

DRAFT

FILL MATERIAL SAMPLING REPORT

**13525 SAINT AUBIN STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48212**



**OCTOBER 30, 2025
REVISED DECEMBER 11, 2025**

PREPARED FOR:
THE CITY OF DETROIT DEMOLITION DEPARTMENT
1301 THIRD STREET, SUITE 606
DETROIT, MICHIGAN 48226



FILL MATERIAL SAMPLING REPORT

**13525 SAINT AUBIN STREET
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 13525 St Aubin 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 13525 St. Aubin SB-1, 13525 St. Aubin SB-2, and 13525 St. Aubin SB-3 generally consisted of three feet of brown gravelly sand underlain by brown and grey mottled 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.
- Concentrations of arsenic were detected in soil samples 13525 St. Aubin SB-2 (3'-4') and 13525 St. Aubin SB-3 (5'-6') in excess of its respective Part 201 groundwater surface water interface protection criteria (GSIPC) and drinking water protection criteria (DWPC).
- Concentrations of acenaphthene, anthracene, barium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chromium (Total), chrysene, copper, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, phenanthrene, pyrene, and zinc were detected in the soil samples 13525 St. Aubin SB-1 (1'-2'), 13525 St. Aubin SB-2 (3'-4'), and/or 13525 St. Aubin SB-3 (5'-6') at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- VOCs, 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.

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 13525 St. Aubin 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 August 7, 2025. 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 hand auger 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 October 15, 2025. 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 13525 St. Aubin SB-1, 13525 St. Aubin SB-2, and 13525 St. Aubin SB-3, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during 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 13525 St. Aubin SB-1 (1'-2'), 13525 St. Aubin SB-2 (3'-4'), and 13525 St. Aubin SB-3 (5'-6'), 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 October 15, 2025.

4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 13525 St. Aubin SB-1, 13525 St. Aubin SB-2, and 13525 St. Aubin SB-3 generally consisted of three feet of brown gravelly sand underlain by brown and grey mottled clay to six 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.

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 13525 St. Aubin SB-1 (1'-2'), 13525 St. Aubin SB-2 (3'-4'), and 13525 St. Aubin SB-3 (5'-6'), 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 ($\mu\text{g}/\text{kg}^1$)	Maximum Detected Concentration ($\mu\text{g}/\text{kg}$)
Arsenic	7440-38-2	13525 St. Aubin SB-2 (3-4) 13525 St. Aubin SB-3 (5-6)	GSIPC ² / 4,600 DWPC ³ / 4,600	6,320

¹ $\mu\text{g}/\text{kg}$ – micrograms per kilogram;

²GSIPC – Groundwater Surface Water Interface Protection Criteria

³DWPC – Drinking Water Protection 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.

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:

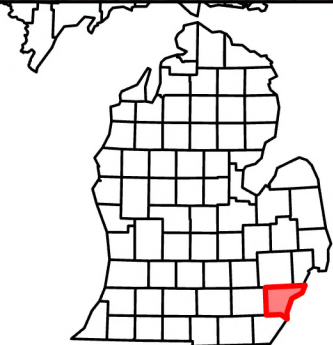
- The stratigraphy encountered during soil boring advancement of 13525 St. Aubin SB-1, 13525 St. Aubin SB-2, and 13525 St. Aubin SB-3 generally consisted of three feet of brown gravelly sand underlain by brown and grey mottled clay to six (6) feet bgs, the maximum depth explored for this investigation. 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.
- Concentrations of arsenic were detected in soil samples 13525 St. Aubin SB-2 (3'-4') and 13525 St. Aubin SB-3 (5'-6') in excess of its respective Part 201 GSIPC and DWPC.
- Concentrations of acenaphthene, anthracene, barium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chromium (Total), chrysene, copper, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, phenanthrene, pyrene, and zinc were detected in the soil samples 13525 St. Aubin SB-1 (1'-2'), 13525 St. Aubin SB-2 (3'-4'), and/or 13525 St. Aubin SB-3 (5'-6') at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- VOCs, 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.

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.

FIGURES





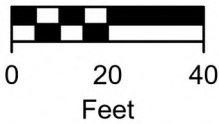
★ Site Location



FIGURE 1
SITE LOCATION

13525 St Aubin, Detroit, MI

DATE 9/23/2025	DRAWN BY JWW	DESIGNED BY JWW	PROJECT NO. DETRO060
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- Sample Locations
- ▭ Parcels (Current)
- ▭ Subject Property

Notes
• Parcel boundaries are approximate
• Basemap Credits: Wayne - 2020 - 6in - 4-band:



FIGURE 2
Site Layout

13525 St Aubin, Detroit, MI

DATE 10/31/2025	DRAWN BY JWW	DESIGNED BY KRB	PROJECT NO. DETR0060
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TABLE



