/23/2024 19:15
Nitrobenzene-d5	73.6	33.2 - 82.1		8/23/2024 19:15
Phenol-d5	77.4	36.4 - 85.4		8/23/2024 19:15
Terphenyl-d14	85.4	45.9 - 96		8/23/2024 19:15

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/22/2024

Data File: B73394.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-6

Lab Sample ID: 243844-06

Date Sampled: 8/20/2024 11:40

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0129	mg/Kg		8/26/2024 15:57
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	1410	mg/Kg		8/23/2024 15:54
Antimony	< 5.71	mg/Kg		8/23/2024 15:54
Arsenic	3.09	mg/Kg		8/23/2024 15:54
Barium	83.2	mg/Kg		8/23/2024 15:54
Beryllium	< 0.476	mg/Kg		8/23/2024 15:54
Cadmium	< 0.476	mg/Kg		8/23/2024 15:54
Calcium	256000	mg/Kg		8/23/2024 16:35
Chromium	9.84	mg/Kg		8/23/2024 15:54
Cobalt	< 4.76	mg/Kg		8/23/2024 15:54
Copper	13.5	mg/Kg		8/23/2024 15:54
Iron	8670	mg/Kg		8/23/2024 15:54
Lead	7.07	mg/Kg		8/23/2024 15:54
Magnesium	8510	mg/Kg		8/23/2024 15:54
Manganese	270	mg/Kg		8/23/2024 15:54
Nickel	7.92	mg/Kg		8/23/2024 15:54
Potassium	607	mg/Kg		8/23/2024 15:54
Selenium	< 1.90	mg/Kg		8/23/2024 15:54
Silver	< 0.952	mg/Kg		8/23/2024 15:54
Sodium	270	mg/Kg		8/23/2024 15:54
Thallium	< 2.38	mg/Kg		8/23/2024 15:54
Vanadium	4.42	mg/Kg		8/23/2024 15:54

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-6

Lab Sample ID: 243844-06

Date Sampled: 8/20/2024 11:40

Matrix: Soil

Date Received 8/21/2024

 Zinc **24.1** mg/Kg 8/23/2024 15:54

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1221	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1232	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1242	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1248	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1254	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1260	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1262	< 0.165	mg/Kg		8/23/2024 20:01
PCB-1268	< 0.165	mg/Kg		8/23/2024 20:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	81.8	16.1 - 102		8/23/2024 20:01

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/22/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 279	ug/Kg		8/27/2024 12:59
1,2,4,5-Tetrachlorobenzene	< 279	ug/Kg		8/27/2024 12:59
1,2,4-Trichlorobenzene	< 279	ug/Kg		8/27/2024 12:59
1,2-Dichlorobenzene	< 279	ug/Kg		8/27/2024 12:59
1,3-Dichlorobenzene	< 279	ug/Kg		8/27/2024 12:59
1,4-Dichlorobenzene	< 279	ug/Kg		8/27/2024 12:59
2,2-Oxybis (1-chloropropane)	< 279	ug/Kg		8/27/2024 12:59
2,3,4,6-Tetrachlorophenol	< 279	ug/Kg		8/27/2024 12:59

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-6

Lab Sample ID: 243844-06

Date Sampled: 8/20/2024 11:40

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 279	ug/Kg	8/27/2024 12:59
2,4,6-Trichlorophenol	< 279	ug/Kg	8/27/2024 12:59
2,4-Dichlorophenol	< 279	ug/Kg	8/27/2024 12:59
2,4-Dimethylphenol	< 279	ug/Kg	8/27/2024 12:59
2,4-Dinitrophenol	< 1120	ug/Kg	8/27/2024 12:59
2,4-Dinitrotoluene	< 279	ug/Kg	8/27/2024 12:59
2,6-Dinitrotoluene	< 279	ug/Kg	8/27/2024 12:59
2-Chloronaphthalene	< 279	ug/Kg	8/27/2024 12:59
2-Chlorophenol	< 279	ug/Kg	8/27/2024 12:59
2-Methylnapthalene	< 279	ug/Kg	8/27/2024 12:59
2-Methylphenol	< 279	ug/Kg	8/27/2024 12:59
2-Nitroaniline	< 279	ug/Kg	8/27/2024 12:59
2-Nitrophenol	< 279	ug/Kg	8/27/2024 12:59
3&4-Methylphenol	< 279	ug/Kg	8/27/2024 12:59
3,3'-Dichlorobenzidine	< 279	ug/Kg	8/27/2024 12:59
3-Nitroaniline	< 279	ug/Kg	8/27/2024 12:59
4,6-Dinitro-2-methylphenol	< 559	ug/Kg	8/27/2024 12:59
4-Bromophenyl phenyl ether	< 279	ug/Kg	8/27/2024 12:59
4-Chloro-3-methylphenol	< 279	ug/Kg	8/27/2024 12:59
4-Chloroaniline	< 279	ug/Kg	8/27/2024 12:59
4-Chlorophenyl phenyl ether	< 279	ug/Kg	8/27/2024 12:59
4-Nitroaniline	< 279	ug/Kg	8/27/2024 12:59
4-Nitrophenol	< 279	ug/Kg	8/27/2024 12:59
Acenaphthene	< 279	ug/Kg	8/27/2024 12:59
Acenaphthylene	< 279	ug/Kg	8/27/2024 12:59
Acetophenone	< 279	ug/Kg	8/27/2024 12:59
Anthracene	< 279	ug/Kg	8/27/2024 12:59
Atrazine	< 279	ug/Kg	8/27/2024 12:59
Benzaldehyde	< 279	ug/Kg	8/27/2024 12:59
Benzo (a) anthracene	532	ug/Kg	8/27/2024 12:59

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-6

Lab Sample ID: 243844-06

Date Sampled: 8/20/2024 11:40

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	815	ug/Kg	8/27/2024 12:59
Benzo (b) fluoranthene	722	ug/Kg	8/27/2024 12:59
Benzo (g,h,i) perylene	552	ug/Kg	8/27/2024 12:59
Benzo (k) fluoranthene	528	ug/Kg	8/27/2024 12:59
Bis (2-chloroethoxy) methane	< 279	ug/Kg	8/27/2024 12:59
Bis (2-chloroethyl) ether	< 279	ug/Kg	8/27/2024 12:59
Bis (2-ethylhexyl) phthalate	< 279	ug/Kg	8/27/2024 12:59
Butylbenzylphthalate	< 279	ug/Kg	8/27/2024 12:59
Caprolactam	< 279	ug/Kg	8/27/2024 12:59
Carbazole	< 279	ug/Kg	8/27/2024 12:59
Chrysene	726	ug/Kg	8/27/2024 12:59
Dibenz (a,h) anthracene	< 279	ug/Kg	8/27/2024 12:59
Dibenzofuran	< 279	ug/Kg	8/27/2024 12:59
Diethyl phthalate	< 279	ug/Kg	8/27/2024 12:59
Dimethyl phthalate	< 279	ug/Kg	8/27/2024 12:59
Di-n-butyl phthalate	< 279	ug/Kg	8/27/2024 12:59
Di-n-octylphthalate	< 279	ug/Kg	8/27/2024 12:59
Fluoranthene	583	ug/Kg	8/27/2024 12:59
Fluorene	< 279	ug/Kg	8/27/2024 12:59
Hexachlorobenzene	< 279	ug/Kg	8/27/2024 12:59
Hexachlorobutadiene	< 279	ug/Kg	8/27/2024 12:59
Hexachlorocyclopentadiene	< 1120	ug/Kg	8/27/2024 12:59
Hexachloroethane	< 279	ug/Kg	8/27/2024 12:59
Indeno (1,2,3-cd) pyrene	574	ug/Kg	8/27/2024 12:59
Isophorone	< 279	ug/Kg	8/27/2024 12:59
Naphthalene	< 279	ug/Kg	8/27/2024 12:59
Nitrobenzene	< 279	ug/Kg	8/27/2024 12:59
N-Nitroso-di-n-propylamine	< 279	ug/Kg	8/27/2024 12:59
N-Nitrosodiphenylamine	< 279	ug/Kg	8/27/2024 12:59
Pentachlorophenol	< 559	ug/Kg	8/27/2024 12:59

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-6

Lab Sample ID: 243844-06

Date Sampled: 8/20/2024 11:40

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	297	ug/Kg		8/27/2024	12:59
Phenol	< 279	ug/Kg		8/27/2024	12:59
Pyrene	775	ug/Kg		8/27/2024	12:59
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	70.5	34.3 - 95.6		8/27/2024	12:59
2-Fluorobiphenyl	72.0	37.9 - 87.2		8/27/2024	12:59
2-Fluorophenol	68.9	34.4 - 80.5		8/27/2024	12:59
Nitrobenzene-d5	66.5	33.2 - 82.1		8/27/2024	12:59
Phenol-d5	73.8	36.4 - 85.4		8/27/2024	12:59
Terphenyl-d14	76.3	45.9 - 96		8/27/2024	12:59

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73430.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-7

Lab Sample ID: 243844-07

Date Sampled: 8/20/2024 11:50

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0506	mg/Kg		8/26/2024 15:59
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	3660	mg/Kg		8/23/2024 14:14
Antimony	< 3.10	mg/Kg		8/23/2024 14:14
Arsenic	24.7	mg/Kg		8/23/2024 14:14
Barium	79.6	mg/Kg		8/23/2024 14:14
Beryllium	< 0.258	mg/Kg		8/23/2024 14:14
Cadmium	4.59	mg/Kg		8/23/2024 14:14
Calcium	144000	mg/Kg		8/23/2024 15:57
Chromium	171	mg/Kg		8/23/2024 14:14
Cobalt	11.6	mg/Kg		8/23/2024 14:14
Copper	237	mg/Kg		8/23/2024 14:14
Iron	123000	mg/Kg		8/23/2024 15:57
Lead	42.2	mg/Kg		8/23/2024 14:14
Magnesium	7700	mg/Kg		8/23/2024 14:14
Manganese	3070	mg/Kg		8/23/2024 15:57
Nickel	109	mg/Kg		8/23/2024 14:14
Potassium	1080	mg/Kg		8/23/2024 14:14
Selenium	< 1.03	mg/Kg		8/23/2024 14:14
Silver	< 0.517	mg/Kg		8/23/2024 14:14
Sodium	592	mg/Kg		8/23/2024 14:14
Thallium	< 1.29	mg/Kg		8/23/2024 14:14
Vanadium	16.9	mg/Kg		8/23/2024 14:14

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-7

Lab Sample ID: 243844-07

Date Sampled: 8/20/2024 11:50

Matrix: Soil

Date Received 8/21/2024

Zinc 115 mg/Kg 8/23/2024 14:14

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1221	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1232	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1242	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1248	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1254	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1260	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1262	< 0.134	mg/Kg		8/23/2024 21:10
PCB-1268	< 0.134	mg/Kg		8/23/2024 21:10

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	83.2	16.1 - 102		8/23/2024 21:10

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 302	ug/Kg		8/27/2024 13:28
1,2,4,5-Tetrachlorobenzene	< 302	ug/Kg		8/27/2024 13:28
1,2,4-Trichlorobenzene	< 302	ug/Kg		8/27/2024 13:28
1,2-Dichlorobenzene	< 302	ug/Kg		8/27/2024 13:28
1,3-Dichlorobenzene	< 302	ug/Kg		8/27/2024 13:28
1,4-Dichlorobenzene	< 302	ug/Kg		8/27/2024 13:28
2,2-Oxybis (1-chloropropane)	< 302	ug/Kg		8/27/2024 13:28
2,3,4,6-Tetrachlorophenol	< 302	ug/Kg	M	8/27/2024 13:28

