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FILL MATERIAL SAMPLING REPORT

6037 HELEN STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48214



FEBRUARY 18, 2026

PREPARED FOR:

THE CITY OF DETROIT DEMOLITION DEPARTMENT

1301 THIRD STREET, SUITE 606

DETROIT, MICHIGAN 48226



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DETROIT, WAYNE COUNTY, MICHIGAN 48214

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EXECUTIVE SUMMARY

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to perform sampling and analysis of fill materials at the property commonly addressed as 6037 Helen Street, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location, as referenced to nearby roads and major geographic features, is shown on Figure 1, *Site Location Map*. Figure 2, *Site Layout*, depicts the current layout of the Site.

This Executive Summary is provided to summarize the results of the work performed at the Site. The Executive Summary is general in nature and should not be used to replace or be considered apart from the entirety of this report.

The purpose of the work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths, as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. Sample analyses associated with this work included volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc (10 Michigan metals); chloride; herbicides; and pesticides. Analytical results were compared to the current generic residential cleanup criteria (GRCC) promulgated under Part 201 of the *Natural Resources and Environmental Protection Act* (NREPA), 1994 P.A. 451, as amended (Part 201).

Pursuant to a request by the COD, MSG has completed sampling and analysis of fill material at the Site, as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. Results of this work, which are subject to the limitations presented in *Appendix A, Limitations*, incorporated by reference herewith, revealed the following:

- The stratigraphy encountered during soil boring advancement of 6037 SB01, 6037 SB02, and 6037 SB03 generally consisted of brown to dark brown and gray sand and clay to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 6037 SB01, 6037 SB02, and 6037 SB03.
- Concentrations of arsenic and phenanthrene were detected in soil samples 6037 SB01 (1-2')_20260122, 6037 SB02 (3-4')_20260122, and/or 6037 SB03 (5-6')_20260122 in excess of Part 201 groundwater surface water interface protection criteria (GSIPC), drinking water protection criteria (DWPC), and/or direct contact criteria (DCC).
- Concentrations of naphthalene and phenanthrene were detected in soil sample 6037 SB02 (3-4')_20260122 in excess of soil volatilization to indoor air pathway (SVIAP).
- Concentrations of 1-methylnaphthalene, 2-methylnaphthalene, 2-butanone (MEK), 3 & 4-methylphenol, acetone, acenaphthene, acenaphthylene, anthracene, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, carbazole, chloride, chromium (Total), chrysene, copper, cresols (Total), dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, methyl acetate, naphthalene, pyrene, and zinc were detected in soil samples 6037 SB01 (1-2')_20260122, 6037 SB02 (3-4')_20260122, and/or 6037 SB03 (5-6')_20260122 at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- PCBs, pesticides, and herbicides were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or

surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

MSG has evaluated the analytical results of the fill material. Based upon the analytical results, we have determined that the material is contaminated above the state's Part 201 GRCC, as applicable.

MSG warrants that no substantive information or documentation was deleted, omitted, or changed that would otherwise cause the MSG to reach a different conclusion. Furthermore, MSG understands that the COD and its agencies and authorities may rely upon the overall completeness, accuracy, and conclusions in this report and hereby provides reliance on the contents presented herein.

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1.0 INTRODUCTION

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to conduct sampling and analysis of fill materials at the property commonly addressed as 6037 Helen Street, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location as referenced to nearby roads and major geographic features is presented as *Figure 1, Site Location Map*. *Figure 2, Site Layout*, depicts the current layout of the Site.

The purpose of this work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths. The scope of work for this investigation was performed in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. This report presents the findings of this investigation. Soil samples were collected by MSG on January 22, 2026. The findings of this report are valid as of the report date, subject to the limitations presented in *Appendix A, Limitations*.

At the time of this investigation, the Site was vacant and formerly occupied by residential structures. Former Site building(s) had been demolished as part of the Blight Removal Program prior to commencement of this work.

2.0 PURPOSE AND SCOPE OF WORK

The purpose of the work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths, as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and modified in the field (when necessary) based on encountered conditions and professional judgment of the MSG field geologist.

MSG performed the following scope of work in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025:

- Advanced three (3) onsite soil borings to a maximum depth of six feet below ground surface (bgs) utilizing a direct push drill rig at the locations depicted on Figure 2.
- Collected one (1) discrete soil sample for laboratory analysis from each soil boring at a depth of 1-2 feet bgs, 3-4 feet bgs, or 5-6 feet bgs, depending on the soil boring.
- Submitted soil samples to an independent analytical laboratory for chemical analysis.
- Prepared this report summarizing the activities and results of this work.

Per the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, sample analyses included volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc (10 Michigan metals); chloride; herbicides; and pesticides. Soil sample analytical results were compared to the current generic residential cleanup criteria (GRCC) promulgated under Part 201 of the *Natural Resources and Environmental Protection Act* (NREPA), 1994 P.A. 451, as amended (Part 201).

3.0 SITE ASSESSMENT METHODOLOGY

The following subsections describe the methodologies employed by MSG at the Site during sampling activities that were conducted on January 22, 2026. A daily field activity report prepared by MSG is presented in *Appendix B, Daily Field Report*.

3.1 Preliminary Site Work Activities

Prior to conducting subsurface soil sampling activities, MSG contacted the MISSDIG utility locating system to identify and physically mark underground utilities. If necessary, proposed soil boring locations were modified based on the results of the utility markings. Additionally, MSG reviewed readily available Site building records or documents to ensure that this scope of work was conducted on the correct property and in the areas of the former Site structure.

3.2 Soil Sample Collection

The sampling plan for the Site was based on the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and modified in the field (if necessary) based on encountered conditions and professional judgment of MSG's field personnel. MSG advanced three (3) soil borings, designated 6037 SB01, 6037 SB02, and 6037 SB03, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during the completion of this work are provided in *Appendix C, Investigation Photographs*.

Soils were continuously profiled at each soil boring location from the ground surface to the termination depth of six feet bgs using a 5-foot long, closed-piston Macro-Core® sampling device. A new disposable high-density polyethylene (HDPE) liner was placed within the sampler between each 5-foot sample interval. The recovered soil samples were examined and logged in the field by the MSG field geologist. The soils were classified by MSG's field geologist in general accordance with ASTM D 2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. Soil descriptions were based on visual examination and interpretation by the field geologist.

Soil samples were examined for visual and olfactory indications of impact in accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and were continuously screened upon retrieval of each sample interval with a MiniRAE 10.6 electron volt (eV) photoionization detector (PID) calibrated with isobutylene span gas. The PID measures the concentration of airborne ionizable gasses and vapors and automatically displays any detected concentrations in parts per million (PPM). The PID measures total concentrations of VOC vapors present and cannot distinguish between individual VOC constituents. PID readings for each sample interval were recorded on the individual soil boring logs, which are included in *Appendix D, Soil Boring Logs*.

Soil samples were collected in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. The soil samples were placed into appropriate pre-preserved and unpreserved laboratory-supplied sample containers, as appropriate for the associated laboratory analyses. Soil samples collected for VOC analysis were placed in laboratory supplied pre-tared 40-milliliter (ml) vials with septum-sealed threaded caps that were pre-preserved with methanol provided by the analytical laboratory. Groundwater was not encountered during the investigation.

3.3 Decontamination

Before initiation of sampling and drilling activities and between each sampling/soil boring, equipment was cleaned to avoid the potential for cross-contamination during field activities. Pertinent equipment and tooling were thoroughly cleaned using a phosphate-free soap to remove chemical residue and caked-on soils. After sample collection was completed, each soil boring location was abandoned with the soil cuttings generated at each soil boring location and finished to match the original surface.

3.4 Analytical Methods

A total of three (3) soil samples designated 6037 SB01 (1-2') _20260122, 6037 SB02 (3-4') _20260122, and 6037 SB03 (5-6') _20260122, were collected as part of this investigation. These soil samples were submitted to ALS Environmental Laboratory (ALS) in Holland, Michigan for laboratory analysis of the following parameters per the requested parameters as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025:

- VOCs by United States Environmental Protection Agency (USEPA) Method SW8260D;
- SVOCs by USEPA Method SW8270E;
- PCBs by USEPA Method SW8082A;
- 10 Michigan metals by USEPA Method SW6020B and SW7471B;
- Chloride by USEPA Method SW9056A;
- Herbicides by USEPA Method SW8151A; and
- Pesticides by USEPA Method SW8081B.

3.5 Quality Assurance/Quality Control

Quality assurance and quality control (QA/QC) was achieved in the field by using MSG's standard operating procedures (SOPs) for sample collection, sample screening, sample preservation, and chain-of-custody protocols to ensure sample integrity. Per the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, duplicate soil samples and field blanks were not collected.

Laboratory QC was achieved by using standard analytical methods, the analyses of spiked and laboratory quality control samples, and the use of internal laboratory quality assurance protocols. Review of the laboratory's QC data indicated the validity of the data and that it is able to be used for assessing soil samples collected during this work.

4.0 SUMMARY OF RESULTS

The following subsections include a discussion of the soil samples that were collected from the Site on January 22, 2026.

4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 6037 SB01, 6037 SB02, and 6037 SB03 generally consisted of brown to dark brown and gray sand and clay to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 6037 SB01, 6037 SB02, and 6037 SB03.

Groundwater was not encountered during soil boring activities completed as part of this investigation.

4.2 Soil Sample Analytical Results

Three (3) soil samples, designated 6037 SB01 (1-2')_20260122, 6037 SB02 (3-4')_20260122, and 6037 SB03 (5-6')_20260122, were collected from the Site and submitted to ALS for laboratory analysis of VOCs, SVOCs, PCBs, Michigan 10 Metals, chloride, herbicides, and pesticides.

The analytical results and comparisons to applicable Part 201 GRCC are summarized in *Table 1, Soil Sample Analytical Detection Summary*. Copies of the laboratory analytical data reports and chain of custody forms are included in *Appendix E, Laboratory Analytical Reports and Chain of Custody Forms*.

A summary of the soil sample analytical detections in excess of Part 201 GRCC is provided below:

Chemical	CAS Number	Soil Sample (feet bgs)	Part 201 GRCC Exceeded / Concentration (µg/kg ¹)	Maximum Detected Concentration (µg/kg)
Arsenic	7440-38-2	6037 SB01 (1-2)_20260122 6037 SB02 (3-4)_20260122 6037 SB03 (5-6)_20260122	GSIPC ² / 4,600 DWPC ³ / 4,600 DCC ⁴ / 7,600	8,400
Phenanthrene	85-01-8	6037 SB02 (3-4)_20260122	GSIPC / 2,100	3,500

¹µg/kg – micrograms per kilogram;

²GSIPC – Groundwater Surface Water Interface Protection Criteria

³DWPC – Drinking Water Protection Criteria

⁴DCC – Direct Contact Criteria

4.3 Exposure Evaluation

MSG has completed a preliminary evaluation for the Site and associated exposure pathways. Cleanup criteria are applicable if it is reasonable and relevant for the corresponding exposure pathway to be or become complete.

Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

5.0 FINDINGS

MSG has evaluated the analytical results of the fill material samples collected at the Site in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. The findings of this investigation are presented below:

- The stratigraphy encountered during soil boring advancement of 6037 SB01, 6037 SB02, and 6037 SB03 generally consisted of brown to dark brown and gray sand and clay to six (6) feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 6037 SB01, 6037 SB02, and 6037 SB03.
- Concentrations of arsenic and phenanthrene were detected in soil samples 6037 SB01 (1-2')_20260122, 6037 SB02 (3-4')_20260122, and/or 6037 SB03 (5-6')_20260122 in excess of Part 201 GSIPC, DWPC, and/or DCC.
- Concentrations of naphthalene and phenanthrene were detected in soil sample 6037 SB02 (3-4')_20260122 in excess of SVIAP.
- Concentrations of 1-methylnaphthalene, 2-methylnaphthalene, 2-butanone (MEK), 3 & 4-methylphenol, acetone, acenaphthene, acenaphthylene, anthracene, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, carbazole, chloride, chromium (Total), chrysene, copper, cresols (Total), dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, methyl acetate, naphthalene, pyrene, and zinc were detected in soil samples 6037 SB01 (1-2')_20260122, 6037 SB02 (3-4')_20260122, and/or 6037 SB03 (5-6')_20260122 at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- PCBs, pesticides, and herbicides were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

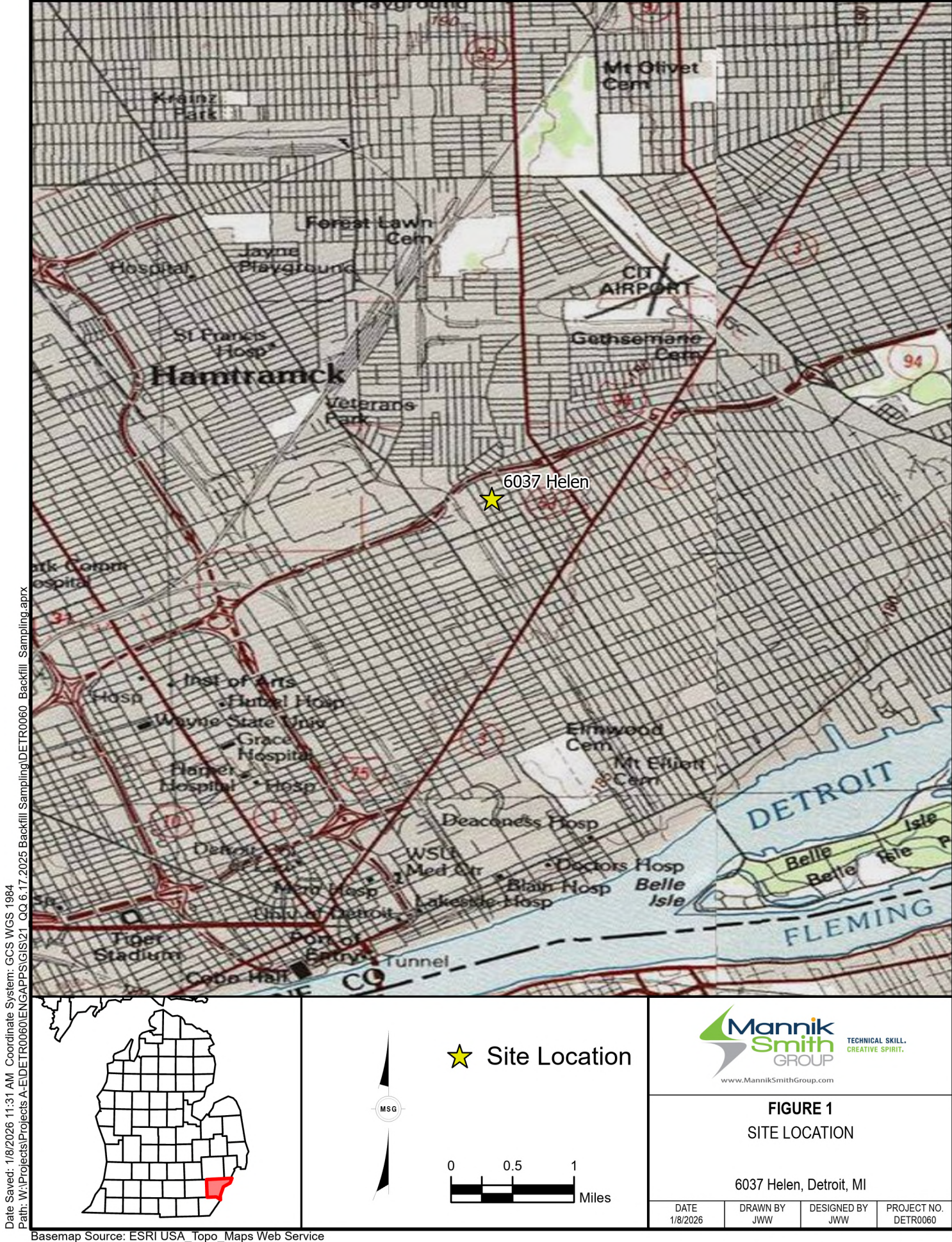
MSG has evaluated the analytical results of the fill material. Based upon the analytical results, we have determined that the material is contaminated above the state's Part 201 GRCC, as applicable.

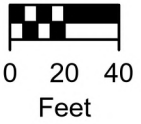
MSG warrants that no substantive information or documentation was deleted, omitted, or changed that would otherwise cause the MSG to reach a different conclusion. Furthermore, MSG understands that the COD and its agencies and authorities may rely upon the overall completeness, accuracy, and conclusions in this report and hereby provides reliance on the contents presented herein.

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FIGURES







- Sample Locations
- Parcels (Current)
- Subject Property

Notes
• Parcel boundaries are approximate
• Basemap Credits: SampleLocations:
GPS_Test:
All Roads:
Parcels (Current):
Wayne - 2020 - 6in - 4-band:



FIGURE 2
Site Layout

6037 Helen, Detroit, MI

DATE 1/6/2026	DRAWN BY JWW	DESIGNED BY KRB	PROJECT NO. DETR0060
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TABLE



Table 1
Soil Sample Analytical Detection Summary

Detroit Backfill Sampling
6037 Helen, Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024			Metals							Volatile Organic Compounds (VOCs)		
			Arsenic (B)	Barium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Mercury (B)	Zinc (B)	2-Butanone (MEK)	Acetone	Methyl Acetate
CAS Number			7440-38-2	7440-39-3	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-66-6	78-93-3	67-64-1	79-20-9
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Statewide Default Background Levels			5,800	75,000	18,000	32,000	21,000	130	47,000	NC	NC	NC
Drinking Water Protection Criteria (DWPC)			4,600	1.30E+06	30,000	5.80E+06	7.00E+05	1,700	2.40E+06	2.60E+05	15,000	NC
Groundwater Surface Water Interface Protection Criteria (GSIPC)			4,600	4.40E+05 ^(G)	3,300	75,000 ^(G)	6.00E+06 ^(G)	50 ^(M,1,2)	1.60E+05	44,000	34,000	NC
Soil Volatilization to Indoor Air Inhalation (SVIIC)			NLV	NLV	NC	NLV	NLV	48,000	NC	5.40E+07	2.90E+08	NC
Soil Volatilization to Indoor Air Pathway (SVIAP)			NC	NC	NC	NC	NC	22 ^(M)	NC	31,000	2.60E+05	NC
Infinite Source Volatile Soil Inhalation Criteria (VSIC)			NLV	NLV	NC	NLV	NLV	52,000	NC	2.90E+07	1.30E+08	NC
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)			NLV	NLV	NC	NLV	NLV	52,000	NC	2.90E+07	1.30E+08	NC
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)			NLV	NLV	NC	NLV	NLV	52,000	NC	3.50E+07	1.90E+08	NC
Particulate Soil Inhalation Criteria (PSIC)			7.20E+05	3.30E+08	2.60E+05	1.30E+08	1.00E+08	2.00E+07	NC	6.70E+10	3.90E+11	NC
Direct Contact Criteria (DCC)			7,600	3.70E+07	2.50E+06	2.00E+07	4.00E+05	1.60E+05	1.70E+08	1.20E+08	2.30E+07	NC
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NC	NA	NA	NA	NC	2.70E+07	1.10E+08	NC
Sample ID	Sample Depth (ft)	Sample Date										
6037 SB01	1.0 - 2.0	01/22/2026	5,860	87,100	12,000	18,600	94,100	26.4	71,400	718	3,060	503
6037 SB02	3.0 - 4.0	01/22/2026	8,400	77,500	15,800	17,000	21,100	52.4	50,900	<89.3	<111	<44.9
6037 SB03	5.0 - 6.0	01/22/2026	7,570	58,900	15,800	14,200	7,490	<14.8	50,200	<91.7	<114	<46.1

Notes

Only parameters with one or more detections are shown.

ug/kg = Micrograms per Kilogram.

Exceeds Generic Drinking Water Protection Criteria.

Exceeds Groundwater Surface Water Interface Protection Criteria.

Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.