Table 1
Soil Sample Analytical Detection Summary
13525 St. Aubin
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 Units: µg/kg			Metals						
			Arsenic (B)	Barium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Mercury (B)	Zinc (B)
CAS Number			7440-38-2	7440-39-3	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-66-6
Statewide Default Background Levels			5,800	75,000	18,000	32,000	21,000	130	47,000
Drinking Water Protection Criteria (DWPC)			4,600	1.30E+06	30,000	5.80E+06	7.00E+05	1,700	2.40E+06
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
Soil Volatilization to Indoor Air Inhalation (SVIIC)			NLV	NLV	NLV	NLV	NLV	48,000	NC
Soil Volatilization to Indoor Air Pathway (SVIAP)			NC	NC	NC	NC	NC	22 ^(M)	NC
Infinite Source Volatile Soil Inhalation Criteria (VSIC)			NLV	NLV	NLV	NLV	NLV	52,000	NC
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)			NLV	NLV	NLV	NLV	NLV	52,000	NC
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)			NLV	NLV	NC	NLV	NLV	52,000	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
Direct Contact Criteria (DCC)			7,600	3.70E+07	2.50E+06	2.00E+07	4.00E+05	1.60E+05	1.70E+08
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NA	NA	NA	NA	NC
Sample ID	Sample Depth (ft)	Sample Date							
13525 St. Aubin SB-1	1-2	10/15/2025	4,040	57,500	10,400	15,800	44,900	48.3	107,000
13525 St. Aubin SB-2	3-4	10/15/2025	6,320	61,800	14,400	14,000	8,480	< 13.6	34,800
13525 St. Aubin SB-3	5-6	10/15/2025	5,900	44,300	14,400	19,000	6,780	< 13.6	40,600

Notes
µg/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.
ND= No Detection; NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.
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
13525 St. Aubin
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 Units: µg/kg			Semivolatile Organic Compounds (SVOCs)													Inorganic Anions/Ions	Volatile Organic Compounds (VOCs)	Polychlorinated Biphenyls (PCBs)	Pesticides/Herbicides
			Acenaphthene	Anthracene	Benzo(A) Anthracene	Benzo(A) Pyrene	Benzo(B) Fluoranthene	Benzo(G,H,I) Perylene	Benzo(K) Fluoranthene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Phenanthrene	Pyrene	Chloride			
CAS Number			83-32-9	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	218-01-9	206-44-0	86-73-7	193-39-5	85-01-8	129-00-0	16887006			
Statewide Default Background Levels			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NA			
Drinking Water Protection Criteria (DWPC)			3.00E+05	41,000	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	3.90E+05	NLL	56,000	4.80E+05	5.00E+06			
Groundwater Surface Water Interface Protection Criteria (GSIPC)			8,700	ID	NLL	NLL	NLL	NLL	NLL	NLL	5,500	5,300	NLL	2,100	ID	(X)			
Soil Volatilization to Indoor Air Inhalation (SVIIC)			1.90E+08	1.00E+09	NLV	NLV	ID	NLV	NLV	ID	1.00E+09	5.80E+08	NLV	2.80E+06	1.00E+09	NLV			
Soil Volatilization to Indoor Air Pathway (SVIAP)			2.00E+05	1.30E+07	1.60E+05 ^(M)	NC	NC	NC	NC	NC	NC	4.70E+05	NC	1,700	2.50E+07	--			
Infinite Source Volatile Soil Inhalation Criteria (VSIC)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	1.60E+05	6.50E+08	NLV			
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	1.60E+05	6.50E+08	NLV			
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	1.60E+05	6.50E+08	NLV			
Particulate Soil Inhalation Criteria (PSIC)			1.40E+10	6.70E+10	ID	1.50E+06	ID	8.00E+08	ID	ID	9.30E+09	9.30E+09	ID	6.70E+06	6.70E+09	ID			
Direct Contact Criteria (DCC)			4.10E+07	2.30E+08	20,000	2,000	20,000	2.50E+06	2.00E+05	2.00E+06	4.60E+07	2.70E+07	20,000	1.60E+06	2.90E+07	5.0E+5 (F)			
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Sample ID	Sample Depth (ft)	Sample Date																	
13525 St. Aubin SB-1	1-2	10/15/2025	< 26.6	< 25.9	154	169	334	180	334	143	235	< 26.7	158	80.9	235	ND	ND	ND	ND
13525 St. Aubin SB-2	3-4	10/15/2025	15.1	26.7	59	45.2	66.5	34.3	20.6	51.4	145	12.3	36.3	143	115	ND	ND	ND	ND
13525 St. Aubin SB-3	5-6	10/15/2025	< 12.5	< 12.1	24.1	< 10.6	< 12.8	24.1	< 13	29.3	< 8.27	< 12.5	< 12	< 8.01	< 8.59	ND	ND	ND	ND

Notes
µg/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.
ND= No Detection; NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.
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 will 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 – 13525 St Aubin