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-7

Lab Sample ID: 243844-07

Date Sampled: 8/20/2024 11:50

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 302	ug/Kg		8/27/2024 13:28
2,4,6-Trichlorophenol	< 302	ug/Kg		8/27/2024 13:28
2,4-Dichlorophenol	< 302	ug/Kg		8/27/2024 13:28
2,4-Dimethylphenol	< 302	ug/Kg	M	8/27/2024 13:28
2,4-Dinitrophenol	< 1210	ug/Kg		8/27/2024 13:28
2,4-Dinitrotoluene	< 302	ug/Kg		8/27/2024 13:28
2,6-Dinitrotoluene	< 302	ug/Kg		8/27/2024 13:28
2-Chloronaphthalene	< 302	ug/Kg		8/27/2024 13:28
2-Chlorophenol	< 302	ug/Kg		8/27/2024 13:28
2-Methylnapthalene	< 302	ug/Kg		8/27/2024 13:28
2-Methylphenol	< 302	ug/Kg		8/27/2024 13:28
2-Nitroaniline	< 302	ug/Kg		8/27/2024 13:28
2-Nitrophenol	< 302	ug/Kg	M	8/27/2024 13:28
3&4-Methylphenol	< 302	ug/Kg		8/27/2024 13:28
3,3'-Dichlorobenzidine	< 302	ug/Kg		8/27/2024 13:28
3-Nitroaniline	< 302	ug/Kg		8/27/2024 13:28
4,6-Dinitro-2-methylphenol	< 604	ug/Kg		8/27/2024 13:28
4-Bromophenyl phenyl ether	< 302	ug/Kg		8/27/2024 13:28
4-Chloro-3-methylphenol	< 302	ug/Kg		8/27/2024 13:28
4-Chloroaniline	< 302	ug/Kg		8/27/2024 13:28
4-Chlorophenyl phenyl ether	< 302	ug/Kg		8/27/2024 13:28
4-Nitroaniline	< 302	ug/Kg		8/27/2024 13:28
4-Nitrophenol	< 302	ug/Kg		8/27/2024 13:28
Acenaphthene	1130	ug/Kg	M	8/27/2024 13:28
Acenaphthylene	< 302	ug/Kg		8/27/2024 13:28
Acetophenone	< 302	ug/Kg		8/27/2024 13:28
Anthracene	1710	ug/Kg		8/27/2024 13:28
Atrazine	< 302	ug/Kg		8/27/2024 13:28
Benzaldehyde	< 302	ug/Kg		8/27/2024 13:28
Benzo (a) anthracene	5410	ug/Kg		8/27/2024 13:28

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-7

Lab Sample ID: 243844-07

Date Sampled: 8/20/2024 11:50

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	6330	ug/Kg	8/27/2024 13:28
Benzo (b) fluoranthene	6970	ug/Kg	8/27/2024 13:28
Benzo (g,h,i) perylene	3980	ug/Kg	8/27/2024 13:28
Benzo (k) fluoranthene	3800	ug/Kg	8/27/2024 13:28
Bis (2-chloroethoxy) methane	< 302	ug/Kg	8/27/2024 13:28
Bis (2-chloroethyl) ether	< 302	ug/Kg	8/27/2024 13:28
Bis (2-ethylhexyl) phthalate	< 302	ug/Kg	8/27/2024 13:28
Butylbenzylphthalate	< 302	ug/Kg	8/27/2024 13:28
Caprolactam	< 302	ug/Kg	8/27/2024 13:28
Carbazole	1130	ug/Kg	8/27/2024 13:28
Chrysene	6520	ug/Kg	8/27/2024 13:28
Dibenz (a,h) anthracene	1510	ug/Kg	8/27/2024 13:28
Dibenzofuran	441	ug/Kg	8/27/2024 13:28
Diethyl phthalate	< 302	ug/Kg	8/27/2024 13:28
Dimethyl phthalate	< 302	ug/Kg	8/27/2024 13:28
Di-n-butyl phthalate	< 302	ug/Kg	8/27/2024 13:28
Di-n-octylphthalate	< 302	ug/Kg	8/27/2024 13:28
Fluoranthene	12000	ug/Kg	8/27/2024 13:28
Fluorene	919	ug/Kg	8/27/2024 13:28
Hexachlorobenzene	< 302	ug/Kg	8/27/2024 13:28
Hexachlorobutadiene	< 302	ug/Kg	8/27/2024 13:28
Hexachlorocyclopentadiene	< 1210	ug/Kg	8/27/2024 13:28
Hexachloroethane	< 302	ug/Kg	8/27/2024 13:28
Indeno (1,2,3-cd) pyrene	4430	ug/Kg	8/27/2024 13:28
Isophorone	< 302	ug/Kg	8/27/2024 13:28
Naphthalene	< 302	ug/Kg	8/27/2024 13:28
Nitrobenzene	< 302	ug/Kg	8/27/2024 13:28
N-Nitroso-di-n-propylamine	< 302	ug/Kg	8/27/2024 13:28
N-Nitrosodiphenylamine	< 302	ug/Kg	8/27/2024 13:28
Pentachlorophenol	< 604	ug/Kg	8/27/2024 13:28

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-7

Lab Sample ID: 243844-07

Date Sampled: 8/20/2024 11:50

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	9040	ug/Kg		8/27/2024 13:28
Phenol	< 302	ug/Kg		8/27/2024 13:28
Pyrene	10600	ug/Kg	D,M	8/27/2024 13:28
Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	46.9	34.3 - 95.6		8/27/2024 13:28
2-Fluorobiphenyl	58.5	37.9 - 87.2		8/27/2024 13:28
2-Fluorophenol	53.2	34.4 - 80.5		8/27/2024 13:28
Nitrobenzene-d5	52.8	33.2 - 82.1		8/27/2024 13:28
Phenol-d5	58.9	36.4 - 85.4		8/27/2024 13:28
Terphenyl-d14	64.6	45.9 - 96		8/27/2024 13:28

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73431.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-8

Lab Sample ID: 243844-08

Date Sampled: 8/20/2024 11:55

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.00706	mg/Kg		8/26/2024 16:05
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	856	mg/Kg		8/23/2024 14:18
Antimony	< 3.03	mg/Kg		8/23/2024 14:18
Arsenic	2.74	mg/Kg		8/23/2024 14:18
Barium	< 5.05	mg/Kg		8/23/2024 14:18
Beryllium	< 0.253	mg/Kg		8/23/2024 14:18
Cadmium	< 0.253	mg/Kg		8/23/2024 14:18
Calcium	147000	mg/Kg		8/23/2024 16:00
Chromium	3.83	mg/Kg		8/23/2024 14:18
Cobalt	< 2.53	mg/Kg		8/23/2024 14:18
Copper	6.23	mg/Kg		8/23/2024 14:18
Iron	2670	mg/Kg		8/23/2024 14:18
Lead	2.78	mg/Kg		8/23/2024 14:18
Magnesium	4030	mg/Kg		8/23/2024 14:18
Manganese	52.2	mg/Kg		8/23/2024 14:18
Nickel	7.60	mg/Kg		8/23/2024 14:18
Potassium	547	mg/Kg		8/23/2024 14:18
Selenium	< 1.01	mg/Kg		8/23/2024 14:18
Silver	< 0.505	mg/Kg		8/23/2024 14:18
Sodium	204	mg/Kg		8/23/2024 14:18
Thallium	< 1.26	mg/Kg		8/23/2024 14:18
Vanadium	3.22	mg/Kg		8/23/2024 14:18

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-8

Lab Sample ID: 243844-08

Date Sampled: 8/20/2024 11:55

Matrix: Soil

Date Received 8/21/2024

Zinc 14.4 mg/Kg 8/23/2024 14:18

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1221	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1232	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1242	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1248	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1254	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1260	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1262	< 0.142	mg/Kg		8/23/2024 21:33
PCB-1268	< 0.142	mg/Kg		8/23/2024 21:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	72.2	16.1 - 102		8/23/2024 21:33

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 288	ug/Kg		8/27/2024 14:56
1,2,4,5-Tetrachlorobenzene	< 288	ug/Kg		8/27/2024 14:56
1,2,4-Trichlorobenzene	< 288	ug/Kg		8/27/2024 14:56
1,2-Dichlorobenzene	< 288	ug/Kg		8/27/2024 14:56
1,3-Dichlorobenzene	< 288	ug/Kg		8/27/2024 14:56
1,4-Dichlorobenzene	< 288	ug/Kg		8/27/2024 14:56
2,2-Oxybis (1-chloropropane)	< 288	ug/Kg		8/27/2024 14:56
2,3,4,6-Tetrachlorophenol	< 288	ug/Kg		8/27/2024 14:56

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-8

Lab Sample ID: 243844-08

Date Sampled: 8/20/2024 11:55

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 288	ug/Kg	8/27/2024 14:56
2,4,6-Trichlorophenol	< 288	ug/Kg	8/27/2024 14:56
2,4-Dichlorophenol	< 288	ug/Kg	8/27/2024 14:56
2,4-Dimethylphenol	< 288	ug/Kg	8/27/2024 14:56
2,4-Dinitrophenol	< 1150	ug/Kg	8/27/2024 14:56
2,4-Dinitrotoluene	< 288	ug/Kg	8/27/2024 14:56
2,6-Dinitrotoluene	< 288	ug/Kg	8/27/2024 14:56
2-Chloronaphthalene	< 288	ug/Kg	8/27/2024 14:56
2-Chlorophenol	< 288	ug/Kg	8/27/2024 14:56
2-Methylnapthalene	< 288	ug/Kg	8/27/2024 14:56
2-Methylphenol	< 288	ug/Kg	8/27/2024 14:56
2-Nitroaniline	< 288	ug/Kg	8/27/2024 14:56
2-Nitrophenol	< 288	ug/Kg	8/27/2024 14:56
3&4-Methylphenol	< 288	ug/Kg	8/27/2024 14:56
3,3'-Dichlorobenzidine	< 288	ug/Kg	8/27/2024 14:56
3-Nitroaniline	< 288	ug/Kg	8/27/2024 14:56
4,6-Dinitro-2-methylphenol	< 576	ug/Kg	8/27/2024 14:56
4-Bromophenyl phenyl ether	< 288	ug/Kg	8/27/2024 14:56
4-Chloro-3-methylphenol	< 288	ug/Kg	8/27/2024 14:56
4-Chloroaniline	< 288	ug/Kg	8/27/2024 14:56
4-Chlorophenyl phenyl ether	< 288	ug/Kg	8/27/2024 14:56
4-Nitroaniline	< 288	ug/Kg	8/27/2024 14:56
4-Nitrophenol	< 288	ug/Kg	8/27/2024 14:56
Acenaphthene	< 288	ug/Kg	8/27/2024 14:56
Acenaphthylene	< 288	ug/Kg	8/27/2024 14:56
Acetophenone	< 288	ug/Kg	8/27/2024 14:56
Anthracene	< 288	ug/Kg	8/27/2024 14:56
Atrazine	< 288	ug/Kg	8/27/2024 14:56
Benzaldehyde	< 288	ug/Kg	8/27/2024 14:56
Benzo (a) anthracene	< 288	ug/Kg	8/27/2024 14:56