Exceeds Two or More DWPC, GSIPC, and/or Applicable Soil Vapor Inhalation Criteria/Screening Levels.

Exceeds PSIC, DCC, and/or Csat, likely exceeds others.

Bold indicates concentration above laboratory reporting limits.

NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.

Part 201 GSIPC Hardness specific criteria (G) calculated using a regional hardness value of the lower portion of the lower peninsula, 150 mg CaCO3/L.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, updated October 12, 2023.

Table 1
Soil Sample Analytical Detection Summary

Detroit Backfill Sampling
6037 Helen, Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024			Semivolatile Organic Compounds (SVOCs)																				Inorganic Anions/Ions		
			1-Methylnaphthalene	2-Methylnaphthalene	3 & 4-Methylphenol	Acenaphthene	Acenaphthylene	Anthracene	Benzo (A)Anthracene	Benzo (A)Pyrene	Benzo (B)Fluoranthene	Benzo (G,H,I)Perylene	Benzo (K)Fluoranthene	Carbazole	Chrysene	Cresols, Total	Dibenzo (A,H)Anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno (1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene	Chloride
CAS Number	90-12-0	91-57-6	65794-96-9	83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	86-74-8	218-01-9	1319-77-3	53-70-3	132-64-9	206-44-0	86-73-7	193-39-5	91-20-3	85-01-8	129-00-0	16887-00-6		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		
Statewide Default Background Levels	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC		
Drinking Water Protection Criteria (DWPC)	NC	57,000	NC	3.00E+05	5,900	41,000	NLL	NLL	NLL	NLL	NLL	9,400	NLL	7,400	NLL	ID	7.30E+05	3.90E+05	NLL	35,000	56,000	4.80E+05	5.00E+06		
Groundwater Surface Water Interface Protection Criteria (GSIPC)	NC	4,200	NC	8,700	ID	ID	NLL	NLL	NLL	NLL	NLL	1,100	NLL	1000 ^(M,600)	NLL	1,700	5,500	5,300	NLL	730	2,100	ID	NC		
Soil Volatilization to Indoor Air Inhalation (SVIIC)	NC	2.70E+06	NC	1.90E+08	1.60E+06	1.00E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	NLV	NLV	2.00E+06	1.00E+09	5.80E+08	NLV	2.50E+05	2.80E+06	1.00E+09	NC		
Soil Volatilization to Indoor Air Pathway (SVIAP)	NC	1,700	NC	2.00E+05	NC	1.30E+07	1.60E+05 ^(M)	NC	NC	NC	NC	NC	NC	NC	NC	7.10E+06	NC	4.70E+05	NC	67 ^(M)	1,700	2.50E+07	NC		
Infinite Source Volatile Soil Inhalation Criteria (VSIC)	NC	1.50E+06	NC	8.10E+07	2.20E+06	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	NLV	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08	NC		
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)	NC	1.50E+06	NC	8.10E+07	2.20E+06	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	NLV	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08	NC		
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)	NC	1.50E+06	NC	8.10E+07	2.20E+06	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	NLV	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08	NC		
Particulate Soil Inhalation Criteria (PSIC)	NC	6.70E+08	NC	1.40E+10	2.30E+09	6.70E+10	ID	1.50E+06	ID	8.00E+08	ID	6.20E+07	ID	6.70E+09	ID	6.70E+06	9.30E+09	9.30E+09	ID	2.00E+08	6.70E+06	6.70E+09	NC		
Direct Contact Criteria (DCC)	NC	8.10E+06	NC	4.10E+07	1.60E+06	2.30E+08	20,000	2,000	20,000	2.50E+06	2.00E+05	5.30E+05	2.00E+06	1.10E+07	2,000	ID	4.60E+07	2.70E+07	20,000	1.60E+07	1.60E+06	2.90E+07	5.00E+05		
Soil Saturation Concentration Screening Levels (Csat)	NC	NA	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NC		
Sample ID	Sample Depth (ft)	Sample Date																							
6037 SB01	1.0 - 2.0	01/22/2026	34.4	36.3	366	97.3	51.5	324	1,280	1,250	1,510	704	506	158	1,360	366	149	<14	2,750	103	813	47.7	1,580	3,030	<3,850
6037 SB02	3.0 - 4.0	01/22/2026	130	134	<50.7	318	<16.1	918	1,360	1,120	1,350	570	454	376	1,330	<25.2	134	287	3,370	417	708	112	3,500	3,190	23,100
6037 SB03	5.0 - 6.0	01/22/2026	<13.3	<9.39	<50.3	<13.3	<16	<13	<16	<11.3	<13.8	<14.2	<14	<27.2	<14.9	<25	<9.97	<13.6	<8.86	<13.4	<12.9	<11.8	<8.59	<9.21	<3,490

Notes

Only parameters with one or more detections are shown.

ug/kg = Micrograms per Kilogram.

Exceeds Generic Drinking Water Protection Criteria.

Exceeds Groundwater Surface Water Interface Protection Criteria.

Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.

Exceeds Two or More DWPC, GSIPC, and/or Applicable Soil Vapor Inhalation Criteria/Screening Levels.

Exceeds PSIC, DCC, and/or Csat, likely exceeds others.

Bold indicates concentration above laboratory reporting limits.

NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.

Part 201 GSIPC Hardness specific criteria (G) calculated using a regional hardness value of the lower portion of the lower peninsula, 150 mg CaCO3/L.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, updated October 12, 2023.

APPENDIX A

LIMITATIONS



LIMITATIONS

This investigation and related documentation are site-specific, which means they pertain to the environmental conditions of the Site only.

The Mannik & Smith Group, Inc. (MSG) performed its services associated with the investigation in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in these reports are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

Contaminants may be hidden in subsurface material, covered by pavement, vegetation, or other substances. Additionally, contamination may not be present in predictable locations. MSG has prepared a logical investigation program to reduce the client's risk of discovering unknown contamination. This risk may be reduced by more extensive exploration on the Site. Even with additional exploration, it is not possible to completely eliminate the risk of discovering contamination on the Site. It can not be assumed that samples collected and conditions observed are representative of an area that has not been sampled and/or tested.

Some environmental assessments are undertaken to satisfy "due diligence", "all appropriate inquiry," or other regulatory requirements provided in federal, state, or local law. Although MSG strives to investigate a site in accordance with the scope of work as defined by written agreement with a client, it cannot warrant that the work undertaken for this report with satisfy "due diligence", "all appropriate inquiry," or any other similar standard under any federal, state, or local law.

Due to changing environmental regulatory conditions and potential on-site activities after the completion of investigation, the client may rely upon the conditions within this investigation report for a period of six months from the report's issuance date.

APPENDIX B

DAILY FIELD REPORT



**DAILY FIELD REPORT**

Client: City of Detroit Demolition Department
Project: Sampling and Analysis of Fill Material

Report No.: 1
Job No.: DETR0060

Date: 01/22/2026	Day: Thursday	Temp: 20° F	(AM)	N/A	(PM)
MSG Personnel: SRK, ZG, MW		Cloud Cover: 100%	(AM)	N/A	(PM)
		Precip.: N/A	(AM)	N/A	(PM)
Personnel: MSG					
MSG Hours On-Site: ~ 1 hours					

Contractors Information		
Contractor: MSG	No. Men and Type: 3; Geologist/Helper/Operator	Equipment Type: Geoprobe 7822DT

Summary of Work Performed:
- Advanced three (3) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs) - Collected soil samples from each soil boring (from the interval with the greatest potential to be impacted based on field indicators).

Field Notes:
1000 – SRK, ZG, and MW onsite (6037 Helen Street) 1005 – Unloaded equipment and marked out boring locations 1010 – Began drilling SB01 1012 – Finished drilling SB01 1020 – Began drilling SB02 1021 – Sampled 6037 SB01 (1-2')_20260122 1022 – Finished drilling SB02 1027 – Began drilling SB03 1029 – Finished drilling SB03 1035 – Sampled 6037 SB02 (3-4')_20260122 1047 – Sampled 6037 SB03 (5-6')_20260122 1050 – Packed up equipment 1100 – MSG off site

Supporting Documentation					
Photograph Taken	Yes ☒	No ☐	Samples Collected	Yes ☒	No ☐
Photo Log Attached	☒	☐	COC Attached	☒	☐
Boring/MW Logs	☒	☐	Field Note Book Taken	☒	☐
Problem Identification and Corrective Measures					
N/A					
Resolved?	Yes ☐	No ☐			

APPENDIX C

INVESTIGATION PHOTOGRAPHS



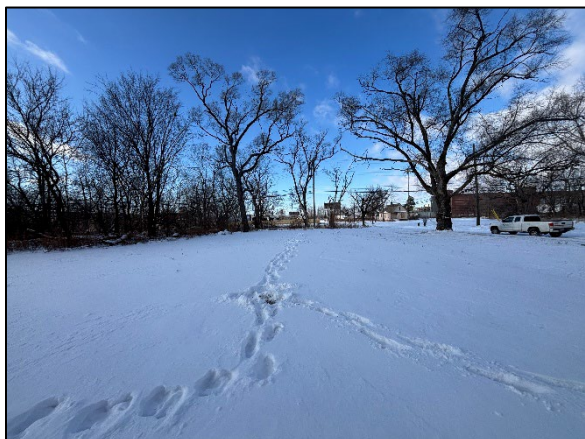


Photo 1: View of the Site pre-drilling, facing west.



Photo 2: View of 6037 SB01, facing southwest.



Photo 3: Viewing 6037 SB01 soil recovery, facing west.

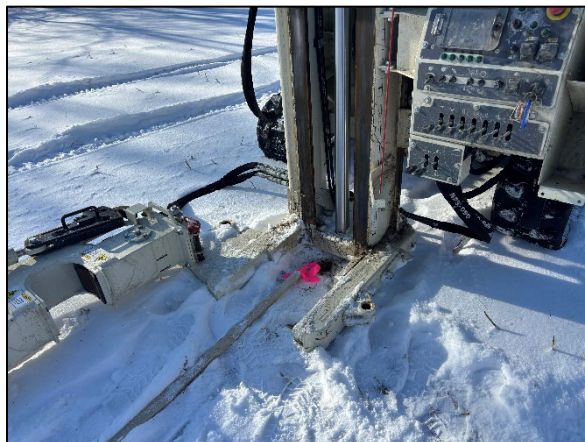


Photo 4: View of 6037 SB02, facing southwest.

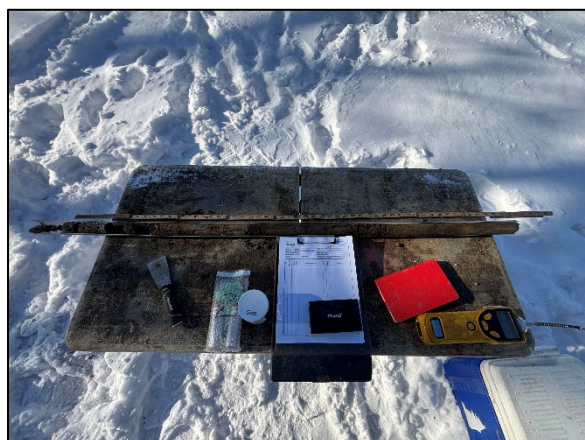


Photo 5: Viewing 6037 SB02 soil recovery, facing west.



Photo 6: View of 6037 SB03, facing southwest.



Photo 7: Viewing 6037SB03 soil recovery, facing west.

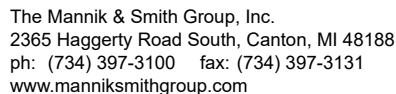


Photo 8: View of the Site post-drilling, facing west.

APPENDIX D

SOIL BORING LOGS





Sheet 1 of 1

PROJECT NAME Backfill Soil Sampling

PROJECT LOCATION 6037 Helen, Detroit, MI

POSITION _____

SURFACE ELEVATION **FINAL DEPTH** 6.0 ft

LOGGED BY SRK CHECKED BY PDH

REMARKS _____

LEGEND:

Template: Master Template - Default Letter - MSG / Strip Set: Enviro Standard Log - MSG / Produced on : February 13 2026 by OpenGround



The Mannik & Smith Group, Inc.
2365 Haggerty Road South, Canton, MI 48188
ph: (734) 397-3100 fax: (734) 397-3131
www.manniksmithgroup.com

BOREHOLE NUMBER SB03

Sheet 1 of 1

CLIENT City of Detroit
PROJECT NUMBER DETR0060_6037 Helen
DATE STARTED 01-22-2026 **COMPLETED** 01-22-2026
DRILLING CONTRACTOR MSG
DRILLING METHOD Direct Push
EQUIPMENT Geoprobe 7822DT **Operator** MW

PROJECT NAME Backfill Soil Sampling
PROJECT LOCATION 6037 Helen, Detroit, MI
POSITION
SURFACE ELEVATION **FINAL DEPTH** 6.0 ft
LOGGED BY SRK **CHECKED BY** PDH
REMARKS

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown, Gravelly SAND, Dry		
			1.0	Brown and Gray, CLAY, Some Gravel, Dry	0.0	
			2.5	Dark Brown to Brown, SAND, Little Gravel, Dry	0.0	
ES		83	3.5	Brown and Gray, CLAY, Little Gravel, Trace Concrete Debris, Dry	0.0	
5					0.0	
			6.0	Terminated at 6.00 ft.	0.0	- Collected Soil Sample 6037 SB03 (5-6') _20260122 at 10:47
10						

LEGEND:

- ▽ AT TIME OF DRILLING Not Encountered
▼ AT END OF DRILLING
▽ AFTER DRILLING

APPENDIX E

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS





right solutions.
right partner.

February 02, 2026

Ryan Montri
The Mannik & Smith Group, Inc.
2365 Haggerty Road South
Suite 100
Canton, MI 48188

Re: **6037 Helen**

Date Received: **01/23/2026**

Work Order: **HN2601090**

Dear Ryan,

Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Kathy Jones-Gronda

/S/ KATHY JONES-GRONDA

Project Manager



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen

Work Order: HN2601090
Date Received: 23-Jan-2026

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt

3 soil/solid samples were received for analysis at ALS Environmental on 23-Jan-2026. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

WorkOrder: HN2601090

Soil/solid results are reported on a dry-weight basis, corrected using laboratory-determined percent moisture content, unless explicitly identified otherwise.

Organics

EPA 8260D-FULL HN-5035A-10mL-S

Run ID: 3844018

The Continuing Calibration Verification did not meet acceptance criteria with low bias. Instrument sensitivity was verified as sufficient through the analysis of a low-level standard. The following non-detects are reported without qualification: Chloroethane (Ethyl chloride), Dichlorodifluoromethane (Freon-12), Methyl bromide (Bromomethane), n-Butyl alcohol (1-Butanol, n-Butanol), Trichlorofluoromethane (Fluorotrichloromethane, Freon 11), Vinyl chloride (Chloroethene)

Run ID: 3846360

The Continuing Calibration Verification did not meet acceptance criteria with high bias, however, the sample results were non-detect for the following analytes: Methyl bromide (Bromomethane), Methyl chloride (Chloromethane)
The Continuing Calibration Verification did not meet acceptance criteria with low bias. Instrument sensitivity was verified as sufficient through the analysis of a low-level standard. The following non-detects are reported without qualification:
Carbon disulfide

EPA 8270E-FULL HN-3546-S

Run ID: 3846362

The Continuing Calibration Verification did not meet acceptance criteria with low bias. Instrument sensitivity was verified as sufficient through the analysis of a low-level standard. The following non-detects are reported without qualification:
Benzaldehyde.

EPA 8081B-3546-S (High)

Run ID: 3846260

Samples HN2601090-001 through -003: One or more surrogate recoveries were below the lower control limits in the CCV. All sample surrogate recoveries were within the control limits; therefore, no qualification is needed: DCB

Metals

EPA 6020B-3050B-S

Run ID: 3849618

Samples HN2601090-001 through -003: The reporting limits are elevated for Cd, Se and Ag due to the dilutions needed for high concentrations of non-target analytes.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Results	Flag	MRL	Units	Method
1-Methylnaphthalene	34.4		19.1	µg/kg	EPA 8270E
2-Butanone (Methyl ethyl ketone, MEK)	718		237	µg/kg	EPA 8260D
2-Methylnaphthalene	36.3		19.1	µg/kg	EPA 8270E
3&4-Methylphenol	366		94.5	µg/kg	EPA 8270E
Acenaphthene	97.3		19.1	µg/kg	EPA 8270E
Acenaphthylene	51.5		19.1	µg/kg	EPA 8270E
Acetone	3060		119	µg/kg	EPA 8260D
Anthracene	324		19.1	µg/kg	EPA 8270E
Arsenic	5.86		3.31	mg/kg	EPA 6020B
Barium	87.1		3.31	mg/kg	EPA 6020B
Benzo(a)anthracene	1280		19.1	µg/kg	EPA 8270E
Benzo(a)pyrene	1250		19.1	µg/kg	EPA 8270E
Benzo(b)fluoranthene	1510		19.1	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	704		19.1	µg/kg	EPA 8270E
Benzo(k)fluoranthene	506		19.1	µg/kg	EPA 8270E
Carbazole	158		94.5	µg/kg	EPA 8270E
Chromium	12.0		3.31	mg/kg	EPA 6020B
Chrysene	1360		19.1	µg/kg	EPA 8270E
Copper	18.6		3.31	mg/kg	EPA 6020B
Dibenz(a,h) anthracene	149		94.5	µg/kg	EPA 8270E
Fluoranthene	2750		19.1	µg/kg	EPA 8270E
Fluorene	103		19.1	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	813		19.1	µg/kg	EPA 8270E
Lead	94.1		3.31	mg/kg	EPA 6020B
Mercury	0.0264		0.0200	mg/kg	EPA 7471B
Methyl acetate	503		297	µg/kg	EPA 8260D
Methylphenol, Total	366		94.5	µg/kg	EPA 8270E
Naphthalene	47.7		19.1	µg/kg	EPA 8270E
Percent Moisture	14.9		0.1	%	EPA 3550C
Phenanthrene	1580		19.1	µg/kg	EPA 8270E
Pyrene	3030		19.1	µg/kg	EPA 8270E
Zinc	71.4		6.63	mg/kg	EPA 6020B

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Results	Flag	MRL	Units	Method
1-Methylnaphthalene	130		18.6	µg/kg	EPA 8270E
2-Methylnaphthalene	134		18.6	µg/kg	EPA 8270E
Acenaphthene	318		18.6	µg/kg	EPA 8270E
Anthracene	918		18.6	µg/kg	EPA 8270E
Arsenic	8.40		3.27	mg/kg	EPA 6020B
Barium	77.5		3.27	mg/kg	EPA 6020B

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Results	Flag	MRL	Units	Method
Benzo(a)anthracene	1360		18.6	µg/kg	EPA 8270E
Benzo(a)pyrene	1120		18.6	µg/kg	EPA 8270E
Benzo(b)fluoranthene	1350		18.6	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	570		18.6	µg/kg	EPA 8270E
Benzo(k)fluoranthene	454		18.6	µg/kg	EPA 8270E
Carbazole	376		92.2	µg/kg	EPA 8270E
Chloride	23.1		11.9	mg/kg	EPA 9056A
Chromium	15.8		3.27	mg/kg	EPA 6020B
Chrysene	1330		18.6	µg/kg	EPA 8270E
Copper	17.0		3.27	mg/kg	EPA 6020B
Dibenz(a,h) anthracene	134		92.2	µg/kg	EPA 8270E
Dibenzofuran	287		92.2	µg/kg	EPA 8270E
Fluoranthene	3370		18.6	µg/kg	EPA 8270E
Fluorene	417		18.6	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	708		18.6	µg/kg	EPA 8270E
Lead	21.1		3.27	mg/kg	EPA 6020B
Mercury	0.0524		0.0219	mg/kg	EPA 7471B
Naphthalene	112		18.6	µg/kg	EPA 8270E
Percent Moisture	12.0		0.1	%	EPA 3550C
Phenanthrene	3500		18.6	µg/kg	EPA 8270E
Pyrene	3190		18.6	µg/kg	EPA 8270E
Zinc	50.9		6.54	mg/kg	EPA 6020B

CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Results	Flag	MRL	Units	Method
Arsenic	7.57		3.21	mg/kg	EPA 6020B
Barium	58.9		3.21	mg/kg	EPA 6020B
Chromium	15.8		3.21	mg/kg	EPA 6020B
Copper	14.2		3.21	mg/kg	EPA 6020B
Lead	7.49		3.21	mg/kg	EPA 6020B
Percent Moisture	12.2		0.1	%	EPA 3550C
Zinc	50.2		6.41	mg/kg	EPA 6020B

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Workorder: HN2601090

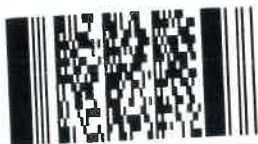
Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2601090-001	6037 SB01 (1-2')_20260122	SOIL/SOLID	01/22/26 10:21	01/23/26 06:00
HN2601090-002	6037 SB02 (3-4')_20260122	SOIL/SOLID	01/22/26 10:35	01/23/26 06:00
HN2601090-003	6037 SB03 (5-6')_20260122	SOIL/SOLID	01/22/26 10:47	01/23/26 06:00

ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 1



Telephone: +1 616 399 6070

ALS Project Manager:							Work Order #:											
Project Information							Parameter/Method Request for Analysis											
Project Name: 6037 Helen							A: VOCs (U.S. EPA Method 8260C (or Method 8260))											
Project Number: DETR0060							B: SVOCs (U.S. EPA Method 8270D (or Method 8270))											
Bill To Company: Mannik Smith Group							C: PCBs (U.S. EPA Method 8082)											
Invoice Attn:							D: Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)											
Address: 2365 South Haggerty Road							E: Chlorides (U.S. EPA Method 9056A)											
Address: 2365 South Haggerty Road							F: Pesticides (U.S. EPA Method 8081B (or Method 8081))											
City/State/Zip: Canton, Mi 48188							G: Herbicides (U.S. EPA Method 8151A (or Method 8151))											
Phone: 734-397-3100							H:											
Phone: 734-397-3100							I:											
Fax:							J:											
e-Mail Address: montri@mannaiksmithgroup.com							e-Mail Address: omitchell@mannaiksmithgroup.com											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	
1	6037 SB01 (1-2')_20260122	1/22/26	10:21	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
2	6037 SB02 (3-4')_20260122	1/22/26	10:35	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
3	6037 SB03 (5-6')_20260122	1/22/26	10:47	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Sampler(s): Please Print & Sign <i>Shannon Kaczmarek</i>							Shipment Method:			Required Turnaround Time: ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:				
Relinquished by: <i>Shannon Kaczmarek</i>		Date: 1/22/26	Time: 1408	Received by: <i>N. J. [Signature]</i>		1/22/26 1555		Notes: Rec'd 1/23/26 0600 QZOL										
Relinquished by: <i>N. J. [Signature]</i>		Date: 1/22	Time: 1700	Received by (Laboratory): <i>ES</i>		1/22 1700		Cooler Temp. 12.6 3.6°C										
Logged by (Laboratory): <i>DES</i>		Date: 1/23/26	Time: 0900	Checked by (Laboratory):				QC Package: (Check Box Below)										
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035							Level II: Standard QC				TRRP-Checklist							
							Level III: Std QC + Raw Data				TRRP Level IV							
							Level IV: SW846 CLP-Like											
							Other:											

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
Signature denotes acceptance of ALS Group USA, Corp. Terms and Conditions - Please click the link below for detailed Terms & Conditions:
<https://www.alsglobal.com/ALSGroupUSACorpTC>
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ALS Holland
3352 128th Ave., Holland MI 49424

ALS Holland Sample Receiving Checklist

Received by: Diane F. Shaw
Date/Time: 1/23/26 0600
Carrier Name: QS
Shipping container/cooler in good condition? (Yes) / No / Not Present
Custody seals intact on shipping container/cooler? Yes / No (Not Present)
Custody seals intact on sample bottles? Yes / No (Not Present)
Chain of Custody present? (Yes) / No
COC signed when relinquished and received? (Yes) / No
COC agrees with sample labels? (Yes) / No
Samples in proper container/bottle? (Yes) / No
Sample containers intact? (Yes) / No
Sufficient sample volume for indicated test? (Yes) / No
All samples received within holding time? (Yes) / No
Container/Temp Blank temperature in compliance? (Yes) / No
Temperature(s) (°C): 3.6/3.6°c
Thermometer(s): 1R6
Sample(s) received on ice? (Yes) / No
Matrix/Matrices: Soil
Cooler(s)/Kit(s): 1
Date/Time sample(s) sent to storage: 1/23/26 0945
Water – VOA vials have zero headspace? Yes / No (No Vials)
Water – pH acceptable upon receipt? Yes / No (N/A)
pH strip lot #: _____ < 2 _____ > 12 _____ Other _____
pH adjusted (note adjustments below)? Yes / No (N/A)
pH adjusted by: _____
Login Notes: _____

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Method criteria
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
NC	Not Calculated
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

LABORATORY CERTIFICATIONS¹

Agency	Type	ID	Issued	Expires
Colorado	UST		07/01/2025	06/30/2026
Connecticut	Drinking Water (Secondary)	PH-0155	12/10/2024	12/31/2026
Florida	NELAP (Primary)	E871106	07/01/2025	06/30/2026
Illinois	NELAP (Secondary)	200076	12/08/2025	12/31/2026
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/01/2025	09/01/2027
Kansas	NELAP (Secondary)	E-10411	08/01/2025	07/31/2026
Kentucky	Waste Water	KY98004	1/1/2026	12/31/2026
Kentucky	UST	120474	07/07/2025	06/30/2026
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/10/2025	12/31/2026
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2025	6/30/2026
New York	NELAP (Secondary)	12128	04/01/2025	04/01/2026
North Dakota	State Specific	R-192	11/18/2024	06/30/2025
Ohio	Drinking Water (Secondary)	87783	06/26/2025	6/30/2026
Pennsylvania	NELAP (Secondary)	68-03827	11/25/2025	07/31/2026
Texas	NELAP (Secondary)	T104704494	02/01/2026	01/31/2027
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572R1	01/28/2026	03/03/2029
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/08/2025	08/31/2026

1 – Scope available upon request

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen

Work Order: HN2601090

Sample Name: 6037 SB01 (1-2')_20260122
Laboratory Code: HN2601090-001
Sample Matrix: SOIL/SOLID

Date Collected: 01/22/26
Date Received: 01/23/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		001-AC	2427668		3838195	Nicole Maleski
EPA 6020B	EPA 3050B	001-AC	2433992	Weston Kotecki	3849618	Denise Coffey
EPA 7471B	Method	001-AC	2432807	Maxx Richey	3848639	Maxx Richey
EPA 8081B	EPA 3546	001-AC	2428536	Willow Julien	3846260	Quinn Garner
EPA 8082A	EPA 3546	001-AC	2428534	Rachel Plantinga	3844223	Nathaniel Dietlin
EPA 8151A	Method	001-AC	2435703	Rachel Plantinga	3854703	Kathy Malmyga
EPA 8260D	EPA 5035A	001-AA	2428124	Jonathan Vazquez	3846360	John Garvale
EPA 8270E	EPA 3546	001-AC	2429903	Mya Harmer	3846362	Sam Marcotte
EPA 9056A	EPA 9056A	001-AC	2427890	Kelsey Beaudette	3839848	Jessica Bacon

Sample Name: 6037 SB02 (3-4')_20260122
Laboratory Code: HN2601090-002
Sample Matrix: SOIL/SOLID

Date Collected: 01/22/26
Date Received: 01/23/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		002-AC	2427668		3838195	Nicole Maleski
EPA 6020B	EPA 3050B	002-AC	2433992	Weston Kotecki	3849618	Denise Coffey
EPA 7471B	Method	002-AC	2432807	Maxx Richey	3848639	Maxx Richey
EPA 8081B	EPA 3546	002-AC	2428536	Willow Julien	3846260	Quinn Garner
EPA 8082A	EPA 3546	002-AC	2428534	Rachel Plantinga	3844223	Nathaniel Dietlin
EPA 8151A	Method	002-AC	2435703	Rachel Plantinga	3854703	Kathy Malmyga
EPA 8260D	EPA 5035A	002-AA	2428124	Jonathan Vazquez	3844018	John Garvale
EPA 8270E	EPA 3546	002-AC	2429903	Mya Harmer	3846362	Sam Marcotte
EPA 9056A	EPA 9056A	002-AC	2427890	Kelsey Beaudette	3839848	Jessica Bacon

Sample Name: 6037 SB03 (5-6')_20260122
Laboratory Code: HN2601090-003
Sample Matrix: SOIL/SOLID

Date Collected: 01/22/26
Date Received: 01/23/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		003-AC	2427668		3838195	Nicole Maleski

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen

Work Order: HN2601090

Sample Name: 6037 SB03 (5-6')_20260122
Laboratory Code: HN2601090-003
Sample Matrix: SOIL/SOLID

Date Collected: 01/22/26
Date Received: 01/23/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	EPA 3050B	003-AC	2433992	Weston Kotecki	3849618	Denise Coffey
EPA 7471B	Method	003-AC	2432807	Maxx Richey	3848639	Maxx Richey
EPA 8081B	EPA 3546	003-AC	2428536	Willow Julien	3846260	Quinn Garner
EPA 8082A	EPA 3546	003-AC	2428534	Rachel Plantinga	3844223	Nathaniel Dietlin
EPA 8151A	Method	003-AC	2435703	Rachel Plantinga	3854703	Kathy Malmyga
EPA 8260D	EPA 5035A	003-AA	2428124	Jonathan Vazquez	3844018	John Garvale
EPA 8270E	EPA 3546	003-AC	2429903	Mya Harmer	3846362	Sam Marcotte
EPA 9056A	EPA 9056A	003-AC	2427890	Kelsey Beaudette	3839848	Jessica Bacon

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.51	U	µg/kg	13.6	1	01/31/26 14:37	01/30/26 10:25
2,4,5-TP (Silvex)	EPA 8151A	<4.47	U	µg/kg	13.6	1	01/31/26 14:37	01/30/26 10:25
2,4-D	EPA 8151A	<7.28	U	µg/kg	27.3	1	01/31/26 14:37	01/30/26 10:25
Surr: DCAA	EPA 8151A	76.0		%REC	10-116	1	01/31/26 14:37	01/30/26 10:25
General Chemistry Parameters								
Percent Moisture	EPA 3550C	14.9		%	0.1	1	01/23/26 10:55	NA
Chloride	EPA 9056A	<3.85	U	mg/kg	12.4	1	01/24/26 11:30	01/23/26 12:25
Metals								
Arsenic	EPA 6020B	5.86		mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Barium	EPA 6020B	87.1		mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Cadmium	EPA 6020B	<0.199	U	mg/kg	1.33	10	01/29/26 16:31	01/29/26 09:03
Chromium	EPA 6020B	12.0		mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Copper	EPA 6020B	18.6		mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Lead	EPA 6020B	94.1		mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Selenium	EPA 6020B	<3.05	U	mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Silver	EPA 6020B	<0.437	U	mg/kg	3.31	10	01/29/26 16:31	01/29/26 09:03
Zinc	EPA 6020B	71.4		mg/kg	6.63	10	01/29/26 16:31	01/29/26 09:03
Mercury	EPA 7471B	0.0264		mg/kg	0.0200	1	01/29/26 12:21	01/28/26 11:04
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<16.2	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
4,4'-DDE	EPA 8081B	<16.7	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
4,4'-DDT	EPA 8081B	<16.8	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Aldrin	EPA 8081B	<16.4	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
alpha-BHC	EPA 8081B	<16.6	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
beta-BHC	EPA 8081B	<16.6	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Chlordane, Technical	EPA 8081B	<25.1	U	µg/kg	63.2	1	01/27/26 15:27	01/23/26 18:51
cis-Chlordane	EPA 8081B	<16.9	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
delta-BHC	EPA 8081B	<16.5	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Dieldrin	EPA 8081B	<17.7	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<17.0	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Endosulfan II	EPA 8081B	<16.7	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Endosulfan sulfate	EPA 8081B	<15.5	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Endrin	EPA 8081B	<20.5	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Endrin aldehyde	EPA 8081B	<16.0	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Endrin ketone	EPA 8081B	<15.4	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
gamma-BHC (Lindane)	EPA 8081B	<16.6	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Heptachlor	EPA 8081B	<16.3	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Heptachlor epoxide	EPA 8081B	<16.7	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Methoxychlor	EPA 8081B	<16.9	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
Toxaphene	EPA 8081B	<27.3	U	µg/kg	152	1	01/27/26 15:27	01/23/26 18:51
trans-Chlordane	EPA 8081B	<16.8	U	µg/kg	25.3	1	01/27/26 15:27	01/23/26 18:51
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	82.9		%REC	53-151	1	01/27/26 15:27	01/23/26 18:51
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	77.9		%REC	67-127	1	01/27/26 15:27	01/23/26 18:51

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<57.8	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1221	EPA 8082A	<57.8	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1232	EPA 8082A	<57.8	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1242	EPA 8082A	<57.8	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1248	EPA 8082A	<57.8	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1254	EPA 8082A	<47.1	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1260	EPA 8082A	<47.1	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1262	EPA 8082A	<47.1	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Aroclor 1268	EPA 8082A	<47.1	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
Total PCB	EPA 8082A	<47.1	U	µg/kg	169	1	01/26/26 23:32	01/23/26 18:39
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	119		%REC	54-146	1	01/26/26 23:32	01/23/26 18:39
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	92.7		%REC	58-140	1	01/26/26 23:32	01/23/26 18:39

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<15.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<22.0	U	µg/kg	953	1	01/27/26 23:23	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<68.4	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
1-Methylnaphthalene	EPA 8270E	34.4		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<22.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,3,4,6-Tetrachlorophenol	EPA 8270E	<69.9	U	µg/kg	191	1	01/27/26 23:23	01/26/26 10:04
2,4,5-Trichlorophenol	EPA 8270E	<56.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,4,6-Trichlorophenol	EPA 8270E	<25.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,4-Dichlorophenol	EPA 8270E	<51.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,4-Dimethylphenol	EPA 8270E	<49.1	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,4-Dinitrophenol	EPA 8270E	<698	U	µg/kg	953	1	01/27/26 23:23	01/26/26 10:04
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<62.0	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<24.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2-Chloronaphthalene	EPA 8270E	<13.3	U	µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
2-Chlorophenol	EPA 8270E	<62.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<79.7	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2-Methylnaphthalene	EPA 8270E	36.3		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
2-Methylphenol (o-Cresol)	EPA 8270E	<25.8	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2-Nitroaniline	EPA 8270E	<53.0	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
2-Nitrophenol	EPA 8270E	<27.2	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
3&4-Methylphenol	EPA 8270E	366		µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
3,3'-Dichlorobenzidine	EPA 8270E	<44.5	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
3-Nitroaniline	EPA 8270E	<55.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<52.3	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
4-Chloro-3-methylphenol	EPA 8270E	<27.2	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
4-Chloroaniline	EPA 8270E	<48.5	U	µg/kg	191	1	01/27/26 23:23	01/26/26 10:04
4-Chlorophenyl phenylether	EPA 8270E	<26.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
4-Nitroaniline	EPA 8270E	<148	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
4-Nitrophenol	EPA 8270E	<224	U	µg/kg	953	1	01/27/26 23:23	01/26/26 10:04
Acenaphthene	EPA 8270E	97.3		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	51.5		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Acetophenone	EPA 8270E	<14.9	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Anthracene	EPA 8270E	324		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Atrazine	EPA 8270E	<55.9	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Benzaldehyde	EPA 8270E	<147	U	µg/kg	191	1	01/27/26 23:23	01/26/26 10:04
Benzo(a)anthracene	EPA 8270E	1280		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Benzo(a)pyrene	EPA 8270E	1250		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Benzo(b)fluoranthene	EPA 8270E	1510		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Benzo(g,h,i)perylene	EPA 8270E	704		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Benzo(k)fluoranthene	EPA 8270E	506		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
bis(2-Chloroethoxy) methane	EPA 8270E	<60.4	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
bis(2-Chloroethyl) ether	EPA 8270E	<27.0	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Butyl benzyl phthalate	EPA 8270E	<119	U	µg/kg	191	1	01/27/26 23:23	01/26/26 10:04
Caprolactam	EPA 8270E	<86.1	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Carbazole	EPA 8270E	158		µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Chrysene	EPA 8270E	1360		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<78.9	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Dibenz(a,h) anthracene	EPA 8270E	149		µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Dibenzofuran	EPA 8270E	<14.0	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Diethyl phthalate	EPA 8270E	<32.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Dimethyl phthalate	EPA 8270E	<18.6	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Fluoranthene	EPA 8270E	2750		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Fluorene	EPA 8270E	103		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Hexachlorobenzene	EPA 8270E	<27.8	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Hexachlorobutadiene	EPA 8270E	<22.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Hexachlorocyclopentadiene	EPA 8270E	<90.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Hexachloroethane	EPA 8270E	<39.5	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Indeno(1,2,3-cd) pyrene	EPA 8270E	813		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Isophorone	EPA 8270E	<18.6	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
Methylphenol, Total	EPA 8270E	366		µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	47.7		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Nitrobenzene	EPA 8270E	<32.1	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
n-Nitrosodi-n-propylamine	EPA 8270E	<15.7	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
N-Nitrosodiphenylamine	EPA 8270E	<55.3	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Pentachlorophenol	EPA 8270E	<75.8	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Phenanthrene	EPA 8270E	1580		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Phenol	EPA 8270E	<47.9	U	µg/kg	94.5	1	01/27/26 23:23	01/26/26 10:04
Pyrene	EPA 8270E	3030		µg/kg	19.1	1	01/27/26 23:23	01/26/26 10:04
Pyridine	EPA 8270E	<188	U	µg/kg	477	1	01/27/26 23:23	01/26/26 10:04
Surr: 2,4,6-Tribromophenol	EPA 8270E	81.5		%REC	48-94	1	01/27/26 23:23	01/26/26 10:04
Surr: 2-Fluorobiphenyl	EPA 8270E	75.0		%REC	50-103	1	01/27/26 23:23	01/26/26 10:04
Surr: 2-Fluorophenol	EPA 8270E	75.6		%REC	43-105	1	01/27/26 23:23	01/26/26 10:04
Surr: 4-Terphenyl-d14	EPA 8270E	93.8		%REC	55-111	1	01/27/26 23:23	01/26/26 10:04
Surr: Nitrobenzene-d5	EPA 8270E	86.3		%REC	47-100	1	01/27/26 23:23	01/26/26 10:04
Surr: Phenol-d6	EPA 8270E	83.5		%REC	49-110	1	01/27/26 23:23	01/26/26 10:04