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-8

Lab Sample ID: 243844-08

Date Sampled: 8/20/2024 11:55

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	< 288	ug/Kg	8/27/2024 14:56
Benzo (b) fluoranthene	< 288	ug/Kg	8/27/2024 14:56
Benzo (g,h,i) perylene	< 288	ug/Kg	8/27/2024 14:56
Benzo (k) fluoranthene	< 288	ug/Kg	8/27/2024 14:56
Bis (2-chloroethoxy) methane	< 288	ug/Kg	8/27/2024 14:56
Bis (2-chloroethyl) ether	< 288	ug/Kg	8/27/2024 14:56
Bis (2-ethylhexyl) phthalate	< 288	ug/Kg	8/27/2024 14:56
Butylbenzylphthalate	< 288	ug/Kg	8/27/2024 14:56
Caprolactam	< 288	ug/Kg	8/27/2024 14:56
Carbazole	< 288	ug/Kg	8/27/2024 14:56
Chrysene	< 288	ug/Kg	8/27/2024 14:56
Dibenz (a,h) anthracene	< 288	ug/Kg	8/27/2024 14:56
Dibenzofuran	< 288	ug/Kg	8/27/2024 14:56
Diethyl phthalate	< 288	ug/Kg	8/27/2024 14:56
Dimethyl phthalate	< 288	ug/Kg	8/27/2024 14:56
Di-n-butyl phthalate	< 288	ug/Kg	8/27/2024 14:56
Di-n-octylphthalate	< 288	ug/Kg	8/27/2024 14:56
Fluoranthene	< 288	ug/Kg	8/27/2024 14:56
Fluorene	< 288	ug/Kg	8/27/2024 14:56
Hexachlorobenzene	< 288	ug/Kg	8/27/2024 14:56
Hexachlorobutadiene	< 288	ug/Kg	8/27/2024 14:56
Hexachlorocyclopentadiene	< 1150	ug/Kg	8/27/2024 14:56
Hexachloroethane	< 288	ug/Kg	8/27/2024 14:56
Indeno (1,2,3-cd) pyrene	< 288	ug/Kg	8/27/2024 14:56
Isophorone	< 288	ug/Kg	8/27/2024 14:56
Naphthalene	< 288	ug/Kg	8/27/2024 14:56
Nitrobenzene	< 288	ug/Kg	8/27/2024 14:56
N-Nitroso-di-n-propylamine	< 288	ug/Kg	8/27/2024 14:56
N-Nitrosodiphenylamine	< 288	ug/Kg	8/27/2024 14:56
Pentachlorophenol	< 576	ug/Kg	8/27/2024 14:56

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-8

Lab Sample ID: 243844-08

Date Sampled: 8/20/2024 11:55

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	< 288	ug/Kg	8/27/2024 14:56
Phenol	< 288	ug/Kg	8/27/2024 14:56
Pyrene	< 288	ug/Kg	8/27/2024 14:56

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	64.0	34.3 - 95.6		8/27/2024 14:56
2-Fluorobiphenyl	70.0	37.9 - 87.2		8/27/2024 14:56
2-Fluorophenol	67.2	34.4 - 80.5		8/27/2024 14:56
Nitrobenzene-d5	64.9	33.2 - 82.1		8/27/2024 14:56
Phenol-d5	73.1	36.4 - 85.4		8/27/2024 14:56
Terphenyl-d14	78.5	45.9 - 96		8/27/2024 14:56

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73434.D

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Report Prepared Friday, August 30, 2024

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-9

Lab Sample ID: 243844-09

Date Sampled: 8/20/2024 12:00

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0188	mg/Kg		8/26/2024 16:07
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	8320	mg/Kg		8/23/2024 14:21
Antimony	< 3.18	mg/Kg		8/23/2024 14:21
Arsenic	7.30	mg/Kg		8/23/2024 14:21
Barium	90.9	mg/Kg		8/23/2024 14:21
Beryllium	0.752	mg/Kg		8/23/2024 14:21
Cadmium	0.795	mg/Kg		8/23/2024 14:21
Calcium	127000	mg/Kg		8/23/2024 16:03
Chromium	24.9	mg/Kg		8/23/2024 14:21
Cobalt	3.38	mg/Kg		8/23/2024 14:21
Copper	2070	mg/Kg		8/23/2024 16:03
Iron	19400	mg/Kg		8/23/2024 14:21
Lead	33.6	mg/Kg		8/23/2024 14:21
Magnesium	11400	mg/Kg		8/23/2024 14:21
Manganese	1770	mg/Kg		8/23/2024 16:03
Nickel	16.4	mg/Kg		8/23/2024 14:21
Potassium	927	mg/Kg		8/23/2024 14:21
Selenium	< 1.06	mg/Kg		8/23/2024 14:21
Silver	< 0.530	mg/Kg		8/23/2024 14:21
Sodium	365	mg/Kg		8/23/2024 14:21
Thallium	< 1.32	mg/Kg		8/23/2024 14:21
Vanadium	8.56	mg/Kg		8/23/2024 14:21

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-9

Lab Sample ID: 243844-09

Date Sampled: 8/20/2024 12:00

Matrix: Soil

Date Received 8/21/2024

Zinc 54.0 mg/Kg 8/23/2024 14:21

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1221	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1232	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1242	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1248	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1254	0.449	mg/Kg		8/23/2024 21:56
PCB-1260	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1262	< 0.163	mg/Kg		8/23/2024 21:56
PCB-1268	< 0.163	mg/Kg		8/23/2024 21:56

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	86.6	16.1 - 102		8/23/2024 21:56

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 304	ug/Kg		8/27/2024 15:26
1,2,4,5-Tetrachlorobenzene	< 304	ug/Kg		8/27/2024 15:26
1,2,4-Trichlorobenzene	< 304	ug/Kg		8/27/2024 15:26
1,2-Dichlorobenzene	< 304	ug/Kg		8/27/2024 15:26
1,3-Dichlorobenzene	< 304	ug/Kg		8/27/2024 15:26
1,4-Dichlorobenzene	< 304	ug/Kg		8/27/2024 15:26
2,2-Oxybis (1-chloropropane)	< 304	ug/Kg		8/27/2024 15:26
2,3,4,6-Tetrachlorophenol	< 304	ug/Kg		8/27/2024 15:26

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-9

Lab Sample ID: 243844-09

Date Sampled: 8/20/2024 12:00

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 304	ug/Kg	8/27/2024 15:26
2,4,6-Trichlorophenol	< 304	ug/Kg	8/27/2024 15:26
2,4-Dichlorophenol	< 304	ug/Kg	8/27/2024 15:26
2,4-Dimethylphenol	< 304	ug/Kg	8/27/2024 15:26
2,4-Dinitrophenol	< 1220	ug/Kg	8/27/2024 15:26
2,4-Dinitrotoluene	< 304	ug/Kg	8/27/2024 15:26
2,6-Dinitrotoluene	< 304	ug/Kg	8/27/2024 15:26
2-Chloronaphthalene	< 304	ug/Kg	8/27/2024 15:26
2-Chlorophenol	< 304	ug/Kg	8/27/2024 15:26
2-Methylnapthalene	333	ug/Kg	8/27/2024 15:26
2-Methylphenol	< 304	ug/Kg	8/27/2024 15:26
2-Nitroaniline	< 304	ug/Kg	8/27/2024 15:26
2-Nitrophenol	< 304	ug/Kg	8/27/2024 15:26
3&4-Methylphenol	< 304	ug/Kg	8/27/2024 15:26
3,3'-Dichlorobenzidine	< 304	ug/Kg	8/27/2024 15:26
3-Nitroaniline	< 304	ug/Kg	8/27/2024 15:26
4,6-Dinitro-2-methylphenol	< 609	ug/Kg	8/27/2024 15:26
4-Bromophenyl phenyl ether	< 304	ug/Kg	8/27/2024 15:26
4-Chloro-3-methylphenol	< 304	ug/Kg	8/27/2024 15:26
4-Chloroaniline	< 304	ug/Kg	8/27/2024 15:26
4-Chlorophenyl phenyl ether	< 304	ug/Kg	8/27/2024 15:26
4-Nitroaniline	< 304	ug/Kg	8/27/2024 15:26
4-Nitrophenol	< 304	ug/Kg	8/27/2024 15:26
Acenaphthene	< 304	ug/Kg	8/27/2024 15:26
Acenaphthylene	< 304	ug/Kg	8/27/2024 15:26
Acetophenone	< 304	ug/Kg	8/27/2024 15:26
Anthracene	475	ug/Kg	8/27/2024 15:26
Atrazine	< 304	ug/Kg	8/27/2024 15:26
Benzaldehyde	< 304	ug/Kg	8/27/2024 15:26
Benzo (a) anthracene	4850	ug/Kg	8/27/2024 15:26

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-9

Lab Sample ID: 243844-09

Date Sampled: 8/20/2024 12:00

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	7510	ug/Kg	8/27/2024 15:26
Benzo (b) fluoranthene	7900	ug/Kg	8/27/2024 15:26
Benzo (g,h,i) perylene	5190	ug/Kg	8/27/2024 15:26
Benzo (k) fluoranthene	4750	ug/Kg	8/27/2024 15:26
Bis (2-chloroethoxy) methane	< 304	ug/Kg	8/27/2024 15:26
Bis (2-chloroethyl) ether	< 304	ug/Kg	8/27/2024 15:26
Bis (2-ethylhexyl) phthalate	< 304	ug/Kg	8/27/2024 15:26
Butylbenzylphthalate	< 304	ug/Kg	8/27/2024 15:26
Caprolactam	< 304	ug/Kg	8/27/2024 15:26
Carbazole	340	ug/Kg	8/27/2024 15:26
Chrysene	6170	ug/Kg	8/27/2024 15:26
Dibenz (a,h) anthracene	1900	ug/Kg	8/27/2024 15:26
Dibenzofuran	< 304	ug/Kg	8/27/2024 15:26
Diethyl phthalate	< 304	ug/Kg	8/27/2024 15:26
Dimethyl phthalate	< 304	ug/Kg	8/27/2024 15:26
Di-n-butyl phthalate	< 304	ug/Kg	8/27/2024 15:26
Di-n-octylphthalate	< 304	ug/Kg	8/27/2024 15:26
Fluoranthene	6540	ug/Kg	8/27/2024 15:26
Fluorene	< 304	ug/Kg	8/27/2024 15:26
Hexachlorobenzene	< 304	ug/Kg	8/27/2024 15:26
Hexachlorobutadiene	< 304	ug/Kg	8/27/2024 15:26
Hexachlorocyclopentadiene	< 1220	ug/Kg	8/27/2024 15:26
Hexachloroethane	< 304	ug/Kg	8/27/2024 15:26
Indeno (1,2,3-cd) pyrene	5590	ug/Kg	8/27/2024 15:26
Isophorone	< 304	ug/Kg	8/27/2024 15:26
Naphthalene	< 304	ug/Kg	8/27/2024 15:26
Nitrobenzene	< 304	ug/Kg	8/27/2024 15:26
N-Nitroso-di-n-propylamine	< 304	ug/Kg	8/27/2024 15:26
N-Nitrosodiphenylamine	< 304	ug/Kg	8/27/2024 15:26
Pentachlorophenol	< 609	ug/Kg	8/27/2024 15:26

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-9

Lab Sample ID: 243844-09

Date Sampled: 8/20/2024 12:00

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	2290	ug/Kg		8/27/2024	15:26
Phenol	< 304	ug/Kg		8/27/2024	15:26
Pyrene	6970	ug/Kg		8/27/2024	15:26
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	65.4	34.3 - 95.6		8/27/2024	15:26
2-Fluorobiphenyl	65.7	37.9 - 87.2		8/27/2024	15:26
2-Fluorophenol	65.2	34.4 - 80.5		8/27/2024	15:26
Nitrobenzene-d5	62.4	33.2 - 82.1		8/27/2024	15:26
Phenol-d5	70.0	36.4 - 85.4		8/27/2024	15:26
Terphenyl-d14	73.1	45.9 - 96		8/27/2024	15:26

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73435.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-10

Lab Sample ID: 243844-10

Date Sampled: 8/20/2024 12:10

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0264	mg/Kg		8/26/2024 16:09
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	3120	mg/Kg		8/23/2024 14:25
Antimony	< 3.38	mg/Kg		8/23/2024 14:25
Arsenic	8.24	mg/Kg		8/23/2024 14:25
Barium	33.4	mg/Kg		8/23/2024 14:25
Beryllium	< 0.282	mg/Kg		8/23/2024 14:25
Cadmium	0.895	mg/Kg		8/23/2024 14:25
Calcium	181000	mg/Kg		8/23/2024 16:06
Chromium	21.6	mg/Kg		8/23/2024 14:25
Cobalt	< 2.82	mg/Kg		8/23/2024 14:25
Copper	40.6	mg/Kg		8/23/2024 14:25
Iron	19300	mg/Kg		8/23/2024 14:25
Lead	33.4	mg/Kg		8/23/2024 14:25
Magnesium	8090	mg/Kg		8/23/2024 14:25
Manganese	533	mg/Kg		8/23/2024 14:25
Nickel	20.6	mg/Kg		8/23/2024 14:25
Potassium	677	mg/Kg		8/23/2024 14:25
Selenium	< 1.13	mg/Kg		8/23/2024 14:25
Silver	< 0.563	mg/Kg		8/23/2024 14:25
Sodium	328	mg/Kg		8/23/2024 14:25
Thallium	< 1.41	mg/Kg		8/23/2024 14:25
Vanadium	7.19	mg/Kg		8/23/2024 14:25

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-10

Lab Sample ID: 243844-10

Date Sampled: 8/20/2024 12:10

Matrix: Soil

Date Received 8/21/2024

 Zinc **69.7** mg/Kg 8/23/2024 14:25

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1221	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1232	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1242	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1248	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1254	0.179	mg/Kg		8/23/2024 22:19
PCB-1260	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1262	< 0.131	mg/Kg		8/23/2024 22:19
PCB-1268	< 0.131	mg/Kg		8/23/2024 22:19

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	86.9	16.1 - 102		8/23/2024 22:19

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 299	ug/Kg		8/27/2024 15:56
1,2,4,5-Tetrachlorobenzene	< 299	ug/Kg		8/27/2024 15:56
1,2,4-Trichlorobenzene	< 299	ug/Kg		8/27/2024 15:56
1,2-Dichlorobenzene	< 299	ug/Kg		8/27/2024 15:56
1,3-Dichlorobenzene	< 299	ug/Kg		8/27/2024 15:56
1,4-Dichlorobenzene	< 299	ug/Kg		8/27/2024 15:56
2,2-Oxybis (1-chloropropane)	< 299	ug/Kg		8/27/2024 15:56
2,3,4,6-Tetrachlorophenol	< 299	ug/Kg		8/27/2024 15:56

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-10

Lab Sample ID: 243844-10

Date Sampled: 8/20/2024 12:10

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 299	ug/Kg	8/27/2024 15:56
2,4,6-Trichlorophenol	< 299	ug/Kg	8/27/2024 15:56
2,4-Dichlorophenol	< 299	ug/Kg	8/27/2024 15:56
2,4-Dimethylphenol	< 299	ug/Kg	8/27/2024 15:56
2,4-Dinitrophenol	< 1200	ug/Kg	8/27/2024 15:56
2,4-Dinitrotoluene	< 299	ug/Kg	8/27/2024 15:56
2,6-Dinitrotoluene	< 299	ug/Kg	8/27/2024 15:56
2-Chloronaphthalene	< 299	ug/Kg	8/27/2024 15:56
2-Chlorophenol	< 299	ug/Kg	8/27/2024 15:56
2-Methylnapthalene	393	ug/Kg	8/27/2024 15:56
2-Methylphenol	< 299	ug/Kg	8/27/2024 15:56
2-Nitroaniline	< 299	ug/Kg	8/27/2024 15:56
2-Nitrophenol	< 299	ug/Kg	8/27/2024 15:56
3&4-Methylphenol	< 299	ug/Kg	8/27/2024 15:56
3,3'-Dichlorobenzidine	< 299	ug/Kg	8/27/2024 15:56
3-Nitroaniline	< 299	ug/Kg	8/27/2024 15:56
4,6-Dinitro-2-methylphenol	< 599	ug/Kg	8/27/2024 15:56
4-Bromophenyl phenyl ether	< 299	ug/Kg	8/27/2024 15:56
4-Chloro-3-methylphenol	< 299	ug/Kg	8/27/2024 15:56
4-Chloroaniline	< 299	ug/Kg	8/27/2024 15:56
4-Chlorophenyl phenyl ether	< 299	ug/Kg	8/27/2024 15:56
4-Nitroaniline	< 299	ug/Kg	8/27/2024 15:56
4-Nitrophenol	< 299	ug/Kg	8/27/2024 15:56
Acenaphthene	< 299	ug/Kg	8/27/2024 15:56
Acenaphthylene	< 299	ug/Kg	8/27/2024 15:56
Acetophenone	< 299	ug/Kg	8/27/2024 15:56
Anthracene	< 299	ug/Kg	8/27/2024 15:56
Atrazine	< 299	ug/Kg	8/27/2024 15:56
Benzaldehyde	< 299	ug/Kg	8/27/2024 15:56
Benzo (a) anthracene	4120	ug/Kg	8/27/2024 15:56

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-10

Lab Sample ID: 243844-10

Date Sampled: 8/20/2024 12:10

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	6590	ug/Kg	8/27/2024 15:56
Benzo (b) fluoranthene	6970	ug/Kg	8/27/2024 15:56
Benzo (g,h,i) perylene	4520	ug/Kg	8/27/2024 15:56
Benzo (k) fluoranthene	3650	ug/Kg	8/27/2024 15:56
Bis (2-chloroethoxy) methane	< 299	ug/Kg	8/27/2024 15:56
Bis (2-chloroethyl) ether	< 299	ug/Kg	8/27/2024 15:56
Bis (2-ethylhexyl) phthalate	< 299	ug/Kg	8/27/2024 15:56
Butylbenzylphthalate	< 299	ug/Kg	8/27/2024 15:56
Caprolactam	< 299	ug/Kg	8/27/2024 15:56
Carbazole	< 299	ug/Kg	8/27/2024 15:56
Chrysene	5360	ug/Kg	8/27/2024 15:56
Dibenz (a,h) anthracene	1570	ug/Kg	8/27/2024 15:56
Dibenzofuran	< 299	ug/Kg	8/27/2024 15:56
Diethyl phthalate	< 299	ug/Kg	8/27/2024 15:56
Dimethyl phthalate	< 299	ug/Kg	8/27/2024 15:56
Di-n-butyl phthalate	< 299	ug/Kg	8/27/2024 15:56
Di-n-octylphthalate	< 299	ug/Kg	8/27/2024 15:56
Fluoranthene	4620	ug/Kg	8/27/2024 15:56
Fluorene	< 299	ug/Kg	8/27/2024 15:56
Hexachlorobenzene	< 299	ug/Kg	8/27/2024 15:56
Hexachlorobutadiene	< 299	ug/Kg	8/27/2024 15:56
Hexachlorocyclopentadiene	< 1200	ug/Kg	8/27/2024 15:56
Hexachloroethane	< 299	ug/Kg	8/27/2024 15:56
Indeno (1,2,3-cd) pyrene	4750	ug/Kg	8/27/2024 15:56
Isophorone	< 299	ug/Kg	8/27/2024 15:56
Naphthalene	300	ug/Kg	8/27/2024 15:56
Nitrobenzene	< 299	ug/Kg	8/27/2024 15:56
N-Nitroso-di-n-propylamine	< 299	ug/Kg	8/27/2024 15:56
N-Nitrosodiphenylamine	< 299	ug/Kg	8/27/2024 15:56
Pentachlorophenol	< 599	ug/Kg	8/27/2024 15:56

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-10

Lab Sample ID: 243844-10

Date Sampled: 8/20/2024 12:10

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	1510	ug/Kg		8/27/2024	15:56
Phenol	< 299	ug/Kg		8/27/2024	15:56
Pyrene	5550	ug/Kg		8/27/2024	15:56
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2,4,6-Tribromophenol	66.8	34.3 - 95.6		8/27/2024	15:56
2-Fluorobiphenyl	65.6	37.9 - 87.2		8/27/2024	15:56
2-Fluorophenol	69.4	34.4 - 80.5		8/27/2024	15:56
Nitrobenzene-d5	63.3	33.2 - 82.1		8/27/2024	15:56
Phenol-d5	73.5	36.4 - 85.4		8/27/2024	15:56
Terphenyl-d14	71.6	45.9 - 96		8/27/2024	15:56

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73436.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-11

Lab Sample ID: 243844-11

Date Sampled: 8/20/2024 12:20

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0683	mg/Kg		8/26/2024 16:11

Method Reference(s): EPA 7471B

Preparation Date: 8/26/2024

Data File: Hg240826B

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	6480	mg/Kg		8/23/2024 14:29
Antimony	< 3.18	mg/Kg		8/23/2024 14:29
Arsenic	4.71	mg/Kg		8/23/2024 14:29
Barium	44.2	mg/Kg		8/23/2024 14:29
Beryllium	< 0.265	mg/Kg		8/23/2024 14:29
Cadmium	0.466	mg/Kg		8/23/2024 14:29
Calcium	179000	mg/Kg		8/23/2024 16:16
Chromium	9.80	mg/Kg		8/23/2024 14:29
Cobalt	4.05	mg/Kg		8/23/2024 14:29
Copper	16.8	mg/Kg		8/23/2024 14:29
Iron	10000	mg/Kg		8/23/2024 14:29
Lead	45.4	mg/Kg		8/23/2024 14:29
Magnesium	10200	mg/Kg		8/23/2024 14:29
Manganese	268	mg/Kg		8/23/2024 14:29
Nickel	11.2	mg/Kg		8/23/2024 14:29
Potassium	1730	mg/Kg		8/23/2024 14:29
Selenium	< 1.06	mg/Kg		8/23/2024 14:29
Silver	< 0.530	mg/Kg		8/23/2024 14:29
Sodium	240	mg/Kg		8/23/2024 14:29
Thallium	< 1.32	mg/Kg		8/23/2024 14:29
Vanadium	13.7	mg/Kg		8/23/2024 14:29

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-11

Lab Sample ID: 243844-11

Date Sampled: 8/20/2024 12:20

Matrix: Soil

Date Received 8/21/2024

 Zinc **100** mg/Kg 8/23/2024 14:29

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1221	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1232	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1242	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1248	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1254	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1260	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1262	< 0.150	mg/Kg		8/23/2024 22:42
PCB-1268	< 0.150	mg/Kg		8/23/2024 22:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	80.5	16.1 - 102		8/23/2024 22:42

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 278	ug/Kg		8/27/2024 16:25
1,2,4,5-Tetrachlorobenzene	< 278	ug/Kg		8/27/2024 16:25
1,2,4-Trichlorobenzene	< 278	ug/Kg		8/27/2024 16:25
1,2-Dichlorobenzene	< 278	ug/Kg		8/27/2024 16:25
1,3-Dichlorobenzene	< 278	ug/Kg		8/27/2024 16:25
1,4-Dichlorobenzene	< 278	ug/Kg		8/27/2024 16:25
2,2-Oxybis (1-chloropropane)	< 278	ug/Kg		8/27/2024 16:25
2,3,4,6-Tetrachlorophenol	< 278	ug/Kg		8/27/2024 16:25

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-11

Lab Sample ID: 243844-11

Date Sampled: 8/20/2024 12:20

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 278	ug/Kg	8/27/2024 16:25
2,4,6-Trichlorophenol	< 278	ug/Kg	8/27/2024 16:25
2,4-Dichlorophenol	< 278	ug/Kg	8/27/2024 16:25
2,4-Dimethylphenol	< 278	ug/Kg	8/27/2024 16:25
2,4-Dinitrophenol	< 1110	ug/Kg	8/27/2024 16:25
2,4-Dinitrotoluene	< 278	ug/Kg	8/27/2024 16:25
2,6-Dinitrotoluene	< 278	ug/Kg	8/27/2024 16:25
2-Chloronaphthalene	< 278	ug/Kg	8/27/2024 16:25
2-Chlorophenol	< 278	ug/Kg	8/27/2024 16:25
2-Methylnapthalene	< 278	ug/Kg	8/27/2024 16:25
2-Methylphenol	< 278	ug/Kg	8/27/2024 16:25
2-Nitroaniline	< 278	ug/Kg	8/27/2024 16:25
2-Nitrophenol	< 278	ug/Kg	8/27/2024 16:25
3&4-Methylphenol	< 278	ug/Kg	8/27/2024 16:25
3,3'-Dichlorobenzidine	< 278	ug/Kg	8/27/2024 16:25
3-Nitroaniline	< 278	ug/Kg	8/27/2024 16:25
4,6-Dinitro-2-methylphenol	< 556	ug/Kg	8/27/2024 16:25
4-Bromophenyl phenyl ether	< 278	ug/Kg	8/27/2024 16:25
4-Chloro-3-methylphenol	< 278	ug/Kg	8/27/2024 16:25
4-Chloroaniline	< 278	ug/Kg	8/27/2024 16:25
4-Chlorophenyl phenyl ether	< 278	ug/Kg	8/27/2024 16:25
4-Nitroaniline	< 278	ug/Kg	8/27/2024 16:25
4-Nitrophenol	< 278	ug/Kg	8/27/2024 16:25
Acenaphthene	290	ug/Kg	8/27/2024 16:25
Acenaphthylene	< 278	ug/Kg	8/27/2024 16:25
Acetophenone	< 278	ug/Kg	8/27/2024 16:25
Anthracene	641	ug/Kg	8/27/2024 16:25
Atrazine	< 278	ug/Kg	8/27/2024 16:25
Benzaldehyde	< 278	ug/Kg	8/27/2024 16:25
Benzo (a) anthracene	1330	ug/Kg	8/27/2024 16:25