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<16.2	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<15.7	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<22.6	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,1,2-Trichloroethane	EPA 8260D	<15.1	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,1-Dichloroethane	EPA 8260D	<13.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,1-Dichloroethylene	EPA 8260D	<11.5	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,2,3-Trichlorobenzene	EPA 8260D	<42.7	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
1,2,3-Trichloropropane	EPA 8260D	<14.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,2,4-Trichlorobenzene	EPA 8260D	<40.4	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
1,2,4-Trimethylbenzene	EPA 8260D	<26.1	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<32.8	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<20.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<13.5	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<20.9	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
1,2-Dichloropropane	EPA 8260D	<26.2	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,3,5-Trimethylbenzene	EPA 8260D	<25.2	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<24.6	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
1,3-Dichloropropene	EPA 8260D	<19.9	U	µg/kg	71.2	1	01/27/26 18:54	01/23/26 13:29
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<28.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	718		µg/kg	237	1	01/27/26 18:54	01/23/26 13:29
2-Hexanone	EPA 8260D	<17.7	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<33.2	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Acetone	EPA 8260D	3060		µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
Benzene	EPA 8260D	<17.2	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Bromochloromethane	EPA 8260D	<18.1	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Bromodichloromethane	EPA 8260D	<19.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Bromoform	EPA 8260D	<15.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Carbon disulfide	EPA 8260D	<18.4	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Carbon tetrachloride	EPA 8260D	<13.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Chlorobenzene	EPA 8260D	<11.8	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Chlorodibromomethane	EPA 8260D	<20.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Chloroethane (Ethyl chloride)	EPA 8260D	<99.7	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
Chloroform	EPA 8260D	<13.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
cis-1,2-Dichloroethylene	EPA 8260D	<22.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
cis-1,3-Dichloropropene	EPA 8260D	<26.8	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Cyclohexane	EPA 8260D	<27.3	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<43.1	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
Ethylbenzene	EPA 8260D	<25.3	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Isopropylbenzene	EPA 8260D	<22.5	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
m+p-Xylene	EPA 8260D	<47.5	U	µg/kg	71.2	1	01/27/26 18:54	01/23/26 13:29
Methyl acetate	EPA 8260D	503		µg/kg	297	1	01/27/26 18:54	01/23/26 13:29
Methyl bromide (Bromomethane)	EPA 8260D	<68.1	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:21
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB01 (1-2')_20260122

Lab ID: HN2601090-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<97.3	U	µg/kg	119	1	01/27/26 18:54	01/23/26 13:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<26.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Methylcyclohexane	EPA 8260D	<13.6	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Methylene chloride (Dichloromethane)	EPA 8260D	<94.5	U	µg/kg	297	1	01/27/26 18:54	01/23/26 13:29
o-Xylene	EPA 8260D	<13.8	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Styrene	EPA 8260D	<14.1	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<21.5	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Toluene	EPA 8260D	<29.4	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Total Xylene	EPA 8260D	<13.8	U	µg/kg	107	1	01/27/26 18:54	01/23/26 13:29
trans-1,2-Dichloroethylene	EPA 8260D	<29.4	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
trans-1,3-Dichloropropylene	EPA 8260D	<19.9	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<16.0	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<18.2	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Vinyl chloride (Chloroethene)	EPA 8260D	<23.7	U	µg/kg	35.6	1	01/27/26 18:54	01/23/26 13:29
Surr: 1,2-Dichloroethane-d4	EPA 8260D	109		%REC	80-120	1	01/27/26 18:54	01/23/26 13:29
Surr: 4-Bromofluorobenzene	EPA 8260D	100		%REC	80-120	1	01/27/26 18:54	01/23/26 13:29
Surr: Dibromofluoromethane	EPA 8260D	94.0		%REC	72-120	1	01/27/26 18:54	01/23/26 13:29
Surr: Toluene-d8	EPA 8260D	98.0		%REC	80-120	1	01/27/26 18:54	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<1.02	U	µg/kg	5.56	1	01/31/26 14:50	01/30/26 10:25
2,4,5-TP (Silvex)	EPA 8151A	<1.82	U	µg/kg	5.56	1	01/31/26 14:50	01/30/26 10:25
2,4-D	EPA 8151A	<2.97	U	µg/kg	11.1	1	01/31/26 14:50	01/30/26 10:25
Surr: DCAA	EPA 8151A	78.0		%REC	10-116	1	01/31/26 14:50	01/30/26 10:25
General Chemistry Parameters								
Percent Moisture	EPA 3550C	12.0		%	0.1	1	01/23/26 10:55	NA
Chloride	EPA 9056A	23.1		mg/kg	11.9	1	01/24/26 11:54	01/23/26 12:25
Metals								
Arsenic	EPA 6020B	8.40		mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Barium	EPA 6020B	77.5		mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Cadmium	EPA 6020B	<0.196	U	mg/kg	1.31	10	01/29/26 16:36	01/29/26 09:03
Chromium	EPA 6020B	15.8		mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Copper	EPA 6020B	17.0		mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Lead	EPA 6020B	21.1		mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Selenium	EPA 6020B	<3.01	U	mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Silver	EPA 6020B	<0.432	U	mg/kg	3.27	10	01/29/26 16:36	01/29/26 09:03
Zinc	EPA 6020B	50.9		mg/kg	6.54	10	01/29/26 16:36	01/29/26 09:03
Mercury	EPA 7471B	0.0524		mg/kg	0.0219	1	01/29/26 12:23	01/28/26 11:04
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<17.8	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
4,4'-DDE	EPA 8081B	<18.3	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
4,4'-DDT	EPA 8081B	<18.5	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Aldrin	EPA 8081B	<18.1	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
alpha-BHC	EPA 8081B	<18.3	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
beta-BHC	EPA 8081B	<18.3	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Chlordane, Technical	EPA 8081B	<27.6	U	µg/kg	69.5	1	01/27/26 15:42	01/23/26 18:51
cis-Chlordane	EPA 8081B	<18.6	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
delta-BHC	EPA 8081B	<18.2	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Dieldrin	EPA 8081B	<19.5	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<18.7	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Endosulfan II	EPA 8081B	<18.4	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Endosulfan sulfate	EPA 8081B	<17.1	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Endrin	EPA 8081B	<22.5	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Endrin aldehyde	EPA 8081B	<17.6	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Endrin ketone	EPA 8081B	<16.9	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
gamma-BHC (Lindane)	EPA 8081B	<18.3	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Heptachlor	EPA 8081B	<17.9	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Heptachlor epoxide	EPA 8081B	<18.4	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Methoxychlor	EPA 8081B	<18.6	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
Toxaphene	EPA 8081B	<30.0	U	µg/kg	167	1	01/27/26 15:42	01/23/26 18:51
trans-Chlordane	EPA 8081B	<18.5	U	µg/kg	27.8	1	01/27/26 15:42	01/23/26 18:51
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	79.0		%REC	53-151	1	01/27/26 15:42	01/23/26 18:51
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	75.1		%REC	67-127	1	01/27/26 15:42	01/23/26 18:51

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<63.6	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1221	EPA 8082A	<63.6	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1232	EPA 8082A	<63.6	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1242	EPA 8082A	<63.6	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1248	EPA 8082A	<63.6	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1254	EPA 8082A	<51.8	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1260	EPA 8082A	<51.8	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1262	EPA 8082A	<51.8	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Aroclor 1268	EPA 8082A	<51.8	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
Total PCB	EPA 8082A	<51.8	U	µg/kg	185	1	01/26/26 23:44	01/23/26 18:39
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	111		%REC	54-146	1	01/26/26 23:44	01/23/26 18:39
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	88.8		%REC	58-140	1	01/26/26 23:44	01/23/26 18:39

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<15.1	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<21.5	U	µg/kg	930	1	01/27/26 23:51	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<66.8	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
1-Methylnaphthalene	EPA 8270E	130		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<21.8	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,3,4,6-Tetrachlorophenol	EPA 8270E	<68.2	U	µg/kg	186	1	01/27/26 23:51	01/26/26 10:04
2,4,5-Trichlorophenol	EPA 8270E	<55.2	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,4,6-Trichlorophenol	EPA 8270E	<24.8	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,4-Dichlorophenol	EPA 8270E	<50.1	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,4-Dimethylphenol	EPA 8270E	<47.9	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,4-Dinitrophenol	EPA 8270E	<681	U	µg/kg	930	1	01/27/26 23:51	01/26/26 10:04
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<60.5	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<23.8	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2-Chloronaphthalene	EPA 8270E	<13.0	U	µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
2-Chlorophenol	EPA 8270E	<60.9	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<77.8	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2-Methylnaphthalene	EPA 8270E	134		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
2-Methylphenol (o-Cresol)	EPA 8270E	<25.2	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2-Nitroaniline	EPA 8270E	<51.7	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
2-Nitrophenol	EPA 8270E	<26.5	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
3&4-Methylphenol	EPA 8270E	<50.7	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
3,3'-Dichlorobenzidine	EPA 8270E	<43.5	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
3-Nitroaniline	EPA 8270E	<54.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<51.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
4-Chloro-3-methylphenol	EPA 8270E	<26.5	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
4-Chloroaniline	EPA 8270E	<47.3	U	µg/kg	186	1	01/27/26 23:51	01/26/26 10:04
4-Chlorophenyl phenylether	EPA 8270E	<25.7	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
4-Nitroaniline	EPA 8270E	<144	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
4-Nitrophenol	EPA 8270E	<218	U	µg/kg	930	1	01/27/26 23:51	01/26/26 10:04
Acenaphthene	EPA 8270E	318		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<16.1	U	µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Acetophenone	EPA 8270E	<14.6	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Anthracene	EPA 8270E	918		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Atrazine	EPA 8270E	<54.5	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Benzaldehyde	EPA 8270E	<143	U	µg/kg	186	1	01/27/26 23:51	01/26/26 10:04
Benzo(a)anthracene	EPA 8270E	1360		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Benzo(a)pyrene	EPA 8270E	1120		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Benzo(b)fluoranthene	EPA 8270E	1350		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Benzo(g,h,i)perylene	EPA 8270E	570		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Benzo(k)fluoranthene	EPA 8270E	454		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
bis(2-Chloroethoxy) methane	EPA 8270E	<59.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
bis(2-Chloroethyl) ether	EPA 8270E	<26.4	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Butyl benzyl phthalate	EPA 8270E	<117	U	µg/kg	186	1	01/27/26 23:51	01/26/26 10:04
Caprolactam	EPA 8270E	<84.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Carbazole	EPA 8270E	376		µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Chrysene	EPA 8270E	1330		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<77.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Dibenz(a,h) anthracene	EPA 8270E	134		µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Dibenzofuran	EPA 8270E	287		µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Diethyl phthalate	EPA 8270E	<31.7	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Dimethyl phthalate	EPA 8270E	<18.2	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Fluoranthene	EPA 8270E	3370		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Fluorene	EPA 8270E	417		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Hexachlorobenzene	EPA 8270E	<27.1	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Hexachlorobutadiene	EPA 8270E	<21.9	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Hexachlorocyclopentadiene	EPA 8270E	<88.3	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Hexachloroethane	EPA 8270E	<38.5	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Indeno(1,2,3-cd) pyrene	EPA 8270E	708		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Isophorone	EPA 8270E	<18.2	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
Methylphenol, Total	EPA 8270E	<25.2	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	112		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Nitrobenzene	EPA 8270E	<31.3	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
n-Nitrosodi-n-propylamine	EPA 8270E	<15.4	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
N-Nitrosodiphenylamine	EPA 8270E	<53.9	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Pentachlorophenol	EPA 8270E	<74.0	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Phenanthrene	EPA 8270E	3500		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Phenol	EPA 8270E	<46.8	U	µg/kg	92.2	1	01/27/26 23:51	01/26/26 10:04
Pyrene	EPA 8270E	3190		µg/kg	18.6	1	01/27/26 23:51	01/26/26 10:04
Pyridine	EPA 8270E	<183	U	µg/kg	466	1	01/27/26 23:51	01/26/26 10:04
Surr: 2,4,6-Tribromophenol	EPA 8270E	79.4		%REC	48-94	1	01/27/26 23:51	01/26/26 10:04
Surr: 2-Fluorobiphenyl	EPA 8270E	69.7		%REC	50-103	1	01/27/26 23:51	01/26/26 10:04
Surr: 2-Fluorophenol	EPA 8270E	72.2		%REC	43-105	1	01/27/26 23:51	01/26/26 10:04
Surr: 4-Terphenyl-d14	EPA 8270E	94.2		%REC	55-111	1	01/27/26 23:51	01/26/26 10:04
Surr: Nitrobenzene-d5	EPA 8270E	80.0		%REC	47-100	1	01/27/26 23:51	01/26/26 10:04
Surr: Phenol-d6	EPA 8270E	76.8		%REC	49-110	1	01/27/26 23:51	01/26/26 10:04

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.0	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<16.6	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<23.8	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,1,2-Trichloroethane	EPA 8260D	<15.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,1-Dichloroethane	EPA 8260D	<13.7	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,1-Dichloroethylene	EPA 8260D	<12.2	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,2,3-Trichlorobenzene	EPA 8260D	<45.0	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
1,2,3-Trichloropropane	EPA 8260D	<15.7	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,2,4-Trichlorobenzene	EPA 8260D	<42.5	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
1,2,4-Trimethylbenzene	EPA 8260D	<27.5	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<34.5	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<22.1	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.2	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<22.1	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
1,2-Dichloropropane	EPA 8260D	<27.6	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,3,5-Trimethylbenzene	EPA 8260D	<26.5	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<25.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
1,3-Dichloropropene	EPA 8260D	<20.9	U	µg/kg	75.0	1	01/27/26 02:50	01/23/26 13:29
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<30.5	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<89.3	U	µg/kg	250	1	01/27/26 02:50	01/23/26 13:29
2-Hexanone	EPA 8260D	<18.6	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<35.0	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Acetone	EPA 8260D	<111	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
Benzene	EPA 8260D	<18.2	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Bromochloromethane	EPA 8260D	<19.1	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Bromodichloromethane	EPA 8260D	<21.0	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Bromoform	EPA 8260D	<15.8	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Carbon disulfide	EPA 8260D	<19.4	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Carbon tetrachloride	EPA 8260D	<14.7	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Chlorobenzene	EPA 8260D	<12.5	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Chlorodibromomethane	EPA 8260D	<21.1	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Chloroethane (Ethyl chloride)	EPA 8260D	<105	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
Chloroform	EPA 8260D	<13.7	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
cis-1,2-Dichloroethylene	EPA 8260D	<24.1	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
cis-1,3-Dichloropropene	EPA 8260D	<28.3	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Cyclohexane	EPA 8260D	<28.7	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<45.4	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
Ethylbenzene	EPA 8260D	<26.6	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Isopropylbenzene	EPA 8260D	<23.7	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
m+p-Xylene	EPA 8260D	<50.0	U	µg/kg	75.0	1	01/27/26 02:50	01/23/26 13:29
Methyl acetate	EPA 8260D	<44.9	U	µg/kg	313	1	01/27/26 02:50	01/23/26 13:29
Methyl bromide (Bromomethane)	EPA 8260D	<71.7	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:35
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB02 (3-4')_20260122

Lab ID: HN2601090-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<103	U	µg/kg	125	1	01/27/26 02:50	01/23/26 13:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<27.4	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Methylcyclohexane	EPA 8260D	<14.3	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Methylene chloride (Dichloromethane)	EPA 8260D	<99.5	U	µg/kg	313	1	01/27/26 02:50	01/23/26 13:29
o-Xylene	EPA 8260D	<14.5	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Styrene	EPA 8260D	<14.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<22.6	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Toluene	EPA 8260D	<30.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Total Xylene	EPA 8260D	<14.5	U	µg/kg	113	1	01/27/26 02:50	01/23/26 13:29
trans-1,2-Dichloroethylene	EPA 8260D	<30.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
trans-1,3-Dichloropropylene	EPA 8260D	<20.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<16.8	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<19.2	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
Vinyl chloride (Chloroethene)	EPA 8260D	<24.9	U	µg/kg	37.5	1	01/27/26 02:50	01/23/26 13:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	102		%REC	80-120	1	01/27/26 02:50	01/23/26 13:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	104		%REC	80-120	1	01/27/26 02:50	01/23/26 13:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	101		%REC	72-120	1	01/27/26 02:50	01/23/26 13:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	97.8		%REC	80-120	1	01/27/26 02:50	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:47
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.51	U	µg/kg	13.6	1	01/31/26 15:03	01/30/26 10:25
2,4,5-TP (Silvex)	EPA 8151A	<4.47	U	µg/kg	13.6	1	01/31/26 15:03	01/30/26 10:25
2,4-D	EPA 8151A	<7.27	U	µg/kg	27.2	1	01/31/26 15:03	01/30/26 10:25
Surr: DCAA	EPA 8151A	14.0		%REC	10-116	1	01/31/26 15:03	01/30/26 10:25
General Chemistry Parameters								
Percent Moisture	EPA 3550C	12.2		%	0.1	1	01/23/26 10:55	NA
Chloride	EPA 9056A	<3.49	U	mg/kg	11.2	1	01/24/26 12:02	01/23/26 12:25
Metals								
Arsenic	EPA 6020B	7.57		mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Barium	EPA 6020B	58.9		mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Cadmium	EPA 6020B	<0.192	U	mg/kg	1.28	10	01/29/26 16:37	01/29/26 09:03
Chromium	EPA 6020B	15.8		mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Copper	EPA 6020B	14.2		mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Lead	EPA 6020B	7.49		mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Selenium	EPA 6020B	<2.95	U	mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Silver	EPA 6020B	<0.423	U	mg/kg	3.21	10	01/29/26 16:37	01/29/26 09:03
Zinc	EPA 6020B	50.2		mg/kg	6.41	10	01/29/26 16:37	01/29/26 09:03
Mercury	EPA 7471B	<0.0148	U	mg/kg	0.0218	1	01/29/26 12:25	01/28/26 11:04
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<17.8	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
4,4'-DDE	EPA 8081B	<18.4	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
4,4'-DDT	EPA 8081B	<18.5	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Aldrin	EPA 8081B	<18.1	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
alpha-BHC	EPA 8081B	<18.3	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
beta-BHC	EPA 8081B	<18.3	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Chlordane, Technical	EPA 8081B	<27.6	U	µg/kg	69.7	1	01/27/26 15:57	01/23/26 18:51
cis-Chlordane	EPA 8081B	<18.6	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
delta-BHC	EPA 8081B	<18.2	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Dieldrin	EPA 8081B	<19.5	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:47
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<18.7	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Endosulfan II	EPA 8081B	<18.5	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Endosulfan sulfate	EPA 8081B	<17.1	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Endrin	EPA 8081B	<22.5	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Endrin aldehyde	EPA 8081B	<17.7	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Endrin ketone	EPA 8081B	<17.0	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
gamma-BHC (Lindane)	EPA 8081B	<18.3	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Heptachlor	EPA 8081B	<18.0	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Heptachlor epoxide	EPA 8081B	<18.4	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Methoxychlor	EPA 8081B	<18.6	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
Toxaphene	EPA 8081B	<30.1	U	µg/kg	167	1	01/27/26 15:57	01/23/26 18:51
trans-Chlordane	EPA 8081B	<18.5	U	µg/kg	27.9	1	01/27/26 15:57	01/23/26 18:51
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	96.4		%REC	53-151	1	01/27/26 15:57	01/23/26 18:51
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	79.9		%REC	67-127	1	01/27/26 15:57	01/23/26 18:51

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<63.7	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1221	EPA 8082A	<63.7	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1232	EPA 8082A	<63.7	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1242	EPA 8082A	<63.7	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1248	EPA 8082A	<63.7	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1254	EPA 8082A	<51.9	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1260	EPA 8082A	<51.9	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1262	EPA 8082A	<51.9	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Aroclor 1268	EPA 8082A	<51.9	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
Total PCB	EPA 8082A	<51.9	U	µg/kg	186	1	01/26/26 23:55	01/23/26 18:39
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	111		%REC	54-146	1	01/26/26 23:55	01/23/26 18:39
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	95.9		%REC	58-140	1	01/26/26 23:55	01/23/26 18:39

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<15.0	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<21.3	U	µg/kg	922	1	01/28/26 00:19	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:47
Date Received: 01/23/26 06:00

CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<66.2	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
1-Methylnaphthalene	EPA 8270E	<13.3	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<21.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,3,4,6-Tetrachlorophenol	EPA 8270E	<67.6	U	µg/kg	185	1	01/28/26 00:19	01/26/26 10:04
2,4,5-Trichlorophenol	EPA 8270E	<54.7	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,4,6-Trichlorophenol	EPA 8270E	<24.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,4-Dichlorophenol	EPA 8270E	<49.7	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,4-Dimethylphenol	EPA 8270E	<47.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,4-Dinitrophenol	EPA 8270E	<675	U	µg/kg	922	1	01/28/26 00:19	01/26/26 10:04
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<60.0	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<23.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2-Chloronaphthalene	EPA 8270E	<12.9	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
2-Chlorophenol	EPA 8270E	<60.4	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<77.1	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2-Methylnaphthalene	EPA 8270E	<9.39	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
2-Methylphenol (o-Cresol)	EPA 8270E	<25.0	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2-Nitroaniline	EPA 8270E	<51.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
2-Nitrophenol	EPA 8270E	<26.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
3&4-Methylphenol	EPA 8270E	<50.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
3,3'-Dichlorobenzidine	EPA 8270E	<43.1	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
3-Nitroaniline	EPA 8270E	<53.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<50.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
4-Chloro-3-methylphenol	EPA 8270E	<26.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
4-Chloroaniline	EPA 8270E	<46.9	U	µg/kg	185	1	01/28/26 00:19	01/26/26 10:04
4-Chlorophenyl phenylether	EPA 8270E	<25.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
4-Nitroaniline	EPA 8270E	<143	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
4-Nitrophenol	EPA 8270E	<216	U	µg/kg	922	1	01/28/26 00:19	01/26/26 10:04
Acenaphthene	EPA 8270E	<13.3	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04

Analytical Report



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Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
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CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<16.0	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Acetophenone	EPA 8270E	<14.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Anthracene	EPA 8270E	<13.0	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Atrazine	EPA 8270E	<54.1	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Benzaldehyde	EPA 8270E	<142	U	µg/kg	185	1	01/28/26 00:19	01/26/26 10:04
Benzo(a)anthracene	EPA 8270E	<16.0	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Benzo(a)pyrene	EPA 8270E	<11.3	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Benzo(b)fluoranthene	EPA 8270E	<13.8	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Benzo(g,h,i)perylene	EPA 8270E	<14.2	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Benzo(k)fluoranthene	EPA 8270E	<14.0	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
bis(2-Chloroethoxy) methane	EPA 8270E	<58.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
bis(2-Chloroethyl) ether	EPA 8270E	<26.1	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Butyl benzyl phthalate	EPA 8270E	<116	U	µg/kg	185	1	01/28/26 00:19	01/26/26 10:04
Caprolactam	EPA 8270E	<83.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Carbazole	EPA 8270E	<27.2	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Chrysene	EPA 8270E	<14.9	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<76.4	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Dibenz(a,h) anthracene	EPA 8270E	<9.97	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Dibenzofuran	EPA 8270E	<13.6	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Diethyl phthalate	EPA 8270E	<31.4	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Dimethyl phthalate	EPA 8270E	<18.0	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Fluoranthene	EPA 8270E	<8.86	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Fluorene	EPA 8270E	<13.4	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Hexachlorobenzene	EPA 8270E	<26.9	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Hexachlorobutadiene	EPA 8270E	<21.7	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Hexachlorocyclopentadiene	EPA 8270E	<87.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Hexachloroethane	EPA 8270E	<38.2	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Indeno(1,2,3-cd) pyrene	EPA 8270E	<12.9	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Isophorone	EPA 8270E	<18.0	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
Methylphenol, Total	EPA 8270E	<25.0	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:47
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CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<11.8	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Nitrobenzene	EPA 8270E	<31.0	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
n-Nitrosodi-n-propylamine	EPA 8270E	<15.2	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
N-Nitrosodiphenylamine	EPA 8270E	<53.5	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Pentachlorophenol	EPA 8270E	<73.3	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Phenanthrene	EPA 8270E	<8.59	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Phenol	EPA 8270E	<46.4	U	µg/kg	91.4	1	01/28/26 00:19	01/26/26 10:04
Pyrene	EPA 8270E	<9.21	U	µg/kg	18.5	1	01/28/26 00:19	01/26/26 10:04
Pyridine	EPA 8270E	<182	U	µg/kg	462	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	75.0		%REC	48-94	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	72.0		%REC	50-103	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	75.0		%REC	43-105	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	94.2		%REC	55-111	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	84.0		%REC	47-100	1	01/28/26 00:19	01/26/26 10:04
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	79.7		%REC	49-110	1	01/28/26 00:19	01/26/26 10:04

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.5	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<17.0	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<24.4	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,1,2-Trichloroethane	EPA 8260D	<16.4	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,1-Dichloroethane	EPA 8260D	<14.0	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,1-Dichloroethylene	EPA 8260D	<12.5	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,2,3-Trichlorobenzene	EPA 8260D	<46.2	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
1,2,3-Trichloropropane	EPA 8260D	<16.1	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,2,4-Trichlorobenzene	EPA 8260D	<43.7	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
1,2,4-Trimethylbenzene	EPA 8260D	<28.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<35.5	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<22.7	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
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CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<22.7	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
1,2-Dichloropropane	EPA 8260D	<28.4	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,3,5-Trimethylbenzene	EPA 8260D	<27.2	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<26.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
1,3-Dichloropropene	EPA 8260D	<21.5	U	µg/kg	77.1	1	01/27/26 03:10	01/23/26 13:29
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<31.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<91.7	U	µg/kg	257	1	01/27/26 03:10	01/23/26 13:29
2-Hexanone	EPA 8260D	<19.1	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<35.9	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Acetone	EPA 8260D	<114	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
Benzene	EPA 8260D	<18.7	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Bromochloromethane	EPA 8260D	<19.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Bromodichloromethane	EPA 8260D	<21.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Bromoform	EPA 8260D	<16.2	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Carbon disulfide	EPA 8260D	<19.9	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Carbon tetrachloride	EPA 8260D	<15.1	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Chlorobenzene	EPA 8260D	<12.8	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Chlorodibromomethane	EPA 8260D	<21.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Chloroethane (Ethyl chloride)	EPA 8260D	<108	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
Chloroform	EPA 8260D	<14.1	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
cis-1,2-Dichloroethylene	EPA 8260D	<24.8	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
cis-1,3-Dichloropropene	EPA 8260D	<29.0	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Cyclohexane	EPA 8260D	<29.5	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<46.6	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
Ethylbenzene	EPA 8260D	<27.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Isopropylbenzene	EPA 8260D	<24.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
m+p-Xylene	EPA 8260D	<51.4	U	µg/kg	77.1	1	01/27/26 03:10	01/23/26 13:29
Methyl acetate	EPA 8260D	<46.1	U	µg/kg	321	1	01/27/26 03:10	01/23/26 13:29
Methyl bromide (Bromomethane)	EPA 8260D	<73.7	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID

Work Order: HN2601090
Date Collected: 01/22/26 10:47
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CLIENT ID: 6037 SB03 (5-6')_20260122

Lab ID: HN2601090-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<105	U	µg/kg	128	1	01/27/26 03:10	01/23/26 13:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<28.1	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Methylcyclohexane	EPA 8260D	<14.7	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Methylene chloride (Dichloromethane)	EPA 8260D	<102	U	µg/kg	321	1	01/27/26 03:10	01/23/26 13:29
o-Xylene	EPA 8260D	<14.9	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Styrene	EPA 8260D	<15.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<23.2	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Toluene	EPA 8260D	<31.8	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Total Xylene	EPA 8260D	<14.9	U	µg/kg	116	1	01/27/26 03:10	01/23/26 13:29
trans-1,2-Dichloroethylene	EPA 8260D	<31.8	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
trans-1,3-Dichloropropylene	EPA 8260D	<21.5	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<17.3	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<19.7	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
Vinyl chloride (Chloroethene)	EPA 8260D	<25.6	U	µg/kg	38.5	1	01/27/26 03:10	01/23/26 13:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	100		%REC	80-120	1	01/27/26 03:10	01/23/26 13:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	102		%REC	80-120	1	01/27/26 03:10	01/23/26 13:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	99.5		%REC	72-120	1	01/27/26 03:10	01/23/26 13:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	95.0		%REC	80-120	1	01/27/26 03:10	01/23/26 13:29



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2435703

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3854703

Chlorinated Herbicides by GC/ECD

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2435703-002
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 13:32
Prep Date: 01/30/26 10:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	35.0	µg/kg	5.00	50		70.0	10-119			
2,4,5-TP (Silvex)	35.0	µg/kg	5.00	50		70.0	10-101			
2,4-D	36.0	µg/kg	10.0	50		72.0	10-128			
Surr: DCAA	43.0	µg/kg		50		86.0	10-116			

MS	CLIENT ID: Batch QC	Lab ID: QC-2435703-005
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 13:45
Prep Date: 01/30/26 10:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	76.2	µg/kg	14.7	122.85	<2.26	62.0	10-119			
2,4,5-TP (Silvex)	73.7	µg/kg	14.7	122.85	<4.03	60.0	10-101			
2,4-D	78.6	µg/kg	29.3	122.85	<6.56	64.0	10-128			
Surr: DCAA	90.9	µg/kg		122.85		74.0	10-116			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2435703-006
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 13:58
Prep Date: 01/30/26 10:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	70.8	µg/kg	14.6	122.1	<2.25	58.0	10-119	7.28	30	
2,4,5-TP (Silvex)	65.9	µg/kg	14.6	122.1	<4.00	54.0	10-101	11.1	30	
2,4-D	80.6	µg/kg	29.2	122.1	<6.52	66.0	10-128	2.46	30	
Surr: DCAA	85.5	µg/kg		122.1		70.0	10-116	6.17	30	

MB	CLIENT ID: Method Blank	Lab ID: QC-MRG2-2435703001
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 13:19
Prep Date: 01/30/26 10:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	<0.920	µg/kg	5.00							U
2,4,5-TP (Silvex)	<1.64	µg/kg	5.00							U
2,4-D	<2.67	µg/kg	10.0							U
Surr: DCAA	44.0	µg/kg		50		88.0	10-116			

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2427668

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3838195

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2427668-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 01/23/26 10:55
Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	<0.1	%	0.1							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2427668-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 01/23/26 10:55
Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	100	%	0.1	100		100	98-102			

DUP	CLIENT ID: Batch QC	Lab ID: QC-2427668-004
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 01/23/26 10:55
Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	16.7	%	0.1		18.3			8.97	10	

DUP	CLIENT ID: Batch QC	Lab ID: QC-2427668-015
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 01/23/26 10:55
Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	8.6	%	0.1		9.2			6.51	10	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2427890

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3839848

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2427890-001
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 01/24/26 08:40
Prep Date: 01/23/26 12:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	<3.10	mg/kg	10.0							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2427890-002
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 01/24/26 08:48
Prep Date: 01/23/26 12:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	94.4	mg/kg	10.0	100		94.4	87-110			

MS	CLIENT ID: Batch QC	Lab ID: QC-2427890-004
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 01/24/26 09:04
Prep Date: 01/23/26 12:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	100	mg/kg	11.3	105.96	<3.28	91.8	87-110			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2427890-005
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 01/24/26 09:12
Prep Date: 01/23/26 12:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	96.9	mg/kg	10.9	102.55	<3.18	91.8	87-110	3.25	15	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2432807

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3848639

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2432807-001
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 01/29/26 11:36
Prep Date: 01/28/26 11:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	<0.0136	mg/kg	0.0200							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2432807-002
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 01/29/26 11:38
Prep Date: 01/28/26 11:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.161	mg/kg	0.0200	0.1665		96.6	80-120			

MS	CLIENT ID: Batch QC	Lab ID: QC-2432807-004
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 01/29/26 11:42
Prep Date: 01/28/26 11:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.132	mg/kg	0.0200	0.15298	<0.0136	79.3	75-125			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2432807-005
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 01/29/26 11:44
Prep Date: 01/28/26 11:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.125	mg/kg	0.0200	0.14626	<0.0136	78.0	75-125	5.65	35	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2433992

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3849618

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2433992-001
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Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 01/29/26 16:09
Prep Date: 01/29/26 09:04

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	<0.0300	mg/kg	0.250							U
Barium	<0.230	mg/kg	0.250							U
Cadmium	<0.0150	mg/kg	0.100							U
Chromium	<0.110	mg/kg	0.250							U
Copper	<0.250	mg/kg	0.250							U
Lead	<0.120	mg/kg	0.250							U
Selenium	<0.230	mg/kg	0.250							U
Silver	<0.0330	mg/kg	0.250							U
Zinc	<0.490	mg/kg	0.500							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2433992-002
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Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 01/29/26 16:11
Prep Date: 01/29/26 09:04

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.76	mg/kg	0.250	5		95.3	80-120			
Barium	5.05	mg/kg	0.250	5		101	80-120			
Cadmium	4.96	mg/kg	0.100	5		99.1	80-120			
Chromium	4.77	mg/kg	0.250	5		95.4	80-120			
Copper	4.83	mg/kg	0.250	5		96.7	80-120			
Lead	4.99	mg/kg	0.250	5		99.8	80-120			
Selenium	4.68	mg/kg	0.250	5		93.6	80-120			
Silver	5.12	mg/kg	0.250	5		102	80-120			
Zinc	4.79	mg/kg	0.500	5		95.7	80-120			

MS	CLIENT ID: Batch QC	Lab ID: QC-2433992-004
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Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 01/29/26 16:17
Prep Date: 01/29/26 09:04

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	12.0	mg/kg	3.19	5.6948	8.57	76.1	75-125			
Barium	59.8	mg/kg	3.19	5	44.3	NC	75-125			O
Cadmium	7.21	mg/kg	1.28	5.6948	0.987	111	75-125			
Chromium	80.9	mg/kg	3.19	5	50.7	NC	75-125			O
Copper	28.3	mg/kg	3.19	5.6948	21.6	158	75-125			S
Lead	96.2	mg/kg	3.19	5	58.4	NC	75-125			O
Selenium	5.34	mg/kg	3.19	5.6948	<2.62	99.8	75-125			
Silver	5.96	mg/kg	3.19	5.6948	<0.376	98.8	75-125			
Zinc	120	mg/kg	6.39	5	90.9	NC	75-125			O

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2433992

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3849618

MSD	CLIENT ID: Batch QC	Lab ID: QC-2433992-005
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Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 01/29/26 16:19
Prep Date: 01/29/26 09:04

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	13.6	mg/kg	3.17	5.6561	8.57	106	75-125	12.9	20	
Barium	63.5	mg/kg	3.17	5	44.3	NC	75-125	5.98	20	O
Cadmium	6.11	mg/kg	1.27	5.6561	0.987	92.4	75-125	16.5	20	
Chromium	46.5	mg/kg	3.17	5	50.7	NC	75-125	53.9	20	OR
Copper	26.6	mg/kg	3.17	5.6561	21.6	130	75-125	6.01	20	S
Lead	54.3	mg/kg	3.17	5	58.4	NC	75-125	55.7	20	OR
Selenium	4.90	mg/kg	3.17	5.6561	<2.60	92.7	75-125	8.57	20	
Silver	5.82	mg/kg	3.17	5.6561	<0.373	97.0	75-125	2.38	20	
Zinc	97.7	mg/kg	6.34	5	90.9	NC	75-125	20.4	20	OR

PDS	CLIENT ID: Batch QC	Lab ID: QC-2433992-007
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Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 01/29/26 16:22
Prep Date: 01/29/26 09:04

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	61.7	mg/kg	3.20	57.143	8.57	94.7	75-125			
Barium	95.3	mg/kg	3.20	57.143	44.3	97.8	75-125			
Cadmium	56.7	mg/kg	1.28	57.143	0.987	97.6	75-125			
Chromium	95.0	mg/kg	3.20	57.143	50.7	87.3	75-125			
Copper	71.1	mg/kg	3.20	57.143	21.6	90.6	75-125			
Lead	107	mg/kg	3.20	57.143	58.4	95.4	75-125			
Selenium	54.4	mg/kg	3.20	57.143	<2.63	95.7	75-125			
Silver	47.1	mg/kg	3.20	57.143	<0.377	81.9	75-125			
Zinc	129	mg/kg	6.41	57.143	90.9	83.5	75-125			

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428536

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3843934

Organochlorine Pesticides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2428536-001
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Method: EPA 8081B**Dilution:** 1**Analysis Date:** 01/27/26 00:37**Prep Date:** 01/23/26 18:52

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	<6.39	µg/kg	10.0							U
4,4'-DDE	<6.59	µg/kg	10.0							U
4,4'-DDT	<6.65	µg/kg	10.0							U
Aldrin	<6.50	µg/kg	10.0							U
alpha-BHC	<6.58	µg/kg	10.0							U
beta-BHC	<6.57	µg/kg	10.0							U
Chlordane, Technical	<9.92	µg/kg	25.0							U
cis-Chlordane	<6.68	µg/kg	10.0							U
delta-BHC	<6.55	µg/kg	10.0							U
Dieldrin	<6.99	µg/kg	10.0							U
Endosulfan I	<6.72	µg/kg	10.0							U
Endosulfan II	<6.62	µg/kg	10.0							U
Endosulfan sulfate	<6.15	µg/kg	10.0							U
Endrin	<8.09	µg/kg	10.0							U
Endrin aldehyde	<6.34	µg/kg	10.0							U
Endrin ketone	<6.08	µg/kg	10.0							U
gamma-BHC (Lindane)	<6.56	µg/kg	10.0							U
Heptachlor	<6.45	µg/kg	10.0							U
Heptachlor epoxide	<6.62	µg/kg	10.0							U
Methoxychlor	<6.69	µg/kg	10.0							U
Toxaphene	<10.8	µg/kg	60.0							U
trans-Chlordane	<6.64	µg/kg	10.0							U
Surr: Decachlorobiphenyl	35.8	µg/kg		33.33		107	53-151			
Surr: Tetrachloro-m-xylene	26.3	µg/kg		33.33		78.9	67-127			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428536-002
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Method: EPA 8081B**Dilution:** 1**Analysis Date:** 01/27/26 00:52**Prep Date:** 01/23/26 18:52

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	28.0	µg/kg	10.0	33.33		84.1	55-141			
4,4'-DDE	27.5	µg/kg	10.0	33.33		82.5	55-143			
4,4'-DDT	28.8	µg/kg	10.0	33.33		86.3	50-144			
Aldrin	28.4	µg/kg	10.0	33.33		85.2	57-141			
alpha-BHC	27.9	µg/kg	10.0	33.33		83.7	58-144			
beta-BHC	27.7	µg/kg	10.0	33.33		83.1	55-147			
cis-Chlordane	28.0	µg/kg	10.0	33.33		84.0	58-142			
delta-BHC	28.0	µg/kg	10.0	33.33		84.2	59-142			
Dieldrin	27.9	µg/kg	10.0	33.33		83.8	59-142			
Endosulfan I	27.3	µg/kg	10.0	33.33		81.9	57-145			
Endosulfan II	27.9	µg/kg	10.0	33.33		83.8	58-138			
Endosulfan sulfate	28.1	µg/kg	10.0	33.33		84.2	54-136			
Endrin	30.6	µg/kg	10.0	33.33		91.9	45-150			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428536

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3843934

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428536-002
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Method: EPA 8081B

Dilution: 1

Analysis Date: 01/27/26 00:52

Prep Date: 01/23/26 18:52

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin aldehyde	21.5	µg/kg	10.0	33.33		64.6	41-147			
Endrin ketone	29.0	µg/kg	10.0	33.33		86.9	54-146			
gamma-BHC (Lindane)	27.7	µg/kg	10.0	33.33		83.0	58-145			
Heptachlor	34.0	µg/kg	10.0	33.33		102	51-145			
Heptachlor epoxide	28.3	µg/kg	10.0	33.33		85.0	59-143			
Methoxychlor	30.8	µg/kg	10.0	33.33		92.3	43-144			
trans-Chlordane	27.8	µg/kg	10.0	33.33		83.5	56-145			
<i>Surr: Decachlorobiphenyl</i>	33.4	<i>µg/kg</i>		33.33		100	<i>51-151</i>			
<i>Surr: Tetrachloro-m-xylene</i>	25.6	<i>µg/kg</i>		33.33		76.7	<i>67-127</i>			

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428536

Work Order: HN2601090
Date Collected: 01/22/26 14:07
Date Received: 01/23/26 06:00
Run ID: 3846260

Organochlorine Pesticides by GC/ECD

MS	CLIENT ID: Batch QC	Lab ID: QC-2428536-005
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Method: EPA 8081B