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-11

Lab Sample ID: 243844-11

Date Sampled: 8/20/2024 12:20

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	1310	ug/Kg	8/27/2024 16:25
Benzo (b) fluoranthene	1380	ug/Kg	8/27/2024 16:25
Benzo (g,h,i) perylene	836	ug/Kg	8/27/2024 16:25
Benzo (k) fluoranthene	987	ug/Kg	8/27/2024 16:25
Bis (2-chloroethoxy) methane	< 278	ug/Kg	8/27/2024 16:25
Bis (2-chloroethyl) ether	< 278	ug/Kg	8/27/2024 16:25
Bis (2-ethylhexyl) phthalate	< 278	ug/Kg	8/27/2024 16:25
Butylbenzylphthalate	< 278	ug/Kg	8/27/2024 16:25
Caprolactam	< 278	ug/Kg	8/27/2024 16:25
Carbazole	418	ug/Kg	8/27/2024 16:25
Chrysene	1520	ug/Kg	8/27/2024 16:25
Dibenz (a,h) anthracene	307	ug/Kg	8/27/2024 16:25
Dibenzofuran	< 278	ug/Kg	8/27/2024 16:25
Diethyl phthalate	< 278	ug/Kg	8/27/2024 16:25
Dimethyl phthalate	< 278	ug/Kg	8/27/2024 16:25
Di-n-butyl phthalate	< 278	ug/Kg	8/27/2024 16:25
Di-n-octylphthalate	< 278	ug/Kg	8/27/2024 16:25
Fluoranthene	3270	ug/Kg	8/27/2024 16:25
Fluorene	339	ug/Kg	8/27/2024 16:25
Hexachlorobenzene	< 278	ug/Kg	8/27/2024 16:25
Hexachlorobutadiene	< 278	ug/Kg	8/27/2024 16:25
Hexachlorocyclopentadiene	< 1110	ug/Kg	8/27/2024 16:25
Hexachloroethane	< 278	ug/Kg	8/27/2024 16:25
Indeno (1,2,3-cd) pyrene	964	ug/Kg	8/27/2024 16:25
Isophorone	< 278	ug/Kg	8/27/2024 16:25
Naphthalene	< 278	ug/Kg	8/27/2024 16:25
Nitrobenzene	< 278	ug/Kg	8/27/2024 16:25
N-Nitroso-di-n-propylamine	< 278	ug/Kg	8/27/2024 16:25
N-Nitrosodiphenylamine	< 278	ug/Kg	8/27/2024 16:25
Pentachlorophenol	< 556	ug/Kg	8/27/2024 16:25

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-11

Lab Sample ID: 243844-11

Date Sampled: 8/20/2024 12:20

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	3140	ug/Kg		8/27/2024 16:25
Phenol	< 278	ug/Kg		8/27/2024 16:25
Pyrene	2720	ug/Kg		8/27/2024 16:25
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	62.0	34.3 - 95.6		8/27/2024 16:25
2-Fluorobiphenyl	60.3	37.9 - 87.2		8/27/2024 16:25
2-Fluorophenol	59.0	34.4 - 80.5		8/27/2024 16:25
Nitrobenzene-d5	56.4	33.2 - 82.1		8/27/2024 16:25
Phenol-d5	62.6	36.4 - 85.4		8/27/2024 16:25
Terphenyl-d14	67.8	45.9 - 96		8/27/2024 16:25

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73437.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-12

Lab Sample ID: 243844-12

Date Sampled: 8/20/2024 12:25

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0279	mg/Kg		8/26/2024 16:14
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	5180	mg/Kg		8/23/2024 14:32
Antimony	< 3.19	mg/Kg		8/23/2024 14:32
Arsenic	6.32	mg/Kg		8/23/2024 14:32
Barium	48.8	mg/Kg		8/23/2024 14:32
Beryllium	0.421	mg/Kg		8/23/2024 14:32
Cadmium	0.335	mg/Kg		8/23/2024 14:32
Calcium	169000	mg/Kg		8/23/2024 16:19
Chromium	9.48	mg/Kg		8/23/2024 14:32
Cobalt	< 2.66	mg/Kg		8/23/2024 14:32
Copper	16.3	mg/Kg		8/23/2024 14:32
Iron	6170	mg/Kg		8/23/2024 14:32
Lead	34.7	mg/Kg		8/23/2024 14:32
Magnesium	8340	mg/Kg		8/23/2024 14:32
Manganese	651	mg/Kg		8/23/2024 16:19
Nickel	7.42	mg/Kg		8/23/2024 14:32
Potassium	909	mg/Kg		8/23/2024 14:32
Selenium	< 1.06	mg/Kg		8/23/2024 14:32
Silver	< 0.532	mg/Kg		8/23/2024 14:32
Sodium	270	mg/Kg		8/23/2024 14:32
Thallium	< 1.33	mg/Kg		8/23/2024 14:32
Vanadium	6.94	mg/Kg		8/23/2024 14:32

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-12

Lab Sample ID: 243844-12

Date Sampled: 8/20/2024 12:25

Matrix: Soil

Date Received 8/21/2024

 Zinc **37.8** mg/Kg 8/23/2024 14:32

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1221	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1232	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1242	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1248	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1254	0.186	mg/Kg		8/23/2024 23:05
PCB-1260	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1262	< 0.164	mg/Kg		8/23/2024 23:05
PCB-1268	< 0.164	mg/Kg		8/23/2024 23:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	87.5	16.1 - 102		8/23/2024 23:05

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 304	ug/Kg		8/27/2024 16:54
1,2,4,5-Tetrachlorobenzene	< 304	ug/Kg		8/27/2024 16:54
1,2,4-Trichlorobenzene	< 304	ug/Kg		8/27/2024 16:54
1,2-Dichlorobenzene	< 304	ug/Kg		8/27/2024 16:54
1,3-Dichlorobenzene	< 304	ug/Kg		8/27/2024 16:54
1,4-Dichlorobenzene	< 304	ug/Kg		8/27/2024 16:54
2,2-Oxybis (1-chloropropane)	< 304	ug/Kg		8/27/2024 16:54
2,3,4,6-Tetrachlorophenol	< 304	ug/Kg		8/27/2024 16:54

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-12

Lab Sample ID: 243844-12

Date Sampled: 8/20/2024 12:25

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 304	ug/Kg	8/27/2024 16:54
2,4,6-Trichlorophenol	< 304	ug/Kg	8/27/2024 16:54
2,4-Dichlorophenol	< 304	ug/Kg	8/27/2024 16:54
2,4-Dimethylphenol	< 304	ug/Kg	8/27/2024 16:54
2,4-Dinitrophenol	< 1220	ug/Kg	8/27/2024 16:54
2,4-Dinitrotoluene	< 304	ug/Kg	8/27/2024 16:54
2,6-Dinitrotoluene	< 304	ug/Kg	8/27/2024 16:54
2-Chloronaphthalene	< 304	ug/Kg	8/27/2024 16:54
2-Chlorophenol	< 304	ug/Kg	8/27/2024 16:54
2-Methylnapthalene	< 304	ug/Kg	8/27/2024 16:54
2-Methylphenol	< 304	ug/Kg	8/27/2024 16:54
2-Nitroaniline	< 304	ug/Kg	8/27/2024 16:54
2-Nitrophenol	< 304	ug/Kg	8/27/2024 16:54
3&4-Methylphenol	< 304	ug/Kg	8/27/2024 16:54
3,3'-Dichlorobenzidine	< 304	ug/Kg	8/27/2024 16:54
3-Nitroaniline	< 304	ug/Kg	8/27/2024 16:54
4,6-Dinitro-2-methylphenol	< 609	ug/Kg	8/27/2024 16:54
4-Bromophenyl phenyl ether	< 304	ug/Kg	8/27/2024 16:54
4-Chloro-3-methylphenol	< 304	ug/Kg	8/27/2024 16:54
4-Chloroaniline	< 304	ug/Kg	8/27/2024 16:54
4-Chlorophenyl phenyl ether	< 304	ug/Kg	8/27/2024 16:54
4-Nitroaniline	< 304	ug/Kg	8/27/2024 16:54
4-Nitrophenol	< 304	ug/Kg	8/27/2024 16:54
Acenaphthene	< 304	ug/Kg	8/27/2024 16:54
Acenaphthylene	< 304	ug/Kg	8/27/2024 16:54
Acetophenone	< 304	ug/Kg	8/27/2024 16:54
Anthracene	< 304	ug/Kg	8/27/2024 16:54
Atrazine	< 304	ug/Kg	8/27/2024 16:54
Benzaldehyde	< 304	ug/Kg	8/27/2024 16:54
Benzo (a) anthracene	447	ug/Kg	8/27/2024 16:54

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-12

Lab Sample ID: 243844-12

Date Sampled: 8/20/2024 12:25

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	717	ug/Kg	8/27/2024 16:54
Benzo (b) fluoranthene	597	ug/Kg	8/27/2024 16:54
Benzo (g,h,i) perylene	484	ug/Kg	8/27/2024 16:54
Benzo (k) fluoranthene	553	ug/Kg	8/27/2024 16:54
Bis (2-chloroethoxy) methane	< 304	ug/Kg	8/27/2024 16:54
Bis (2-chloroethyl) ether	< 304	ug/Kg	8/27/2024 16:54
Bis (2-ethylhexyl) phthalate	< 304	ug/Kg	8/27/2024 16:54
Butylbenzylphthalate	< 304	ug/Kg	8/27/2024 16:54
Caprolactam	< 304	ug/Kg	8/27/2024 16:54
Carbazole	< 304	ug/Kg	8/27/2024 16:54
Chrysene	554	ug/Kg	8/27/2024 16:54
Dibenz (a,h) anthracene	< 304	ug/Kg	8/27/2024 16:54
Dibenzofuran	< 304	ug/Kg	8/27/2024 16:54
Diethyl phthalate	< 304	ug/Kg	8/27/2024 16:54
Dimethyl phthalate	< 304	ug/Kg	8/27/2024 16:54
Di-n-butyl phthalate	< 304	ug/Kg	8/27/2024 16:54
Di-n-octylphthalate	< 304	ug/Kg	8/27/2024 16:54
Fluoranthene	580	ug/Kg	8/27/2024 16:54
Fluorene	< 304	ug/Kg	8/27/2024 16:54
Hexachlorobenzene	< 304	ug/Kg	8/27/2024 16:54
Hexachlorobutadiene	< 304	ug/Kg	8/27/2024 16:54
Hexachlorocyclopentadiene	< 1220	ug/Kg	8/27/2024 16:54
Hexachloroethane	< 304	ug/Kg	8/27/2024 16:54
Indeno (1,2,3-cd) pyrene	504	ug/Kg	8/27/2024 16:54
Isophorone	< 304	ug/Kg	8/27/2024 16:54
Naphthalene	< 304	ug/Kg	8/27/2024 16:54
Nitrobenzene	< 304	ug/Kg	8/27/2024 16:54
N-Nitroso-di-n-propylamine	< 304	ug/Kg	8/27/2024 16:54
N-Nitrosodiphenylamine	< 304	ug/Kg	8/27/2024 16:54
Pentachlorophenol	< 609	ug/Kg	8/27/2024 16:54

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-12

Lab Sample ID: 243844-12

Date Sampled: 8/20/2024 12:25

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	< 304	ug/Kg	8/27/2024 16:54
Phenol	< 304	ug/Kg	8/27/2024 16:54
Pyrene	606	ug/Kg	8/27/2024 16:54

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	68.1	34.3 - 95.6		8/27/2024 16:54
2-Fluorobiphenyl	66.5	37.9 - 87.2		8/27/2024 16:54
2-Fluorophenol	69.6	34.4 - 80.5		8/27/2024 16:54
Nitrobenzene-d5	61.0	33.2 - 82.1		8/27/2024 16:54
Phenol-d5	74.7	36.4 - 85.4		8/27/2024 16:54
Terphenyl-d14	73.5	45.9 - 96		8/27/2024 16:54

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73438.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-13

Lab Sample ID: 243844-13

Date Sampled: 8/20/2024 12:30

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0206	mg/Kg		8/26/2024 16:16
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	1740	mg/Kg		8/23/2024 14:35
Antimony	< 2.91	mg/Kg		8/23/2024 14:35
Arsenic	2.37	mg/Kg		8/23/2024 14:35
Barium	6.20	mg/Kg		8/23/2024 14:35
Beryllium	< 0.243	mg/Kg		8/23/2024 14:35
Cadmium	< 0.243	mg/Kg		8/23/2024 14:35
Calcium	136000	mg/Kg		8/23/2024 16:22
Chromium	5.42	mg/Kg		8/23/2024 14:35
Cobalt	< 2.43	mg/Kg		8/23/2024 14:35
Copper	7.20	mg/Kg		8/23/2024 14:35
Iron	2940	mg/Kg		8/23/2024 14:35
Lead	8.32	mg/Kg		8/23/2024 14:35
Magnesium	3620	mg/Kg		8/23/2024 14:35
Manganese	91.5	mg/Kg		8/23/2024 14:35
Nickel	7.14	mg/Kg		8/23/2024 14:35
Potassium	836	mg/Kg		8/23/2024 14:35
Selenium	< 0.971	mg/Kg		8/23/2024 14:35
Silver	< 0.485	mg/Kg		8/23/2024 14:35
Sodium	189	mg/Kg		8/23/2024 14:35
Thallium	< 1.21	mg/Kg		8/23/2024 14:35
Vanadium	6.55	mg/Kg		8/23/2024 14:35

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Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-13

Lab Sample ID: 243844-13

Date Sampled: 8/20/2024 12:30

Matrix: Soil

Date Received 8/21/2024

Zinc 35.5 mg/Kg 8/23/2024 14:35

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1221	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1232	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1242	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1248	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1254	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1260	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1262	< 0.163	mg/Kg		8/24/2024 02:10
PCB-1268	< 0.163	mg/Kg		8/24/2024 02:10

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	85.4	16.1 - 102		8/24/2024 02:10

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 284	ug/Kg		8/27/2024 17:24
1,2,4,5-Tetrachlorobenzene	< 284	ug/Kg		8/27/2024 17:24
1,2,4-Trichlorobenzene	< 284	ug/Kg		8/27/2024 17:24
1,2-Dichlorobenzene	< 284	ug/Kg		8/27/2024 17:24
1,3-Dichlorobenzene	< 284	ug/Kg		8/27/2024 17:24
1,4-Dichlorobenzene	< 284	ug/Kg		8/27/2024 17:24
2,2-Oxybis (1-chloropropane)	< 284	ug/Kg		8/27/2024 17:24
2,3,4,6-Tetrachlorophenol	< 284	ug/Kg		8/27/2024 17:24

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-13

Lab Sample ID: 243844-13

Date Sampled: 8/20/2024 12:30

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 284	ug/Kg	8/27/2024 17:24
2,4,6-Trichlorophenol	< 284	ug/Kg	8/27/2024 17:24
2,4-Dichlorophenol	< 284	ug/Kg	8/27/2024 17:24
2,4-Dimethylphenol	< 284	ug/Kg	8/27/2024 17:24
2,4-Dinitrophenol	< 1140	ug/Kg	8/27/2024 17:24
2,4-Dinitrotoluene	< 284	ug/Kg	8/27/2024 17:24
2,6-Dinitrotoluene	< 284	ug/Kg	8/27/2024 17:24
2-Chloronaphthalene	< 284	ug/Kg	8/27/2024 17:24
2-Chlorophenol	< 284	ug/Kg	8/27/2024 17:24
2-Methylnapthalene	< 284	ug/Kg	8/27/2024 17:24
2-Methylphenol	< 284	ug/Kg	8/27/2024 17:24
2-Nitroaniline	< 284	ug/Kg	8/27/2024 17:24
2-Nitrophenol	< 284	ug/Kg	8/27/2024 17:24
3&4-Methylphenol	< 284	ug/Kg	8/27/2024 17:24
3,3'-Dichlorobenzidine	< 284	ug/Kg	8/27/2024 17:24
3-Nitroaniline	< 284	ug/Kg	8/27/2024 17:24
4,6-Dinitro-2-methylphenol	< 569	ug/Kg	8/27/2024 17:24
4-Bromophenyl phenyl ether	< 284	ug/Kg	8/27/2024 17:24
4-Chloro-3-methylphenol	< 284	ug/Kg	8/27/2024 17:24
4-Chloroaniline	< 284	ug/Kg	8/27/2024 17:24
4-Chlorophenyl phenyl ether	< 284	ug/Kg	8/27/2024 17:24
4-Nitroaniline	< 284	ug/Kg	8/27/2024 17:24
4-Nitrophenol	< 284	ug/Kg	8/27/2024 17:24
Acenaphthene	< 284	ug/Kg	8/27/2024 17:24
Acenaphthylene	< 284	ug/Kg	8/27/2024 17:24
Acetophenone	< 284	ug/Kg	8/27/2024 17:24
Anthracene	< 284	ug/Kg	8/27/2024 17:24
Atrazine	< 284	ug/Kg	8/27/2024 17:24
Benzaldehyde	< 284	ug/Kg	8/27/2024 17:24
Benzo (a) anthracene	< 284	ug/Kg	8/27/2024 17:24

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-13

Lab Sample ID: 243844-13

Date Sampled: 8/20/2024 12:30

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	< 284	ug/Kg	8/27/2024 17:24
Benzo (b) fluoranthene	< 284	ug/Kg	8/27/2024 17:24
Benzo (g,h,i) perylene	< 284	ug/Kg	8/27/2024 17:24
Benzo (k) fluoranthene	< 284	ug/Kg	8/27/2024 17:24
Bis (2-chloroethoxy) methane	< 284	ug/Kg	8/27/2024 17:24
Bis (2-chloroethyl) ether	< 284	ug/Kg	8/27/2024 17:24
Bis (2-ethylhexyl) phthalate	< 284	ug/Kg	8/27/2024 17:24
Butylbenzylphthalate	< 284	ug/Kg	8/27/2024 17:24
Caprolactam	< 284	ug/Kg	8/27/2024 17:24
Carbazole	< 284	ug/Kg	8/27/2024 17:24
Chrysene	< 284	ug/Kg	8/27/2024 17:24
Dibenz (a,h) anthracene	< 284	ug/Kg	8/27/2024 17:24
Dibenzofuran	< 284	ug/Kg	8/27/2024 17:24
Diethyl phthalate	< 284	ug/Kg	8/27/2024 17:24
Dimethyl phthalate	< 284	ug/Kg	8/27/2024 17:24
Di-n-butyl phthalate	< 284	ug/Kg	8/27/2024 17:24
Di-n-octylphthalate	< 284	ug/Kg	8/27/2024 17:24
Fluoranthene	< 284	ug/Kg	8/27/2024 17:24
Fluorene	< 284	ug/Kg	8/27/2024 17:24
Hexachlorobenzene	< 284	ug/Kg	8/27/2024 17:24
Hexachlorobutadiene	< 284	ug/Kg	8/27/2024 17:24
Hexachlorocyclopentadiene	< 1140	ug/Kg	8/27/2024 17:24
Hexachloroethane	< 284	ug/Kg	8/27/2024 17:24
Indeno (1,2,3-cd) pyrene	< 284	ug/Kg	8/27/2024 17:24
Isophorone	< 284	ug/Kg	8/27/2024 17:24
Naphthalene	< 284	ug/Kg	8/27/2024 17:24
Nitrobenzene	< 284	ug/Kg	8/27/2024 17:24
N-Nitroso-di-n-propylamine	< 284	ug/Kg	8/27/2024 17:24
N-Nitrosodiphenylamine	< 284	ug/Kg	8/27/2024 17:24
Pentachlorophenol	< 569	ug/Kg	8/27/2024 17:24

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-13

Lab Sample ID: 243844-13

Date Sampled: 8/20/2024 12:30

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	< 284	ug/Kg	8/27/2024 17:24
Phenol	< 284	ug/Kg	8/27/2024 17:24
Pyrene	< 284	ug/Kg	8/27/2024 17:24

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	77.1	34.3 - 95.6		8/27/2024 17:24
2-Fluorobiphenyl	71.4	37.9 - 87.2		8/27/2024 17:24
2-Fluorophenol	71.9	34.4 - 80.5		8/27/2024 17:24
Nitrobenzene-d5	67.3	33.2 - 82.1		8/27/2024 17:24
Phenol-d5	77.2	36.4 - 85.4		8/27/2024 17:24
Terphenyl-d14	79.0	45.9 - 96		8/27/2024 17:24

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73439.D



Lab Project ID: 243844

Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-14

Lab Sample ID: 243844-14

Date Sampled: 8/20/2024 12:40

Matrix: Soil

Date Received 8/21/2024

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	0.0165	mg/Kg		8/26/2024 16:18
Method Reference(s): EPA 7471B				
Preparation Date: 8/26/2024				
Data File: Hg240826B				

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	4810	mg/Kg		8/23/2024 14:39
Antimony	< 3.01	mg/Kg		8/23/2024 14:39
Arsenic	8.62	mg/Kg		8/23/2024 14:39
Barium	21.0	mg/Kg		8/23/2024 14:39
Beryllium	< 0.251	mg/Kg		8/23/2024 14:39
Cadmium	0.281	mg/Kg		8/23/2024 14:39
Calcium	207000	mg/Kg		8/23/2024 16:25
Chromium	9.81	mg/Kg		8/23/2024 14:39
Cobalt	< 2.51	mg/Kg		8/23/2024 14:39
Copper	10.4	mg/Kg		8/23/2024 14:39
Iron	5200	mg/Kg		8/23/2024 14:39
Lead	12.0	mg/Kg		8/23/2024 14:39
Magnesium	8450	mg/Kg		8/23/2024 14:39
Manganese	96.8	mg/Kg		8/23/2024 14:39
Nickel	9.99	mg/Kg		8/23/2024 14:39
Potassium	2540	mg/Kg		8/23/2024 14:39
Selenium	< 1.00	mg/Kg		8/23/2024 14:39
Silver	< 0.502	mg/Kg		8/23/2024 14:39
Sodium	265	mg/Kg		8/23/2024 14:39
Thallium	< 1.26	mg/Kg		8/23/2024 14:39
Vanadium	12.2	mg/Kg		8/23/2024 14:39

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Lab Project ID: 243844

 Client: **Ravi Engineering & Land Surveying, P.C.**

Project Reference: 631 Northland Ave

Sample Identifier: SS-14

Lab Sample ID: 243844-14

Date Sampled: 8/20/2024 12:40

Matrix: Soil

Date Received 8/21/2024

 Zinc **34.7** mg/Kg 8/23/2024 14:39

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 8/22/2024

Data File: 240823A

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1221	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1232	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1242	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1248	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1254	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1260	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1262	< 0.131	mg/Kg		8/24/2024 02:33
PCB-1268	< 0.131	mg/Kg		8/24/2024 02:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	80.4	16.1 - 102		8/24/2024 02:33