Dilution: 1

Analysis Date: 01/27/26 12:15

Prep Date: 01/23/26 18:52

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	47.7	µg/kg	20.5	55.86	<10.7	83.4	55-141			
4,4'-DDE	63.1	µg/kg	20.5	55.86	17.8	87.0	55-143			
4,4'-DDT	61.4	µg/kg	20.5	55.86	<11.1	92.6	50-144			
Aldrin	46.0	µg/kg	20.5	55.86	<10.9	82.4	57-141			
alpha-BHC	44.2	µg/kg	20.5	55.86	<11.0	79.2	58-144			
beta-BHC	45.1	µg/kg	20.5	55.86	<11.0	80.8	55-147			
cis-Chlordane	90.8	µg/kg	20.5	55.86	29.7	119	58-142			
delta-BHC	46.2	µg/kg	20.5	55.86	<11.0	82.7	59-142			
Dieldrin	49.4	µg/kg	20.5	55.86	<11.7	88.5	59-142			
Endosulfan I	49.6	µg/kg	20.5	55.86	<11.3	88.7	57-145			
Endosulfan II	47.0	µg/kg	20.5	55.86	<11.1	84.2	58-138			
Endosulfan sulfate	47.8	µg/kg	20.5	55.86	<10.3	85.6	54-135			
Endrin	52.3	µg/kg	20.5	55.86	<13.6	93.7	45-150			
Endrin aldehyde	55.6	µg/kg	20.5	55.86	<10.6	99.5	41-147			
Endrin ketone	46.9	µg/kg	20.5	55.86	<10.2	84.0	54-146			
gamma-BHC (Lindane)	44.5	µg/kg	20.5	55.86	<11.0	79.7	58-145			
Heptachlor	57.0	µg/kg	20.5	55.86	<10.8	102	51-145			
Heptachlor epoxide	54.7	µg/kg	20.5	55.86	<11.1	86.1	59-143			
Methoxychlor	54.5	µg/kg	20.5	55.86	<11.2	97.5	43-144			
trans-Chlordane	68.1	µg/kg	20.5	55.86	24.6	85.9	56-145			
Surr: Decachlorobiphenyl	44.6	µg/kg		55.86		79.8	53-151			
Surr: Tetrachloro-m-xylene	37.8	µg/kg		55.86		67.7	67-127			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2428536-006
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Method: EPA 8081B

Dilution: 1

Analysis Date: 01/27/26 12:30

Prep Date: 01/23/26 18:52

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	53.0	µg/kg	20.5	55.86	<10.7	92.8	55-141	10.4	20	
4,4'-DDE	67.0	µg/kg	20.5	55.86	17.8	94.0	55-143	6.01	20	
4,4'-DDT	70.9	µg/kg	20.5	55.86	<11.1	110	50-144	14.4	20	
Aldrin	52.5	µg/kg	20.5	55.86	<10.9	93.9	57-141	13.0	20	
alpha-BHC	51.1	µg/kg	20.5	55.86	<11.0	91.4	58-144	14.4	20	
beta-BHC	51.5	µg/kg	20.5	55.86	<11.0	92.2	55-147	13.2	20	
cis-Chlordane	110	µg/kg	20.5	55.86	29.7	153	58-142	19.2	20	S
delta-BHC	53.6	µg/kg	20.5	55.86	<11.0	96.0	59-142	14.8	20	
Dieldrin	55.2	µg/kg	20.5	55.86	<11.7	98.8	59-142	11.1	20	
Endosulfan I	56.8	µg/kg	20.5	55.86	<11.3	102	57-145	13.6	20	
Endosulfan II	53.5	µg/kg	20.5	55.86	<11.1	95.8	58-138	12.8	20	
Endosulfan sulfate	54.6	µg/kg	20.5	55.86	<10.3	97.7	54-135	13.2	20	
Endrin	59.1	µg/kg	20.5	55.86	<13.6	106	45-150	12.1	20	
Endrin aldehyde	61.8	µg/kg	20.5	55.86	<10.6	111	41-147	10.6	20	
Endrin ketone	53.7	µg/kg	20.5	55.86	<10.2	96.2	54-146	13.6	20	



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428536

Work Order: HN2601090
Date Collected: 01/22/26 14:07
Date Received: 01/23/26 06:00
Run ID: 3846260

MSD		CLIENT ID: Batch QC				Lab ID: QC-2428536-006				
Method: EPA 8081B		Dilution: 1				Analysis Date: 01/27/26 12:30				
						Prep Date: 01/23/26 18:52				
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
gamma-BHC (Lindane)	50.6	µg/kg	20.5	55.86	<11.0	90.6	58-145	12.8	20	
Heptachlor	63.9	µg/kg	20.5	55.86	<10.8	114	51-145	11.6	20	
Heptachlor epoxide	63.5	µg/kg	20.5	55.86	<11.1	102	59-143	14.8	20	
Methoxychlor	63.6	µg/kg	20.5	55.86	<11.2	114	43-144	15.5	20	
trans-Chlordane	85.8	µg/kg	20.5	55.86	24.6	118	56-145	23.1	20	R
Surr: Decachlorobiphenyl	49.6	µg/kg		55.86		88.8	53-151	10.7	30	
Surr: Tetrachloro-m-xylene	42.3	µg/kg		55.86		75.7	67-127	11.2	30	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428534

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3844223

Polychlorinated Biphenyls (PCBs) by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2428534-001
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 01/26/26 20:00
Prep Date: 01/23/26 18:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	<22.9	µg/kg	66.7							U
Aroclor 1221	<22.9	µg/kg	66.7							U
Aroclor 1232	<22.9	µg/kg	66.7							U
Aroclor 1242	<22.9	µg/kg	66.7							U
Aroclor 1248	<22.9	µg/kg	66.7							U
Aroclor 1254	<18.6	µg/kg	66.7							U
Aroclor 1260	<18.6	µg/kg	66.7							U
Aroclor 1262	<18.6	µg/kg	66.7							U
Aroclor 1268	<18.6	µg/kg	66.7							U
Total PCB	<18.6	µg/kg	66.7							U
Surr: Decachlorobiphenyl	37.1	µg/kg		33.3		111	54-146			
Surr: Tetrachloro-m-xylene	31.7	µg/kg		33.3		95.3	58-140			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428534-002
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 01/26/26 20:12
Prep Date: 01/23/26 18:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	816	µg/kg	66.7	833		97.9	71-135			
Aroclor 1260	699	µg/kg	66.7	833		83.9	67-135			
Surr: Decachlorobiphenyl	35.0	µg/kg		33.3		105	54-146			
Surr: Tetrachloro-m-xylene	31.8	µg/kg		33.3		95.3	58-140			

MS	CLIENT ID: Batch QC	Lab ID: QC-2428534-005
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 01/26/26 21:22
Prep Date: 01/23/26 18:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	1620	µg/kg	137	1400.8	<38.4	116	71-135			
Aroclor 1260	1290	µg/kg	137	1400.8	<31.3	91.9	67-135			
Surr: Decachlorobiphenyl	62.9	µg/kg		55.998		112	54-146			
Surr: Tetrachloro-m-xylene	55.1	µg/kg		55.998		98.4	58-140			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2428534-006
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 01/26/26 21:34
Prep Date: 01/23/26 18:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	1380	µg/kg	136	1388.3	<38.1	99.7	71-135	15.6	20	
Aroclor 1260	1210	µg/kg	136	1388.3	<31.0	87.2	67-135	6.12	20	
Surr: Decachlorobiphenyl	59.4	µg/kg		55.5		107	54-146	5.73	30	
Surr: Tetrachloro-m-xylene	48.7	µg/kg		55.5		87.8	58-140	12.3	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428534

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3844223

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

Semivolatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2429903-001
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 14:24

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	<5.41	µg/kg	33.0							U
1,2,4,5-Tetrachlorobenzene	<7.69	µg/kg	333							U
1,4-Dioxane (1,4- Diethyleneoxide)	<23.9	µg/kg	167							U
1-Methylnaphthalene	<4.80	µg/kg	6.67							U
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	<7.81	µg/kg	33.0							U
2,3,4,6-Tetrachlorophenol	<24.4	µg/kg	67.0							U
2,4,5-Trichlorophenol	<19.8	µg/kg	33.0							U
2,4,6-Trichlorophenol	<8.87	µg/kg	33.0							U
2,4-Dichlorophenol	<17.9	µg/kg	33.0							U
2,4-Dimethylphenol	<17.1	µg/kg	33.0							U
2,4-Dinitrophenol	<244	µg/kg	333							U
2,4-Dinitrotoluene (2,4-DNT)	<21.6	µg/kg	33.0							U
2,6-Dinitrotoluene (2,6-DNT)	<8.51	µg/kg	33.0							U
2-Chloronaphthalene	<4.66	µg/kg	6.67							U
2-Chlorophenol	<21.8	µg/kg	33.0							U
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	<27.8	µg/kg	33.0							U
2-Methylnaphthalene	<3.39	µg/kg	6.67							U
2-Methylphenol (o-Cresol)	<9.01	µg/kg	33.0							U
2-Nitroaniline	<18.5	µg/kg	33.0							U
2-Nitrophenol	<9.50	µg/kg	33.0							U
3&4-Methylphenol	<18.2	µg/kg	33.0							U
3,3'-Dichlorobenzidine	<15.6	µg/kg	167							U
3-Nitroaniline	<19.4	µg/kg	33.0							U
4-Bromophenyl phenyl ether (BDE-3)	<18.3	µg/kg	33.0							U
4-Chloro-3-methylphenol	<9.50	µg/kg	33.0							U
4-Chloroaniline	<16.9	µg/kg	67.0							U
4-Chlorophenyl phenylether	<9.21	µg/kg	33.0							U
4-Nitroaniline	<51.7	µg/kg	167							U
4-Nitrophenol	<78.1	µg/kg	333							U
Acenaphthene	<4.82	µg/kg	6.67							U
Acenaphthylene	<5.78	µg/kg	6.67							U
Acetophenone	<5.22	µg/kg	33.0							U
Anthracene	<4.70	µg/kg	6.67							U
Atrazine	<19.5	µg/kg	33.0							U
Benzaldehyde	<51.2	µg/kg	67.0							U
Benzo(a)anthracene	<5.76	µg/kg	6.67							U
Benzo(a)pyrene	<4.09	µg/kg	6.67							U
Benzo(b)fluoranthene	<4.97	µg/kg	6.67							U
Benzo(g,h,i)perylene	<5.11	µg/kg	6.67							U
Benzo(k)fluoranthene	<5.05	µg/kg	6.67							U
bis(2-Chloroethoxy)methane	<21.1	µg/kg	33.0							U
bis(2-Chloroethyl) ether	<9.44	µg/kg	33.0							U

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

MB	CLIENT ID: Method Blank	Lab ID: QC-2429903-001
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 14:24

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Butyl benzyl phthalate	<41.7	µg/kg	67.0							U
Caprolactam	<30.1	µg/kg	33.0							U
Carbazole	<9.82	µg/kg	33.0							U
Chrysene	<5.39	µg/kg	6.67							U
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	<27.6	µg/kg	33.0							U
Dibenz(a,h) anthracene	<3.60	µg/kg	33.0							U
Dibenzofuran	<4.90	µg/kg	33.0							U
Diethyl phthalate	<11.3	µg/kg	33.0							U
Dimethyl phthalate	<6.50	µg/kg	33.0							U
Fluoranthene	<3.20	µg/kg	6.67							U
Fluorene	<4.84	µg/kg	6.67							U
Hexachlorobenzene	<9.70	µg/kg	33.0							U
Hexachlorobutadiene	<7.85	µg/kg	33.0							U
Hexachlorocyclopentadiene	<31.6	µg/kg	33.0							U
Hexachloroethane	<13.8	µg/kg	33.0							U
Indeno(1,2,3-cd) pyrene	<4.64	µg/kg	6.67							U
Isophorone	<6.51	µg/kg	167							U
Methylphenol, Total	<9.01	µg/kg	67.0							U
Naphthalene	<4.26	µg/kg	6.67							U
Nitrobenzene	<11.2	µg/kg	167							U
n-Nitrosodi-n-propylamine	<5.50	µg/kg	33.0							U
N-Nitrosodiphenylamine	<19.3	µg/kg	33.0							U
Pentachlorophenol	<26.5	µg/kg	33.0							U
Phenanthrene	<3.10	µg/kg	6.67							U
Phenol	<16.7	µg/kg	33.0							U
Pyrene	<3.33	µg/kg	6.67							U
Pyridine	<65.6	µg/kg	167							U
Surr: 2,4,6-Tribromophenol	2410	µg/kg		3333		72.3	48-94			
Surr: 2-Fluorobiphenyl	2490	µg/kg		3333		74.6	50-103			
Surr: 2-Fluorophenol	2590	µg/kg		3333		77.8	43-105			
Surr: 4-Terphenyl-d14	3070	µg/kg		3333		92.0	55-111			
Surr: Nitrobenzene-d5	2890	µg/kg		3333		86.6	47-100			
Surr: Phenol-d6	2700	µg/kg		3333		81.0	49-110			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2429903-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 14:53

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1020	µg/kg	33.0	1333		76.8	57-101			
1,2,4,5-Tetrachlorobenzene	993	µg/kg	33.0	1333		74.5	54-98			
1-Methylnaphthalene	1000	µg/kg	6.67	1333		75.3	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	965	µg/kg	33.0	1333		72.4	50-101			
2,3,4,6-Tetrachlorophenol	954	µg/kg	67.0	1333		71.6	48-103			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2429903-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 14:53

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	901	µg/kg	33.0	1333		67.6	54-98			
2,4,6-Trichlorophenol	903	µg/kg	33.0	1333		67.8	56-97			
2,4-Dichlorophenol	970	µg/kg	33.0	1333		72.8	54-99			
2,4-Dimethylphenol	891	µg/kg	33.0	1333		66.8	47-102			
2,4-Dinitrophenol	<244	µg/kg	333	1333		18.8	10-100			U
2,4-Dinitrotoluene (2,4-DNT)	945	µg/kg	33.0	1333		70.9	62-105			
2,6-Dinitrotoluene (2,6-DNT)	973	µg/kg	33.0	1333		73.0	62-103			
2-Chloronaphthalene	869	µg/kg	6.67	1333		65.2	57-101			
2-Chlorophenol	929	µg/kg	33.0	1333		69.7	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	767	µg/kg	33.0	1333		57.6	42-104			
2-Methylnaphthalene	983	µg/kg	6.67	1333		73.8	55-102			
2-Methylphenol (o-Cresol)	936	µg/kg	33.0	1333		70.2	54-103			
2-Nitroaniline	803	µg/kg	33.0	1333		60.3	57-103			
2-Nitrophenol	983	µg/kg	33.0	1333		73.7	52-102			
3&4-Methylphenol	935	µg/kg	33.0	1333		70.1	56-103			
3,3'-Dichlorobenzidine	737	µg/kg	167	1333		55.3	41-91			
3-Nitroaniline	673	µg/kg	33.0	1333		50.5	35-107			
4-Bromophenyl phenyl ether (BDE-3)	999	µg/kg	33.0	1333		75.0	63-104			
4-Chloro-3-methylphenol	1010	µg/kg	33.0	1333		75.9	57-103			
4-Chloroaniline	1020	µg/kg	67.0	1333		76.7	32-99			
4-Chlorophenyl phenylether	971	µg/kg	33.0	1333		72.9	62-100			
4-Nitroaniline	463	µg/kg	167	1333		34.8	19-124			
4-Nitrophenol	815	µg/kg	333	1333		61.1	44-106			
Acenaphthene	932	µg/kg	6.67	1333		69.9	60-101			
Acenaphthylene	946	µg/kg	6.67	1333		71.0	59-101			
Acetophenone	947	µg/kg	33.0	1333		71.1	54-102			
Anthracene	993	µg/kg	6.67	1333		74.5	63-96			
Atrazine	1150	µg/kg	33.0	1333		86.6	60-110			
Benzaldehyde	231	µg/kg	67.0	1333		17.3	10-143			
Benzo(a)anthracene	997	µg/kg	6.67	1333		74.8	66-102			
Benzo(a)pyrene	1040	µg/kg	6.67	1333		77.9	66-105			
Benzo(b)fluoranthene	917	µg/kg	6.67	1333		68.8	67-105			
Benzo(g,h,i)perylene	1050	µg/kg	6.67	1333		79.1	59-110			
Benzo(k)fluoranthene	1020	µg/kg	6.67	1333		76.9	68-106			
bis(2-Chloroethoxy)methane	965	µg/kg	33.0	1333		72.4	54-102			
bis(2-Chloroethyl) ether	959	µg/kg	33.0	1333		72.0	51-101			
Butyl benzyl phthalate	1110	µg/kg	67.0	1333		83.1	59-107			
Caprolactam	832	µg/kg	33.0	1333		62.4	49-103			
Carbazole	997	µg/kg	33.0	1333		74.8	63-103			
Chrysene	1150	µg/kg	6.67	1333		86.4	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1170	µg/kg	33.0	1333		88.0	63-101			
Dibenz(a,h) anthracene	1050	µg/kg	33.0	1333		78.6	61-109			
Dibenzofuran	943	µg/kg	33.0	1333		70.7	61-101			
Diethyl phthalate	991	µg/kg	33.0	1333		74.4	63-105			



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2429903-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 14:53

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Dimethyl phthalate	980	µg/kg	33.0	1333		73.5	64-104			
Fluoranthene	1010	µg/kg	6.67	1333		75.4	66-105			
Fluorene	927	µg/kg	6.67	1333		69.5	62-101			
Hexachlorobenzene	970	µg/kg	33.0	1333		72.8	61-104			
Hexachlorobutadiene	987	µg/kg	33.0	1333		74.1	52-99			
Hexachlorocyclopentadiene	933	µg/kg	33.0	1333		70.0	39-106			
Hexachloroethane	905	µg/kg	33.0	1333		67.9	59-99			
Indeno(1,2,3-cd) pyrene	1090	µg/kg	6.67	1333		82.1	57-114			
Isophorone	1020	µg/kg	167	1333		76.2	55-101			
Methylphenol, Total	1870	µg/kg	67.0	2667		70.1	54-103			
Naphthalene	959	µg/kg	6.67	1333		71.9	54-99			
Nitrobenzene	1010	µg/kg	167	1333		75.8	53-100			
n-Nitrosodi-n-propylamine	949	µg/kg	33.0	1333		71.2	52-104			
N-Nitrosodiphenylamine	976	µg/kg	33.0	1333		73.2	61-104			
Pentachlorophenol	787	µg/kg	33.0	1333		59.0	35-100			
Phenanthrene	937	µg/kg	6.67	1333		70.3	64-101			
Phenol	941	µg/kg	33.0	1333		70.6	51-107			
Pyrene	1140	µg/kg	6.67	1333		85.7	62-114			
Pyridine	739	µg/kg	167	1333		55.5	40-84			
Surr: 2,4,6-Tribromophenol	2490	µg/kg		3333		74.8	48-94			
Surr: 2-Fluorobiphenyl	2360	µg/kg		3333		70.9	50-103			
Surr: 2-Fluorophenol	2370	µg/kg		3333		71.0	43-105			
Surr: 4-Terphenyl-d14	2820	µg/kg		3333		84.7	55-111			
Surr: Nitrobenzene-d5	2860	µg/kg		3333		85.8	47-100			
Surr: Phenol-d6	2530	µg/kg		3333		76.0	49-110			

MS	CLIENT ID: Batch QC	Lab ID: QC-2429903-005
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 15:21