Method Reference(s): EPA 8082A

EPA 3546

Preparation Date: 8/23/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 295	ug/Kg		8/27/2024 17:53
1,2,4,5-Tetrachlorobenzene	< 295	ug/Kg		8/27/2024 17:53
1,2,4-Trichlorobenzene	< 295	ug/Kg		8/27/2024 17:53
1,2-Dichlorobenzene	< 295	ug/Kg		8/27/2024 17:53
1,3-Dichlorobenzene	< 295	ug/Kg		8/27/2024 17:53
1,4-Dichlorobenzene	< 295	ug/Kg		8/27/2024 17:53
2,2-Oxybis (1-chloropropane)	< 295	ug/Kg		8/27/2024 17:53
2,3,4,6-Tetrachlorophenol	< 295	ug/Kg		8/27/2024 17:53

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-14

Lab Sample ID: 243844-14

Date Sampled: 8/20/2024 12:40

Matrix: Soil

Date Received 8/21/2024

2,4,5-Trichlorophenol	< 295	ug/Kg	8/27/2024 17:53
2,4,6-Trichlorophenol	< 295	ug/Kg	8/27/2024 17:53
2,4-Dichlorophenol	< 295	ug/Kg	8/27/2024 17:53
2,4-Dimethylphenol	< 295	ug/Kg	8/27/2024 17:53
2,4-Dinitrophenol	< 1180	ug/Kg	8/27/2024 17:53
2,4-Dinitrotoluene	< 295	ug/Kg	8/27/2024 17:53
2,6-Dinitrotoluene	< 295	ug/Kg	8/27/2024 17:53
2-Chloronaphthalene	< 295	ug/Kg	8/27/2024 17:53
2-Chlorophenol	< 295	ug/Kg	8/27/2024 17:53
2-Methylnapthalene	< 295	ug/Kg	8/27/2024 17:53
2-Methylphenol	< 295	ug/Kg	8/27/2024 17:53
2-Nitroaniline	< 295	ug/Kg	8/27/2024 17:53
2-Nitrophenol	< 295	ug/Kg	8/27/2024 17:53
3&4-Methylphenol	< 295	ug/Kg	8/27/2024 17:53
3,3'-Dichlorobenzidine	< 295	ug/Kg	8/27/2024 17:53
3-Nitroaniline	< 295	ug/Kg	8/27/2024 17:53
4,6-Dinitro-2-methylphenol	< 590	ug/Kg	8/27/2024 17:53
4-Bromophenyl phenyl ether	< 295	ug/Kg	8/27/2024 17:53
4-Chloro-3-methylphenol	< 295	ug/Kg	8/27/2024 17:53
4-Chloroaniline	< 295	ug/Kg	8/27/2024 17:53
4-Chlorophenyl phenyl ether	< 295	ug/Kg	8/27/2024 17:53
4-Nitroaniline	< 295	ug/Kg	8/27/2024 17:53
4-Nitrophenol	< 295	ug/Kg	8/27/2024 17:53
Acenaphthene	< 295	ug/Kg	8/27/2024 17:53
Acenaphthylene	< 295	ug/Kg	8/27/2024 17:53
Acetophenone	< 295	ug/Kg	8/27/2024 17:53
Anthracene	< 295	ug/Kg	8/27/2024 17:53
Atrazine	< 295	ug/Kg	8/27/2024 17:53
Benzaldehyde	< 295	ug/Kg	8/27/2024 17:53
Benzo (a) anthracene	592	ug/Kg	8/27/2024 17:53

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Lab Project ID: 243844
Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave

Sample Identifier: SS-14

Lab Sample ID: 243844-14

Date Sampled: 8/20/2024 12:40

Matrix: Soil

Date Received 8/21/2024

Benzo (a) pyrene	1060	ug/Kg	8/27/2024 17:53
Benzo (b) fluoranthene	997	ug/Kg	8/27/2024 17:53
Benzo (g,h,i) perylene	754	ug/Kg	8/27/2024 17:53
Benzo (k) fluoranthene	697	ug/Kg	8/27/2024 17:53
Bis (2-chloroethoxy) methane	< 295	ug/Kg	8/27/2024 17:53
Bis (2-chloroethyl) ether	< 295	ug/Kg	8/27/2024 17:53
Bis (2-ethylhexyl) phthalate	< 295	ug/Kg	8/27/2024 17:53
Butylbenzylphthalate	< 295	ug/Kg	8/27/2024 17:53
Caprolactam	< 295	ug/Kg	8/27/2024 17:53
Carbazole	< 295	ug/Kg	8/27/2024 17:53
Chrysene	803	ug/Kg	8/27/2024 17:53
Dibenz (a,h) anthracene	< 295	ug/Kg	8/27/2024 17:53
Dibenzofuran	< 295	ug/Kg	8/27/2024 17:53
Diethyl phthalate	< 295	ug/Kg	8/27/2024 17:53
Dimethyl phthalate	< 295	ug/Kg	8/27/2024 17:53
Di-n-butyl phthalate	< 295	ug/Kg	8/27/2024 17:53
Di-n-octylphthalate	< 295	ug/Kg	8/27/2024 17:53
Fluoranthene	713	ug/Kg	8/27/2024 17:53
Fluorene	< 295	ug/Kg	8/27/2024 17:53
Hexachlorobenzene	< 295	ug/Kg	8/27/2024 17:53
Hexachlorobutadiene	< 295	ug/Kg	8/27/2024 17:53
Hexachlorocyclopentadiene	< 1180	ug/Kg	8/27/2024 17:53
Hexachloroethane	< 295	ug/Kg	8/27/2024 17:53
Indeno (1,2,3-cd) pyrene	767	ug/Kg	8/27/2024 17:53
Isophorone	< 295	ug/Kg	8/27/2024 17:53
Naphthalene	< 295	ug/Kg	8/27/2024 17:53
Nitrobenzene	< 295	ug/Kg	8/27/2024 17:53
N-Nitroso-di-n-propylamine	< 295	ug/Kg	8/27/2024 17:53
N-Nitrosodiphenylamine	< 295	ug/Kg	8/27/2024 17:53
Pentachlorophenol	< 590	ug/Kg	8/27/2024 17:53

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Lab Project ID: 243844

Client: Ravi Engineering & Land Surveying, P.C.

Project Reference: 631 Northland Ave

Sample Identifier: SS-14

Lab Sample ID: 243844-14

Date Sampled: 8/20/2024 12:40

Matrix: Soil

Date Received 8/21/2024

Phenanthrene	< 295	ug/Kg	8/27/2024 17:53
Phenol	< 295	ug/Kg	8/27/2024 17:53
Pyrene	779	ug/Kg	8/27/2024 17:53

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	68.4	34.3 - 95.6		8/27/2024 17:53
2-Fluorobiphenyl	67.0	37.9 - 87.2		8/27/2024 17:53
2-Fluorophenol	65.5	34.4 - 80.5		8/27/2024 17:53
Nitrobenzene-d5	62.1	33.2 - 82.1		8/27/2024 17:53
Phenol-d5	70.7	36.4 - 85.4		8/27/2024 17:53
Terphenyl-d14	73.8	45.9 - 96		8/27/2024 17:53

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 8/23/2024

Data File: B73440.D



Method Blank Report

Client: Ravi Engineering & Land Surveying, P.C.
Project Reference: 631 Northland Ave
Lab Project ID: 243844
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	<282	ug/Kg		8/26/2024 18:57
1,2,4,5-Tetrachlorobenzene	<282	ug/Kg		8/26/2024 18:57
1,2,4-Trichlorobenzene	<282	ug/Kg		8/26/2024 18:57
1,2-Dichlorobenzene	<282	ug/Kg		8/26/2024 18:57
1,3-Dichlorobenzene	<282	ug/Kg		8/26/2024 18:57
1,4-Dichlorobenzene	<282	ug/Kg		8/26/2024 18:57
2,2-Oxybis (1-chloropropane)	<282	ug/Kg		8/26/2024 18:57
2,3,4,6-Tetrachlorophenol	<282	ug/Kg		8/26/2024 18:57
2,4,5-Trichlorophenol	<282	ug/Kg		8/26/2024 18:57
2,4,6-Trichlorophenol	<282	ug/Kg		8/26/2024 18:57
2,4-Dichlorophenol	<282	ug/Kg		8/26/2024 18:57
2,4-Dimethylphenol	<282	ug/Kg		8/26/2024 18:57
2,4-Dinitrophenol	<1130	ug/Kg		8/26/2024 18:57
2,4-Dinitrotoluene	<282	ug/Kg		8/26/2024 18:57
2,6-Dinitrotoluene	<282	ug/Kg		8/26/2024 18:57
2-Chloronaphthalene	<282	ug/Kg		8/26/2024 18:57
2-Chlorophenol	<282	ug/Kg		8/26/2024 18:57
2-Methylnapthalene	<282	ug/Kg		8/26/2024 18:57
2-Methylphenol	<282	ug/Kg		8/26/2024 18:57
2-Nitroaniline	<282	ug/Kg		8/26/2024 18:57
2-Nitrophenol	<282	ug/Kg		8/26/2024 18:57
3&4-Methylphenol	<282	ug/Kg		8/26/2024 18:57
3,3'-Dichlorobenzidine	<282	ug/Kg		8/26/2024 18:57
3-Nitroaniline	<282	ug/Kg		8/26/2024 18:57
4,6-Dinitro-2-methylphenol	<565	ug/Kg		8/26/2024 18:57
4-Bromophenyl phenyl ether	<282	ug/Kg		8/26/2024 18:57
4-Chloro-3-methylphenol	<282	ug/Kg		8/26/2024 18:57

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Method Blank Report

Client: Ravi Engineering & Land Surveying, P.C.
Project Reference: 631 Northland Ave
Lab Project ID: 243844
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
4-Chloroaniline	<282	ug/Kg		8/26/2024 18:57
4-Chlorophenyl phenyl ether	<282	ug/Kg		8/26/2024 18:57
4-Nitroaniline	<282	ug/Kg		8/26/2024 18:57
4-Nitrophenol	<282	ug/Kg		8/26/2024 18:57
Acenaphthene	<282	ug/Kg		8/26/2024 18:57
Acenaphthylene	<282	ug/Kg		8/26/2024 18:57
Acetophenone	<282	ug/Kg		8/26/2024 18:57
Anthracene	<282	ug/Kg		8/26/2024 18:57
Atrazine	<282	ug/Kg		8/26/2024 18:57
Benzaldehyde	<282	ug/Kg		8/26/2024 18:57
Benzo (a) anthracene	<282	ug/Kg		8/26/2024 18:57
Benzo (a) pyrene	<282	ug/Kg		8/26/2024 18:57
Benzo (b) fluoranthene	<282	ug/Kg		8/26/2024 18:57
Benzo (g,h,i) perylene	<282	ug/Kg		8/26/2024 18:57
Benzo (k) fluoranthene	<282	ug/Kg		8/26/2024 18:57
Bis (2-chloroethoxy) methane	<282	ug/Kg		8/26/2024 18:57
Bis (2-chloroethyl) ether	<282	ug/Kg		8/26/2024 18:57
Bis (2-ethylhexyl) phthalate	<282	ug/Kg		8/26/2024 18:57
Butylbenzylphthalate	<282	ug/Kg		8/26/2024 18:57
Caprolactam	<282	ug/Kg		8/26/2024 18:57
Carbazole	<282	ug/Kg		8/26/2024 18:57
Chrysene	<282	ug/Kg		8/26/2024 18:57
Dibenz (a,h) anthracene	<282	ug/Kg		8/26/2024 18:57
Dibenzofuran	<282	ug/Kg		8/26/2024 18:57
Diethyl phthalate	<282	ug/Kg		8/26/2024 18:57
Dimethyl phthalate	<282	ug/Kg		8/26/2024 18:57
Di-n-butyl phthalate	<282	ug/Kg		8/26/2024 18:57
Di-n-octylphthalate	<282	ug/Kg		8/26/2024 18:57