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2620	µg/kg	87.9	3218.3	<13.1	81.4	57-101			
1,2,4,5-Tetrachlorobenzene	2560	µg/kg	887	3218.3	<18.6	79.4	54-98			
1-Methylnaphthalene	2560	µg/kg	17.8	3218.3	<11.6	79.5	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2390	µg/kg	87.9	3218.3	<18.9	74.4	50-101			
2,3,4,6-Tetrachlorophenol	2620	µg/kg	178	3218.3	<58.9	81.3	48-103			
2,4,5-Trichlorophenol	2520	µg/kg	87.9	3218.3	<47.7	78.2	54-98			
2,4,6-Trichlorophenol	2390	µg/kg	87.9	3218.3	<21.4	74.1	56-97			
2,4-Dichlorophenol	2590	µg/kg	87.9	3218.3	<43.3	80.4	54-99			
2,4-Dimethylphenol	2290	µg/kg	87.9	3218.3	<41.4	71.0	47-102			
2,4-Dinitrophenol	932	µg/kg	887	3218.3	<58.8	29.0	10-100			
2,4-Dinitrotoluene (2,4-DNT)	2400	µg/kg	87.9	3218.3	<52.3	74.6	62-105			
2,6-Dinitrotoluene (2,6-DNT)	2460	µg/kg	87.9	3218.3	<20.5	76.4	62-103			
2-Chloronaphthalene	2220	µg/kg	17.8	3218.3	<11.3	69.0	57-101			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

MS	CLIENT ID: Batch QC	Lab ID: QC-2429903-005
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 15:21

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2-Chlorophenol	2350	µg/kg	87.9	3218.3	<52.7	73.1	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1990	µg/kg	87.9	3218.3	<67.2	61.9	42-104			
2-Methylnaphthalene	2550	µg/kg	17.8	3218.3	<8.18	79.2	55-102			
2-Methylphenol (o-Cresol)	2360	µg/kg	87.9	3218.3	<21.8	73.3	54-103			
2-Nitroaniline	2060	µg/kg	87.9	3218.3	<44.7	64.1	57-103			
2-Nitrophenol	2440	µg/kg	87.9	3218.3	<22.9	75.9	52-102			
3&4-Methylphenol	2360	µg/kg	87.9	3218.3	<43.9	73.4	56-103			
3,3'-Dichlorobenzidine	1560	µg/kg	444	3218.3	<37.6	48.4	41-91			
3-Nitroaniline	1600	µg/kg	87.9	3218.3	<46.7	49.6	35-107			
4-Bromophenyl phenyl ether (BDE-3)	2600	µg/kg	87.9	3218.3	<44.1	80.9	63-104			
4-Chloro-3-methylphenol	2700	µg/kg	87.9	3218.3	<22.9	84.0	57-103			
4-Chloroaniline	2440	µg/kg	178	3218.3	<40.9	75.9	32-99			
4-Chlorophenyl phenylether	2490	µg/kg	87.9	3218.3	<22.2	77.4	62-100			
4-Nitroaniline	1160	µg/kg	444	3218.3	<125	36.0	19-124			
4-Nitrophenol	2260	µg/kg	887	3218.3	<188	70.3	44-106			
Acenaphthene	2390	µg/kg	17.8	3218.3	<11.6	74.3	60-101			
Acenaphthylene	2440	µg/kg	17.8	3218.3	<14.0	75.9	59-101			
Acetophenone	2320	µg/kg	87.9	3218.3	<12.6	72.2	54-102			
Anthracene	2600	µg/kg	17.8	3218.3	<11.3	80.8	63-96			
Atrazine	2890	µg/kg	87.9	3218.3	<47.2	89.7	60-110			
Benzaldehyde	692	µg/kg	178	3218.3	<124	21.5	10-143			
Benzo(a)anthracene	2670	µg/kg	17.8	3218.3	69.6	81.0	66-102			
Benzo(a)pyrene	2860	µg/kg	17.8	3218.3	85.6	86.6	66-105			
Benzo(b)fluoranthene	2520	µg/kg	17.8	3218.3	116	74.9	67-105			
Benzo(g,h,i)perylene	2820	µg/kg	17.8	3218.3	78.5	85.3	59-110			
Benzo(k)fluoranthene	2750	µg/kg	17.8	3218.3	42.8	84.1	68-106			
bis(2-Chloroethoxy)methane	2390	µg/kg	87.9	3218.3	<51.0	74.4	54-102			
bis(2-Chloroethyl) ether	2420	µg/kg	87.9	3218.3	<22.8	75.3	51-101			
Butyl benzyl phthalate	2960	µg/kg	178	3218.3	<101	92.0	59-107			
Caprolactam	2190	µg/kg	87.9	3218.3	<72.6	67.9	49-103			
Carbazole	2560	µg/kg	87.9	3218.3	<23.7	79.6	63-103			
Chrysene	3080	µg/kg	17.8	3218.3	73.1	93.5	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	3040	µg/kg	87.9	3218.3	<66.6	94.4	63-101			
Dibenz(a,h) anthracene	2700	µg/kg	87.9	3218.3	<8.69	83.8	61-109			
Dibenzofuran	2440	µg/kg	87.9	3218.3	<11.8	75.8	61-101			
Diethyl phthalate	2500	µg/kg	87.9	3218.3	<27.4	77.7	63-105			
Dimethyl phthalate	2400	µg/kg	87.9	3218.3	<15.7	74.5	64-104			
Fluoranthene	2840	µg/kg	17.8	3218.3	134	84.6	66-105			
Fluorene	2410	µg/kg	17.8	3218.3	<11.7	74.8	62-101			
Hexachlorobenzene	2580	µg/kg	87.9	3218.3	<23.4	80.0	61-104			
Hexachlorobutadiene	2590	µg/kg	87.9	3218.3	<19.0	80.4	52-99			
Hexachlorocyclopentadiene	1930	µg/kg	87.9	3218.3	<78.7	60.1	39-106			
Hexachloroethane	2320	µg/kg	87.9	3218.3	<33.3	72.1	59-99			
Indeno(1,2,3-cd) pyrene	2970	µg/kg	17.8	3218.3	80.3	90.0	57-114			



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

MS		CLIENT ID: Batch QC				Lab ID: QC-2429903-005				
Method: EPA 8270E		Dilution: 1				Analysis Date: 01/27/26 15:21				
						Prep Date: 01/26/26 10:05				
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isophorone	2500	µg/kg	444	3218.3	<15.7	77.6	55-101			
Methylphenol, Total	4720	µg/kg	87.9	6438.9	<21.8	73.3	54-103			
Naphthalene	2440	µg/kg	17.8	3218.3	<10.3	75.7	54-99			
Nitrobenzene	2510	µg/kg	444	3218.3	<27.0	78.1	53-100			
n-Nitrosodi-n-propylamine	2310	µg/kg	87.9	3218.3	<13.3	71.8	52-104			
N-Nitrosodiphenylamine	2540	µg/kg	87.9	3218.3	<46.6	78.8	61-104			
Pentachlorophenol	2060	µg/kg	87.9	3218.3	<63.9	64.1	35-100			
Phenanthrene	2480	µg/kg	17.8	3218.3	37.5	76.1	64-101			
Phenol	2610	µg/kg	87.9	3218.3	<40.4	81.0	51-107			
Pyrene	3240	µg/kg	17.8	3218.3	137	96.9	52-114			
Pyridine	2180	µg/kg	444	3218.3	<158	67.7	40-84			
Surr: 2,4,6-Tribromophenol	6560	µg/kg		8046.8		81.5	48-94			
Surr: 2-Fluorobiphenyl	5850	µg/kg		8046.8		72.7	50-103			
Surr: 2-Fluorophenol	5970	µg/kg		8046.8		74.1	43-105			
Surr: 4-Terphenyl-d14	7230	µg/kg		8046.8		89.8	55-111			
Surr: Nitrobenzene-d5	7060	µg/kg		8046.8		87.7	47-100			
Surr: Phenol-d6	6310	µg/kg		8046.8		78.4	49-110			

MSD		CLIENT ID: Batch QC				Lab ID: QC-2429903-006				
Method: EPA 8270E		Dilution: 1				Analysis Date: 01/27/26 15:50				
						Prep Date: 01/26/26 10:05				
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2620	µg/kg	85.3	3121.8	<12.7	84.0	57-101	0.103	30	
1,2,4,5-Tetrachlorobenzene	2560	µg/kg	861	3121.8	<18.0	81.9	54-98	0.0566	30	
1-Methylnaphthalene	2580	µg/kg	17.2	3121.8	<11.2	82.8	56-100	0.963	30	
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2410	µg/kg	85.3	3121.8	<18.3	77.3	50-101	0.848	30	
2,3,4,6-Tetrachlorophenol	2610	µg/kg	172	3121.8	<57.2	83.6	48-103	0.314	30	
2,4,5-Trichlorophenol	2500	µg/kg	85.3	3121.8	<46.3	80.0	54-98	0.768	30	
2,4,6-Trichlorophenol	2380	µg/kg	85.3	3121.8	<20.8	76.2	56-97	0.315	30	
2,4-Dichlorophenol	2600	µg/kg	85.3	3121.8	<42.0	83.4	54-99	0.560	30	
2,4-Dimethylphenol	2370	µg/kg	85.3	3121.8	<40.1	76.1	47-102	3.83	30	
2,4-Dinitrophenol	<571	µg/kg	861	3121.8	<571	23.1	10-100	NC		U
2,4-Dinitrotoluene (2,4-DNT)	2360	µg/kg	85.3	3121.8	<50.7	75.7	62-105	1.51	30	
2,6-Dinitrotoluene (2,6-DNT)	2460	µg/kg	85.3	3121.8	<19.9	78.9	62-103	0.242	30	
2-Chloronaphthalene	2220	µg/kg	17.2	3121.8	<10.9	71.1	57-101	0.0454	30	
2-Chlorophenol	2370	µg/kg	85.3	3121.8	<51.1	75.8	52-102	0.586	30	
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1920	µg/kg	85.3	3121.8	<65.2	61.4	42-104	3.77	30	
2-Methylnaphthalene	2580	µg/kg	17.2	3121.8	<7.94	82.8	55-102	1.40	30	
2-Methylphenol (o-Cresol)	2380	µg/kg	85.3	3121.8	<21.1	76.3	54-103	0.970	30	
2-Nitroaniline	2060	µg/kg	85.3	3121.8	<43.3	66.1	57-103	0.0313	30	
2-Nitrophenol	2580	µg/kg	85.3	3121.8	<22.2	82.5	52-102	5.36	30	
3&4-Methylphenol	2370	µg/kg	85.3	3121.8	<42.6	76.0	56-103	0.437	30	
3,3'-Dichlorobenzidine	1920	µg/kg	431	3121.8	<36.4	61.4	41-91	20.7	30	



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

MSD	CLIENT ID: Batch QC	Lab ID: QC-2429903-006
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Method: EPA 8270E

Dilution: 1

Analysis Date: 01/27/26 15:50

Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
3-Nitroaniline	1710	µg/kg	85.3	3121.8	<45.3	54.7	35-107	6.84	30	
4-Bromophenyl phenyl ether (BDE-3)	2610	µg/kg	85.3	3121.8	<42.8	83.7	63-104	0.299	30	
4-Chloro-3-methylphenol	2650	µg/kg	85.3	3121.8	<22.2	85.0	57-103	1.86	30	
4-Chloroaniline	2550	µg/kg	172	3121.8	<39.7	81.7	32-99	4.32	30	
4-Chlorophenyl phenylether	2460	µg/kg	85.3	3121.8	<21.6	78.7	62-100	1.44	30	
4-Nitroaniline	1160	µg/kg	431	3121.8	<121	37.2	19-124	0.235	30	
4-Nitrophenol	2340	µg/kg	861	3121.8	<183	75.1	44-106	3.57	30	
Acenaphthene	2380	µg/kg	17.2	3121.8	<11.3	76.3	60-101	0.387	30	
Acenaphthylene	2430	µg/kg	17.2	3121.8	<13.5	77.9	59-101	0.441	30	
Acetophenone	2360	µg/kg	85.3	3121.8	<12.2	75.5	54-102	1.50	30	
Anthracene	2630	µg/kg	17.2	3121.8	<11.0	84.2	63-96	1.02	30	
Atrazine	2910	µg/kg	85.3	3121.8	<45.7	93.1	60-110	0.677	30	
Benzaldehyde	649	µg/kg	172	3121.8	<120	20.8	10-143	6.35	30	
Benzo(a)anthracene	2750	µg/kg	17.2	3121.8	69.6	86.2	66-102	3.09	30	
Benzo(a)pyrene	2880	µg/kg	17.2	3121.8	85.6	89.7	66-105	0.435	30	
Benzo(b)fluoranthene	2530	µg/kg	17.2	3121.8	116	77.8	67-105	0.662	30	
Benzo(g,h,i)perylene	2780	µg/kg	17.2	3121.8	78.5	86.9	59-110	1.18	30	
Benzo(k)fluoranthene	2780	µg/kg	17.2	3121.8	42.8	87.7	68-106	1.15	30	
bis(2-Chloroethoxy)methane	2410	µg/kg	85.3	3121.8	<49.4	77.3	54-102	0.848	30	
bis(2-Chloroethyl) ether	2430	µg/kg	85.3	3121.8	<22.1	77.8	51-101	0.223	30	
Butyl benzyl phthalate	3000	µg/kg	172	3121.8	<97.7	96.0	59-107	1.21	30	
Caprolactam	2170	µg/kg	85.3	3121.8	<70.4	69.6	49-103	0.571	30	
Carbazole	2580	µg/kg	85.3	3121.8	<23.0	82.7	63-103	0.777	30	
Chrysene	3140	µg/kg	17.2	3121.8	73.1	98.5	66-105	2.06	30	
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	3140	µg/kg	85.3	3121.8	<64.6	101	63-101	3.22	30	
Dibenz(a,h) anthracene	2680	µg/kg	85.3	3121.8	<8.43	85.9	61-109	0.509	30	
Dibenzofuran	2430	µg/kg	85.3	3121.8	<11.5	77.9	61-101	0.245	30	
Diethyl phthalate	2480	µg/kg	85.3	3121.8	<26.6	79.5	63-105	0.816	30	
Dimethyl phthalate	2420	µg/kg	85.3	3121.8	<15.2	77.5	64-104	0.972	30	
Fluoranthene	2890	µg/kg	17.2	3121.8	134	88.8	66-105	1.82	30	
Fluorene	2400	µg/kg	17.2	3121.8	<11.3	76.8	62-101	0.338	30	
Hexachlorobenzene	2590	µg/kg	85.3	3121.8	<22.7	82.9	61-104	0.457	30	
Hexachlorobutadiene	2600	µg/kg	85.3	3121.8	<18.4	83.2	52-99	0.380	30	
Hexachlorocyclopentadiene	1770	µg/kg	85.3	3121.8	<76.3	56.6	39-106	9.04	30	
Hexachloroethane	2320	µg/kg	85.3	3121.8	<32.3	74.4	59-99	0.0295	30	
Indeno(1,2,3-cd) pyrene	2980	µg/kg	17.2	3121.8	80.3	93.1	57-114	0.314	30	
Isophorone	2550	µg/kg	431	3121.8	<15.2	81.6	55-101	1.92	30	
Methylphenol, Total	4750	µg/kg	85.3	6245.9	<21.1	76.1	54-103	0.704	30	
Naphthalene	2480	µg/kg	17.2	3121.8	<9.98	79.5	54-99	1.85	30	
Nitrobenzene	2580	µg/kg	431	3121.8	<26.2	82.7	53-100	2.74	30	
n-Nitrosodi-n-propylamine	2370	µg/kg	85.3	3121.8	<12.9	75.9	52-104	2.44	30	
N-Nitrosodiphenylamine	2560	µg/kg	85.3	3121.8	<45.2	81.9	61-104	0.815	30	
Pentachlorophenol	2190	µg/kg	85.3	3121.8	<62.0	70.3	35-100	6.19	30	
Phenanthrene	2540	µg/kg	17.2	3121.8	37.5	80.1	64-101	2.14	30	
Phenol	2630	µg/kg	85.3	3121.8	<39.2	84.1	51-107	0.712	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2429903

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3846362

MSD	CLIENT ID: Batch QC	Lab ID: QC-2429903-006
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Method: EPA 8270E **Dilution:** 1 **Analysis Date:** 01/27/26 15:50
Prep Date: 01/26/26 10:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Pyrene	3360	µg/kg	17.2	3121.8	137	104	52-114	3.63	30	
Pyridine	2210	µg/kg	431	3121.8	<154	70.7	40-84	1.29	30	
Surr: 2,4,6-Tribromophenol	6600	µg/kg		7805.6		84.5	48-94	0.620	30	
Surr: 2-Fluorobiphenyl	5930	µg/kg		7805.6		76.0	50-103	1.40	30	
Surr: 2-Fluorophenol	6060	µg/kg		7805.6		77.6	43-105	1.52	30	
Surr: 4-Terphenyl-d14	7350	µg/kg		7805.6		94.1	55-111	1.66	30	
Surr: Nitrobenzene-d5	7270	µg/kg		7805.6		93.2	47-100	2.97	30	
Surr: Phenol-d6	6410	µg/kg		7805.6		82.1	49-110	1.49	30	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2428124-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 01:08

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	<13.6	µg/kg	30.0							U
1,1,2,2-Tetrachloroethane	<13.2	µg/kg	30.0							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<19.0	µg/kg	30.0							U
1,1,2-Trichloroethane	<12.8	µg/kg	30.0							U
1,1-Dichloroethane	<10.9	µg/kg	30.0							U
1,1-Dichloroethylene	<9.72	µg/kg	30.0							U
1,2,3-Trichlorobenzene	<36.0	µg/kg	100							U
1,2,3-Trichloropropane	<12.6	µg/kg	30.0							U
1,2,4-Trichlorobenzene	<34.0	µg/kg	100							U
1,2,4-Trimethylbenzene	<22.0	µg/kg	30.0							U
1,2-Dibromo-3-chloropropane (DBCP)	<27.6	µg/kg	100							U
1,2-Dibromoethane (EDB, Ethylene dibromide)	<17.6	µg/kg	30.0							U
1,2-Dichlorobenzene (o-Dichlorobenzene)	<11.4	µg/kg	30.0							U
1,2-Dichloroethane (Ethylene dichloride)	<26.3	µg/kg	100							U
1,2-Dichloropropane	<22.1	µg/kg	30.0							U
1,3,5-Trimethylbenzene	<21.2	µg/kg	100							U
1,3-Dichlorobenzene (m-Dichlorobenzene)	<20.7	µg/kg	30.0							U
1,3-Dichloropropene	<16.8	µg/kg	60.0							U
1,4-Dichlorobenzene (p-Dichlorobenzene)	<24.4	µg/kg	30.0							U
2-Butanone (Methyl ethyl ketone, MEK)	<71.4	µg/kg	200							U
2-Hexanone	<14.9	µg/kg	30.0							U
4-Methyl-2-pentanone (MIBK)	<28.0	µg/kg	30.0							U
Acetone	<89.0	µg/kg	100							U
Benzene	<14.5	µg/kg	30.0							U
Bromochloromethane	<15.3	µg/kg	30.0							U
Bromodichloromethane	<16.8	µg/kg	30.0							U
Bromoform	<12.6	µg/kg	30.0							U
Carbon disulfide	<15.5	µg/kg	30.0							U
Carbon tetrachloride	<11.7	µg/kg	30.0							U
Chlorobenzene	<9.96	µg/kg	30.0							U
Chlorodibromomethane	<16.8	µg/kg	30.0							U
Chloroethane (Ethyl chloride)	<84.0	µg/kg	100							U
Chloroform	<11.0	µg/kg	30.0							U
cis-1,2-Dichloroethylene	<19.3	µg/kg	30.0							U
cis-1,3-Dichloropropene	<22.6	µg/kg	30.0							U
Cyclohexane	<23.0	µg/kg	100							U
Dichlorodifluoromethane (Freon-12)	<36.3	µg/kg	100							U
Ethylbenzene	<21.3	µg/kg	30.0							U

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

MB	CLIENT ID: Method Blank	Lab ID: QC-2428124-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 01:08

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isopropylbenzene	<19.0	µg/kg	30.0							U
m+p-Xylene	<40.0	µg/kg	60.0							U
Methyl acetate	<35.9	µg/kg	250							U
Methyl bromide (Bromomethane)	<57.4	µg/kg	100							U
Methyl chloride (Chloromethane)	<82.0	µg/kg	100							U
Methyl tert-butyl ether (MTBE)	<21.9	µg/kg	30.0							U
Methylcyclohexane	<11.4	µg/kg	30.0							U
Methylene chloride (Dichloromethane)	<79.6	µg/kg	250							U
o-Xylene	<11.6	µg/kg	30.0							U
Styrene	<11.9	µg/kg	30.0							U
Tetrachloroethylene (Perchloroethylene)	<18.1	µg/kg	30.0							U
Toluene	<24.7	µg/kg	30.0							U
Total Xylene	<11.6	µg/kg	90.0							U
trans-1,2-Dichloroethylene	<24.8	µg/kg	30.0							U
trans-1,3-Dichloropropylene	<16.8	µg/kg	30.0							U
Trichloroethene (Trichloroethylene)	<13.4	µg/kg	30.0							U
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	<15.3	µg/kg	30.0							U
Vinyl chloride (Chloroethene)	<19.9	µg/kg	30.0							U
Surr: 1,2-Dichloroethane-d4	1040	µg/kg		1000		104	80-120			
Surr: 4-Bromofluorobenzene	1010	µg/kg		1000		101	80-120			
Surr: Dibromofluoromethane	1030	µg/kg		1000		103	72-120			
Surr: Toluene-d8	1000	µg/kg		1000		100.0	80-120			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428124-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 00:11

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	957	µg/kg	30.0	1000		95.7	75-121			
1,1,2,2-Tetrachloroethane	886	µg/kg	30.0	1000		88.6	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	994	µg/kg	30.0	1000		99.4	62-129			
1,1,2-Trichloroethane	914	µg/kg	30.0	1000		91.4	80-123			
1,1-Dichloroethane	898	µg/kg	30.0	1000		89.8	74-124			
1,1-Dichloroethylene	916	µg/kg	30.0	1000		91.6	68-131			
1,2,3-Trichlorobenzene	854	µg/kg	100	1000		85.4	60-135			
1,2,3-Trichloropropane	888	µg/kg	30.0	1000		88.8	77-121			
1,2,4-Trichlorobenzene	876	µg/kg	100	1000		87.6	63-130			
1,2,4-Trimethylbenzene	916	µg/kg	30.0	1000		91.6	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	776	µg/kg	100	1000		77.6	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	933	µg/kg	30.0	1000		93.3	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	908	µg/kg	30.0	1000		90.8	77-122			



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428124-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 00:11

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichloroethane (Ethylene dichloride)	908	µg/kg	100	1000		90.8	70-130			
1,2-Dichloropropane	860	µg/kg	30.0	1000		86.0	71-130			
1,3,5-Trimethylbenzene	972	µg/kg	100	1000		97.2	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	914	µg/kg	30.0	1000		91.4	78-121			
1,3-Dichloropropene	1700	µg/kg	60.0	2000		84.8	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	901	µg/kg	30.0	1000		90.1	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	854	µg/kg	200	1000		85.4	47-164			
2-Hexanone	850	µg/kg	30.0	1000		85.0	70-137			
4-Methyl-2-pentanone (MIBK)	1340	µg/kg	30.0	1000		134	57-200			
Acetone	906	µg/kg	100	1000		90.6	52-190			
Benzene	958	µg/kg	30.0	1000		95.8	78-122			
Bromochloromethane	878	µg/kg	30.0	1000		87.8	68-130			
Bromodichloromethane	918	µg/kg	30.0	1000		91.8	75-125			
Bromoform	866	µg/kg	30.0	1000		86.6	59-120			
Carbon disulfide	1050	µg/kg	30.0	1000		105	60-163			
Carbon tetrachloride	952	µg/kg	30.0	1000		95.2	69-123			
Chlorobenzene	928	µg/kg	30.0	1000		92.8	79-120			
Chlorodibromomethane	904	µg/kg	30.0	1000		90.4	57-123			
Chloroethane (Ethyl chloride)	717	µg/kg	100	1000		71.7	38-132			
Chloroform	883	µg/kg	30.0	1000		88.3	72-122			
cis-1,2-Dichloroethylene	884	µg/kg	30.0	1000		88.4	74-125			
cis-1,3-Dichloropropene	870	µg/kg	30.0	1000		87.0	62-124			
Dichlorodifluoromethane (Freon-12)	514	µg/kg	100	1000		51.4	28-137			
Ethylbenzene	974	µg/kg	30.0	1000		97.4	75-121			
Isopropylbenzene	969	µg/kg	30.0	1000		96.9	74-121			
m+p-Xylene	1940	µg/kg	60.0	2000		97.2	67-129			
Methyl acetate	668	µg/kg	250	1000		66.8	61-125			
Methyl bromide (Bromomethane)	857	µg/kg	100	1000		85.7	31-169			
Methyl chloride (Chloromethane)	580	µg/kg	100	1000		58.0	24-119			
Methyl tert-butyl ether (MTBE)	890	µg/kg	30.0	1000		89.0	79-139			
Methylene chloride (Dichloromethane)	778	µg/kg	250	1000		77.8	62-135			
o-Xylene	952	µg/kg	30.0	1000		95.2	75-120			
Styrene	935	µg/kg	30.0	1000		93.5	74-126			
Tetrachloroethylene (Perchloroethylene)	1240	µg/kg	30.0	1000		124	76-128			
Toluene	929	µg/kg	30.0	1000		92.9	76-120			
Total Xylene	2900	µg/kg	90.0	3000		96.6	67-129			
trans-1,2-Dichloroethylene	912	µg/kg	30.0	1000		91.2	72-127			
trans-1,3-Dichloropropylene	827	µg/kg	30.0	1000		82.7	66-120			
Trichloroethene (Trichloroethylene)	966	µg/kg	30.0	1000		96.6	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	736	µg/kg	30.0	1000		73.6	51-115			
Vinyl chloride (Chloroethene)	642	µg/kg	30.0	1000		64.2	43-128			



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2428124-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 00:11

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 1,2-Dichloroethane-d4	975	µg/kg		1000		97.5	80-120			
Surr: 4-Bromofluorobenzene	1020	µg/kg		1000		102	80-120			
Surr: Dibromofluoromethane	1000	µg/kg		1000		100	72-120			
Surr: Toluene-d8	972	µg/kg		1000		97.2	80-120			

MS	CLIENT ID: Batch QC	Lab ID: QC-2428124-005
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 07:13

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1680	µg/kg	66.8	1661.1	<22.6	101	75-121			
1,1,2,2-Tetrachloroethane	1100	µg/kg	66.8	1661.1	<22.0	66.5	79-125			S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1730	µg/kg	66.8	1661.1	<31.6	104	62-129			
1,1,2-Trichloroethane	1540	µg/kg	66.8	1661.1	<21.2	92.6	80-123			
1,1-Dichloroethane	1600	µg/kg	66.8	1661.1	<18.2	96.6	74-124			
1,1-Dichloroethylene	1660	µg/kg	66.8	1661.1	<16.1	99.8	68-131			
1,2,3-Trichlorobenzene	1250	µg/kg	223	1661.1	<59.8	75.0	60-135			
1,2,3-Trichloropropane	1490	µg/kg	66.8	1661.1	<20.9	89.5	77-121			
1,2,4-Trichlorobenzene	1340	µg/kg	223	1661.1	<56.5	80.6	63-130			
1,2,4-Trimethylbenzene	1600	µg/kg	66.8	1661.1	<36.5	96.2	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	1100	µg/kg	223	1661.1	<45.9	66.0	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	1590	µg/kg	66.8	1661.1	<29.3	96.0	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	1460	µg/kg	66.8	1661.1	<18.9	87.8	77-122			
1,2-Dichloroethane (Ethylene dichloride)	1610	µg/kg	223	1661.1	<43.7	96.9	70-130			
1,2-Dichloropropane	1560	µg/kg	66.8	1661.1	<36.7	94.2	71-130			
1,3,5-Trimethylbenzene	1660	µg/kg	223	1661.1	<35.2	100	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	1460	µg/kg	66.8	1661.1	<34.4	88.0	78-121			
1,3-Dichloropropene	2830	µg/kg	134	3322.3	<27.8	85.2	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	1460	µg/kg	66.8	1661.1	<40.5	87.7	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	1560	µg/kg	445	1661.1	<119	93.8	47-164			
2-Hexanone	1600	µg/kg	66.8	1661.1	<24.7	96.5	70-137			
4-Methyl-2-pentanone (MIBK)	1890	µg/kg	66.8	1661.1	<46.4	114	57-200			
Acetone	2420	µg/kg	223	1661.1	<148	145	52-190			
Benzene	1720	µg/kg	66.8	1661.1	<24.1	103	78-122			
Bromochloromethane	1540	µg/kg	66.8	1661.1	<25.3	92.6	68-130			
Bromodichloromethane	1550	µg/kg	66.8	1661.1	<27.9	93.3	75-125			
Bromoform	1390	µg/kg	66.8	1661.1	<21.0	83.8	59-120			
Carbon disulfide	1820	µg/kg	66.8	1661.1	<25.8	110	60-163			
Carbon tetrachloride	1650	µg/kg	66.8	1661.1	<19.5	99.4	69-123			
Chlorobenzene	1590	µg/kg	66.8	1661.1	<16.5	95.8	79-120			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

MS	CLIENT ID: Batch QC	Lab ID: QC-2428124-005
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 01/24/26 07:13**Prep Date:** 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chlorodibromomethane	1480	µg/kg	66.8	1661.1	<28.0	89.2	57-123			
Chloroethane (Ethyl chloride)	583	µg/kg	223	1661.1	<140	35.1	38-132			S
Chloroform	1580	µg/kg	66.8	1661.1	<18.3	95.4	72-122			
cis-1,2-Dichloroethylene	1580	µg/kg	66.8	1661.1	<32.0	94.9	74-125			
cis-1,3-Dichloropropene	1480	µg/kg	66.8	1661.1	<37.5	88.8	62-124			
Dichlorodifluoromethane (Freon-12)	919	µg/kg	223	1661.1	<60.3	55.3	28-137			
Ethylbenzene	1680	µg/kg	66.8	1661.1	<35.3	101	75-121			
Isopropylbenzene	1690	µg/kg	66.8	1661.1	<31.5	102	74-121			
m+p-Xylene	3370	µg/kg	134	3322.3	<66.4	102	67-129			
Methyl acetate	1370	µg/kg	556	1661.1	<59.7	82.7	61-125			
Methyl bromide (Bromomethane)	662	µg/kg	223	1661.1	<95.3	39.8	31-169			
Methyl chloride (Chloromethane)	1070	µg/kg	223	1661.1	<136	64.2	24-119			
Methyl tert-butyl ether (MTBE)	1580	µg/kg	66.8	1661.1	<36.3	95.0	79-139			
Methylene chloride (Dichloromethane)	998	µg/kg	556	1661.1	<132	60.0	62-135			S
o-Xylene	1670	µg/kg	66.8	1661.1	<19.3	101	75-120			
Styrene	1630	µg/kg	66.8	1661.1	<19.8	98.0	74-126			
Tetrachloroethylene (Perchloroethylene)	3170	µg/kg	66.8	1661.1	<30.0	191	76-128			S
Toluene	1610	µg/kg	66.8	1661.1	<41.1	97.2	76-120			
Total Xylene	5050	µg/kg	200	4983.4	<19.3	101	67-129			
trans-1,2-Dichloroethylene	1620	µg/kg	66.8	1661.1	<41.1	97.5	72-127			
trans-1,3-Dichloropropylene	1350	µg/kg	66.8	1661.1	<27.8	81.6	66-120			
Trichloroethene (Trichloroethylene)	2020	µg/kg	66.8	1661.1	<22.3	122	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1140	µg/kg	66.8	1661.1	<25.5	68.9	51-115			
Vinyl chloride (Chloroethene)	1110	µg/kg	66.8	1661.1	<33.1	67.0	43-128			
Surr: 1,2-Dichloroethane-d4	1630	µg/kg		1661.1		98.0	80-120			
Surr: 4-Bromofluorobenzene	1740	µg/kg		1661.1		105	80-120			
Surr: Dibromofluoromethane	1660	µg/kg		1661.1		100	72-120			
Surr: Toluene-d8	1620	µg/kg		1661.1		97.4	80-120			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2428124-006
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 01/24/26 07:32**Prep Date:** 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1720	µg/kg	66.8	1661.1	<22.6	103	75-121	2.25	30	
1,1,2,2-Tetrachloroethane	1070	µg/kg	66.8	1661.1	<22.0	64.2	79-125	3.60	30	S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1810	µg/kg	66.8	1661.1	<31.6	109	62-129	4.36	30	
1,1,2-Trichloroethane	1580	µg/kg	66.8	1661.1	<21.2	94.8	80-123	2.45	30	
1,1-Dichloroethane	1670	µg/kg	66.8	1661.1	<18.2	100	74-124	3.71	30	
1,1-Dichloroethylene	1670	µg/kg	66.8	1661.1	<16.1	101	68-131	0.849	30	
1,2,3-Trichlorobenzene	1380	µg/kg	223	1661.1	<59.8	83.0	60-135	10.2	30	
1,2,3-Trichloropropane	1500	µg/kg	66.8	1661.1	<20.9	90.6	77-121	1.17	30	
1,2,4-Trichlorobenzene	1420	µg/kg	223	1661.1	<56.5	85.3	63-130	5.60	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

MSD	CLIENT ID: Batch QC	Lab ID: QC-2428124-006
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 07:32

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	1640	µg/kg	66.8	1661.1	<36.5	98.7	64-126	2.51	30	
1,2-Dibromo-3-chloropropane (DBCP)	1180	µg/kg	223	1661.1	<45.9	71.2	55-135	7.59	30	
1,2-Dibromoethane (EDB, Ethylene dibromide)	1620	µg/kg	66.8	1661.1	<29.3	97.8	63-155	1.81	30	
1,2-Dichlorobenzene (o-Dichlorobenzene)	1520	µg/kg	66.8	1661.1	<18.9	91.6	77-122	4.29	30	
1,2-Dichloroethane (Ethylene dichloride)	1610	µg/kg	223	1661.1	<43.7	96.7	70-130	0.207	30	
1,2-Dichloropropane	1550	µg/kg	66.8	1661.1	<36.7	93.3	71-130	0.907	30	
1,3,5-Trimethylbenzene	1690	µg/kg	223	1661.1	<35.2	102	66-130	1.64	30	
1,3-Dichlorobenzene (m-Dichlorobenzene)	1540	µg/kg	66.8	1661.1	<34.4	92.8	78-121	5.20	30	
1,3-Dichloropropene	2860	µg/kg	134	3322.3	<27.8	86.0	62-124	0.964	30	
1,4-Dichlorobenzene (p-Dichlorobenzene)	1530	µg/kg	66.8	1661.1	<40.5	92.2	78-122	5.00	30	
2-Butanone (Methyl ethyl ketone, MEK)	1520	µg/kg	445	1661.1	<119	91.8	47-164	2.16	30	
2-Hexanone	1690	µg/kg	66.8	1661.1	<24.7	102	70-137	5.30	30	
4-Methyl-2-pentanone (MIBK)	1910	µg/kg	66.8	1661.1	<46.4	115	57-200	0.874	30	
Acetone	2330	µg/kg	223	1661.1	<148	140	52-190	3.71	30	
Benzene	1710	µg/kg	66.8	1661.1	<24.1	103	78-122	0.242	30	
Bromochloromethane	1580	µg/kg	66.8	1661.1	<25.3	95.0	68-130	2.56	30	
Bromodichloromethane	1570	µg/kg	66.8	1661.1	<27.9	94.5	75-125	1.28	30	
Bromoform	1440	µg/kg	66.8	1661.1	<21.0	86.9	59-120	3.63	30	
Carbon disulfide	1880	µg/kg	66.8	1661.1	<25.8	113	60-163	3.41	30	
Carbon tetrachloride	1620	µg/kg	66.8	1661.1	<19.5	97.2	69-123	2.19	30	
Chlorobenzene	1610	µg/kg	66.8	1661.1	<16.5	97.1	79-120	1.30	30	
Chlorodibromomethane	1510	µg/kg	66.8	1661.1	<28.0	91.0	57-123	2.00	30	
Chloroethane (Ethyl chloride)	575	µg/kg	223	1661.1	<140	34.6	38-132	1.43	30	S
Chloroform	1610	µg/kg	66.8	1661.1	<18.3	96.8	72-122	1.51	30	
cis-1,2-Dichloroethylene	1620	µg/kg	66.8	1661.1	<32.0	97.4	74-125	2.60	30	
cis-1,3-Dichloropropene	1450	µg/kg	66.8	1661.1	<37.5	87.2	62-124	1.82	30	
Dichlorodifluoromethane (Freon-12)	951	µg/kg	223	1661.1	<60.3	57.2	28-137	3.47	30	
Ethylbenzene	1700	µg/kg	66.8	1661.1	<35.3	102	75-121	0.836	30	
Isopropylbenzene	1740	µg/kg	66.8	1661.1	<31.5	105	74-121	2.71	30	
m+p-Xylene	3460	µg/kg	134	3322.3	<66.4	104	67-129	2.43	30	
Methyl acetate	1720	µg/kg	556	1661.1	<59.7	104	61-125	22.6	30	
Methyl bromide (Bromomethane)	704	µg/kg	223	1661.1	<95.3	42.4	31-169	6.20	30	
Methyl chloride (Chloromethane)	1090	µg/kg	223	1661.1	<136	65.8	24-119	2.39	30	
Methyl tert-butyl ether (MTBE)	1620	µg/kg	66.8	1661.1	<36.3	97.5	79-139	2.65	30	
Methylene chloride (Dichloromethane)	1120	µg/kg	556	1661.1	<132	67.3	62-135	11.4	30	
o-Xylene	1690	µg/kg	66.8	1661.1	<19.3	102	75-120	1.04	30	
Styrene	1650	µg/kg	66.8	1661.1	<19.8	99.6	74-126	1.57	30	
Tetrachloroethylene (Perchloroethylene)	3220	µg/kg	66.8	1661.1	<30.0	194	76-128	1.48	30	S
Toluene	1650	µg/kg	66.8	1661.1	<41.1	99.2	76-120	2.14	30	
Total Xylene	5150	µg/kg	200	4983.4	<19.3	103	67-129	1.97	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 6037 Helen
Matrix: SOIL/SOLID
QC Lot: 2428124

Work Order: HN2601090
Date Collected: NA
Date Received: NA
Run ID: 3842243

MSD	CLIENT ID: Batch QC	Lab ID: QC-2428124-006
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Method: EPA 8260D

Dilution: 1

Analysis Date: 01/24/26 07:32

Prep Date: 01/23/26 13:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
trans-1,2-Dichloroethylene	1700	µg/kg	66.8	1661.1	<41.1	102	72-127	4.66	30	
trans-1,3-Dichloropropylene	1410	µg/kg	66.8	1661.1	<27.8	84.8	66-120	3.91	30	
Trichloroethene (Trichloroethylene)	2060	µg/kg	66.8	1661.1	<22.3	124	75-122	1.87	30	S
Trichlorofluoromethane	1160	µg/kg	66.8	1661.1	<25.5	70.0	51-115	1.58	30	
(Fluorotrichloromethane, Freon 11)										
Vinyl chloride (Chloroethene)	1150	µg/kg	66.8	1661.1	<33.1	69.2	43-128	3.23	30	
Surr: 1,2-Dichloroethane-d4	1600	µg/kg		1661.1		96.2	80-120	1.75	30	
Surr: 4-Bromofluorobenzene	1720	µg/kg		1661.1		104	80-120	1.20	30	
Surr: Dibromofluoromethane	1610	µg/kg		1661.1		96.9	72-120	3.35	30	
Surr: Toluene-d8	1570	µg/kg		1661.1		94.8	80-120	2.76	30	

The following samples were analyzed in this batch: HN2601090-001, HN2601090-002, HN2601090-003