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Method Blank Report

Client: Ravi Engineering & Land Surveying, P.C.
Project Reference: 631 Northland Ave
Lab Project ID: 243844
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
Fluoranthene	<282	ug/Kg		8/26/2024 18:57
Fluorene	<282	ug/Kg		8/26/2024 18:57
Hexachlorobenzene	<282	ug/Kg		8/26/2024 18:57
Hexachlorobutadiene	<282	ug/Kg		8/26/2024 18:57
Hexachlorocyclopentadiene	<1130	ug/Kg		8/26/2024 18:57
Hexachloroethane	<282	ug/Kg		8/26/2024 18:57
Indeno (1,2,3-cd) pyrene	<282	ug/Kg		8/26/2024 18:57
Isophorone	<282	ug/Kg		8/26/2024 18:57
Naphthalene	<282	ug/Kg		8/26/2024 18:57
Nitrobenzene	<282	ug/Kg		8/26/2024 18:57
N-Nitroso-di-n-propylamine	<282	ug/Kg		8/26/2024 18:57
N-Nitrosodiphenylamine	<282	ug/Kg		8/26/2024 18:57
Pentachlorophenol	<565	ug/Kg		8/26/2024 18:57
Phenanthrene	<282	ug/Kg		8/26/2024 18:57
Phenol	<282	ug/Kg		8/26/2024 18:57
Pyrene	<282	ug/Kg		8/26/2024 18:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	65.5	34.3 - 95.6		8/26/2024 18:57
2-Fluorobiphenyl	61.8	37.9 - 87.2		8/26/2024 18:57
2-Fluorophenol	62.7	34.4 - 80.5		8/26/2024 18:57
Nitrobenzene-d5	59.4	33.2 - 82.1		8/26/2024 18:57
Phenol-d5	68.1	36.4 - 85.4		8/26/2024 18:57
Terphenyl-d14	75.4	45.9 - 96		8/26/2024 18:57

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/23/2024
Data File: B73413.D
QC Batch ID: QC240823ABNS
QC Number: Blk 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



QC Report for Laboratory Control Sample

Client: Ravi Engineering & Land Surveying, P.C.
Project Reference: 631 Northland Ave
Lab Project ID: 243844
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)							
Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	%Rec Limits	LCS Outliers	Date Analyzed
1,2,4-Trichlorobenzene	2630	ug/Kg	1190	45.2	37.7 - 80.4		8/26/2024
1,4-Dichlorobenzene	2630	ug/Kg	1110	42.3	34.3 - 75.3		8/26/2024
2,3,4,6-Tetrachlorophenol	3950	ug/Kg	2780	70.5	44.8 - 86.1		8/26/2024
2,4,6-Trichlorophenol	3950	ug/Kg	2830	71.7	46.6 - 92.6		8/26/2024
2,4-Dichlorophenol	3950	ug/Kg	2760	69.8	45.6 - 89.4		8/26/2024
2,4-Dimethylphenol	3950	ug/Kg	1860	47.2	31.6 - 93.8		8/26/2024
2,4-Dinitrophenol	3950	ug/Kg	2460	62.4	10 - 73.8		8/26/2024
2,4-Dinitrotoluene	2630	ug/Kg	1380	52.3	41 - 91.2		8/26/2024
2-Chlorophenol	3950	ug/Kg	2660	67.5	43.6 - 84.3		8/26/2024
2-Nitrophenol	3950	ug/Kg	2780	70.4	41.3 - 85.8		8/26/2024
4,6-Dinitro-2-methylphenol	3950	ug/Kg	2620	66.3	20.9 - 88.5		8/26/2024
4-Chloro-3-methylphenol	3950	ug/Kg	2980	75.4	47.7 - 92.8		8/26/2024
4-Nitrophenol	3950	ug/Kg	3070	77.8	37.1 - 94.4		8/26/2024
Acenaphthene	2630	ug/Kg	1300	49.4	42.5 - 87.3		8/26/2024
N-Nitroso-di-n-propylamine	2630	ug/Kg	1310	49.7	39.1 - 84.2		8/26/2024
Pentachlorophenol	3950	ug/Kg	3050	77.3	36.6 - 103		8/26/2024

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QC Report for Laboratory Control Sample

Client: **Ravi Engineering & Land Surveying, P.C.**
Project Reference: 631 Northland Ave
Lab Project ID: 243844
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike	Spike	LCS	LCS %	%Rec	LCS	Date
	Added	Units	Result	Recovery	Limits	Outliers	Analyzed
Phenol	3950	ug/Kg	2690	68.0	44.2 - 85.3		8/26/2024
Pyrene	2630	ug/Kg	1450	55.2	48 - 97		8/26/2024
Method Reference(s): EPA 8270D							
EPA 3546							
Preparation Date: 8/23/2024							
Data File: B73414.D							
QC Number: LCS 1							
QC Batch ID: QC240823ABNS							

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QC Report for Matrix Spike and Matrix Spike Duplicate

Client:	Ravi Engineering & Land Surveying, P.C.	Lab Project ID: 243844
Project Reference:	631 Northland Ave	

Lab Sample ID:	243844-07	Date Sampled: 8/20/2024
Sample Identifier:	SS-7	Date Received: 8/21/2024
Matrix:	Soil	Date Analyzed: 8/27/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample Result	Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier
1,2,4-Trichlorobenzene	< 302	ug/Kg	3120	1920	61.5	2940	1540	52.3	37.7 - 80.4			16.1	55.2	
1,4-Dichlorobenzene	< 302	ug/Kg	3120	1740	55.8	2940	1390	47.3	34.3 - 75.3			16.5	60.9	
2,3,4,6-Tetrachlorophenol	< 302	ug/Kg	4690	2670	56.9	4410	1960	44.5	44.8 - 86.1		*	24.6	42.3	
2,4,6-Trichlorophenol	< 302	ug/Kg	4690	2980	63.6	4410	2190	49.6	46.6 - 92.6			24.7	43.6	
2,4-Dichlorophenol	< 302	ug/Kg	4690	3000	63.9	4410	2250	51.1	45.6 - 89.4			22.3	42.5	
2,4-Dimethylphenol	< 302	ug/Kg	4690	1760	37.6	4410	1240	28.1	31.6 - 93.8		*	29.0	59.4	
2,4-Dinitrophenol	< 1210	ug/Kg	4690	900	19.2	4410	659	14.9	10 - 73.8			25.1	114	
2,4-Dinitrotoluene	< 302	ug/Kg	3120	1920	61.5	2940	1360	46.3	41 - 91.2			28.1	53.6	
2-Chlorophenol	< 302	ug/Kg	4690	2870	61.3	4410	2100	47.6	43.6 - 84.3			25.2	42.8	
2-Nitrophenol	< 302	ug/Kg	4690	2740	58.5	4410	1820	41.2	41.3 - 85.8		*	34.7	44.5	
4,6-Dinitro-2-methylphenol	< 604	ug/Kg	4690	1500	32.0	4410	1010	22.9	20.9 - 88.5			33.2	92.8	
4-Chloro-3-methylphenol	< 302	ug/Kg	4690	3240	69.1	4410	2410	54.6	47.7 - 92.8			23.5	41.8	
4-Nitrophenol	< 302	ug/Kg	4690	3350	71.4	4410	2620	59.4	37.1 - 94.4			18.3	45.6	
Acenaphthene	1130	ug/Kg	3120	2670	49.3	2940	2050	31.5	42.5 - 87.3		*	44.1	50.3	

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Ravi Engineering & Land Surveying, P.C. **Lab Project ID:** 243844
Project Reference: 631 Northland Ave

Lab Sample ID: 243844-07 **Date Sampled:** 8/20/2024
Sample Identifier: SS-7 **Date Received:** 8/21/2024
Matrix: Soil **Date Analyzed:** 8/27/2024

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample	Result	MS	MS	MS %	MSD	MSD	MSD %	%Rec.	MS	MSD	Relative	RPD	RPD
	Result	Units	Added	Result	Recovery	Added	Result	Recovery	Limits	Outlier	Outlier	% Diff.	Limit	Outlier
N-Nitroso-di-n-propylamine	< 302	ug/Kg	3120	2070	66.1	2940	1610	54.8	39.1 - 84.2			18.7	52.3	
	< 604	ug/Kg	4690	2280	48.7	4410	1680	38.1	36.6 - 103			24.4	63.6	
	< 302	ug/Kg	4690	2990	63.9	4410	2240	50.9	44.2 - 85.3			22.7	41.7	
Pyrene	10600	ug/Kg	3120	8600	-64.7	2940	6540	-139	48 - 97	*	*	72.8	48	*
Method Reference(s): EPA 8270D EPA 3546														
Preparation Date: 8/23/2024														
Data File(s): B73432.D B73433.D B73431.D 1														
QC Batch ID: QC240823ABNS														

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.
 This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.
 Report Prepared Thursday, August 29, 2024



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"H" = Denotes a parameter analyzed outside of holding time.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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CHAIN OF CUSTODY

1 of 3

PARADIGM ENVIRONMENTAL SERVICES

REPORT TO:

INVOICE TO:

LAB PROJECT ID

COMPANY: RNI ENGINEERING	ADDRESS: 2110 S Clinton Ave	CITY: ROCHESTER	STATE: NY	ZIP: 14618
ATTN: BEN KENDY	PHONE: 716 244 1404	FAX: 716 244 1404	Email: lizcarter@paradigm.com	

PROJECT REFERENCE

Matrix Codes: AQ - Aqueous Liquid	WA - Water	DW - Drinking Water	SO - Soil	SD - Solid	WP - Wipe	OL - Oil
NQ - Non-Aqueous Liquid	WG - Groundwater	WW - Wastewater	SL - Sludge	PT - Paint	CK - Caulk	AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRADES	SAMPLE IDENTIFIER	MC ADS	NON MC	REMARKS	PARADIGM LAB SAMPLE NUMBER
8/20/24	11:20 AM	X		SS-1	50	1	TCL SVOCs TAL METALS PCBs	01
	11:10	X		SS-2				02
	11:20	X		SS-3				03
	11:30	X		SS-4				04
	11:35	X		SS-5				05
	11:40	X		SS-6				06
	11:50	X		SS-7				07
	11:55	X		SS-8				08
	12:00	X		SS-9				09

Turnaround Time

Report Supplements

Availability contingent upon lab approval; additional fees may apply.

Standard 5 day	☒	None Required	☐	None Required	☐
10 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐		☐		
Other	☐	Other	☐	Other EDD	☐

Please indicate date needed:

Please indicate package needed:

Please indicate EDD needed:

Sampled By: [Signature]	Date/Time: 8/20/24 11:00 AM	Total Cost: [Box]
Relinquished By: [Signature]	Date/Time: 8/21/24 10:15 AM	
Received By: [Signature]	Date/Time: 8/21/24 10:11 AM	
Received @ Lab By: [Signature]	Date/Time: 8/21/24 12:50	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

3 received 8/21/24

11:47

PARADIGM ENVIRONMENTAL SERVICES

ENVIRONMENTAL SERVICES

[illegible]

Total Cost:		
Samples By	Date/Time	
Relinquished By	Date/Time	
Received By	Date/Time	P.I.F.
Received @ Lab By	Date/Time	



Chain of Custody Supplement

3 of 3

Client: Ravi Engineering
Lab Project ID: 243844

Completed by: Cedric Mue
Date: 8/21/24

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt		
	Yes	No	N/A
Container Type	☒	☐	☐
Comments			
Transferred to method-compliant container	☒ (L-07) 93 → 93 (brown jar)	☐	☒
Headspace (<1 mL)	☐	☐	☒
Comments			
Preservation	☐	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒	☐	☒ metals (except Hg)
Comments	3°C iced		
Compliant Sample Quantity/Type	☒	☐	☐
Comments			