Report No.: 1
Job No.: DETR0060

Date: <u>10/15/2025</u>	Day: <u>Wednesday</u>	Temp: <u>-° F</u> (AM) <u>60 ° F</u> (PM)
MSG Personnel: <u>EMB, BSM</u>	Cloud Cover: <u>-%</u> (AM) <u>100%</u> (PM)	Precip.: <u>None</u> (AM) <u>-</u> (PM)
Personnel: <u>MSG</u>	Wind: <u>-</u> (AM) <u>6 mph N</u> (PM)	
MSG Hours On-Site: <u>~1.25 hours</u>		

Contractors Information		
Contractor: <u>MSG</u>	No. Men and Type: <u>2; Helper/Geologist/Driller</u>	Equipment Type: <u>Geoprobe 7822DT</u>
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 borings (from the interval with the greatest potential to be impacted based on field indicators) and a composite of all three (3) borings.		
Field Notes:		
1225 – MSG onsite (13525 St Aubin). 1255 – Collected 13525 St Aubin SB-1 (1'-2'). 1300 - Collected 13525 St Aubin SB-2 (3'-4'). 1305 - Collected 13525 St Aubin SB-3 (5'-6'). 1310 - Collected 13525 St Aubin (0'-6') Comp. - MSG GPS'd each SB location. 1345 – MSG off site.		

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

APPENDIX C

INVESTIGATION PHOTOGRAPHS





Photo 1: View of the Site



Photo 2: Viewing advancement of 13525 St. Aubin SB-1



Photo 3: Viewing advancement of 13525 St. Aubin SB-2



Photo 4: Viewing advancement of 13525 St. Aubin SB-3



Photo 5: Viewing soil recovery from 13525 SB-1, SB-2, and SB-3



Photo 6: Viewing broken sidewalk in front of the Site prior to drilling

APPENDIX D

SOIL BORING LOGS





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 SB-1

Sheet 1 of 1

CLIENT City of Detroit

PROJECT NAME Backfill Soil Sampling

PROJECT NUMBER DETR0060.BFS23

PROJECT LOCATION 13525 St Aubin, Detroit MI

DATE STARTED 10-15-2025 COMPLETED 10-15-2025

POSITION _____

DRILLING CONTRACTOR MSG

SURFACE ELEVATION _____ FINAL DEPTH 6.0 ft

DRILLING METHOD Direct Push

LOGGED BY EMB CHECKED BY PDH

EQUIPMENT Geoprobe 7822DT Operator BM

REMARKS _____

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Black and Brown Gravelly SAND, trace clay; moist	0	Collected soil sample 13525 St. Aubin SB-1 (1-2') at 12:55
					0	
	ES	75	3.0	Brown and Gray Mottled CLAY, some sand, trace gravel; moist	0	
5					0	
			6.0		0	
				Terminated at 6.00 ft.		
10						
15						

LEGEND:

▽ AT TIME OF DRILLING

▼ AT END OF DRILLING

▽ AFTER DRILLING



Sheet 1 of 1

PROJECT NAME Backfill Soil Sampling

PROJECT LOCATION 13525 St Aubin, Detroit MI

POSITION _____

SURFACE ELEVATION **FINAL DEPTH** 6.0 ft

LOGGED BY EMB CHECKED BY PDH

REMARKS _____

LEGEND:

▼ AT END OF DRILLING

▼ AFTER DRILLING

APPENDIX E
LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS





right solutions.
right partner.

October 28, 2025

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

Re: **DETR0060**

Date Received: **10/16/2025**

Work Order: **HN2515418**

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

Dale Schipper

/S/ DALE SCHIPPER

Project Manager



Client: The Mannik & Smith Group, Inc.
Project: DETR0060

Work Order: HN2515418
Date Received: 16-Oct-2025

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 16-Oct-2025. 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.

Organics

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

Run ID: 3616792

The LCS recovery was above the upper control limit. All the sample results in the batch were non-detect. No qualification is necessary for this analyte: Carbon tetrachloride; Trichlorofluoromethane

EPA 8081B-3546-S (High)

Run ID: 3614355

MS/MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): delta-BHC; Endosulfan II; tetrachloro-m-xylene (surrogate)

The MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte: Multiple, See QA/QC Report

The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: 4,4'-DDT

HN2515418-001: One or more surrogate recoveries were below the lower control limits. The sample results may be biased low.

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: 4,4'-DDT

EPA 8082A-3546-S (High)

Run ID: 3614644

One or more surrogate recoveries were above the upper control limits in QC-2288188-001. The samples were non-detect, therefore, no qualification is needed.

One or more surrogate recoveries in QC-2288188-001 were above the upper control limits. The samples were non-detect, therefore, no qualification is needed.

EPA 8270E-FULL HN-3546-S

Run ID: 3612730

The LCS recovery was above the upper control limit. All the sample results in the batch were non-detect. No qualification is necessary for this analyte: Atrazine

The recovery of Atrazine in the LCS exceeds the calculable calibration range.

HN2515418-001: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

Metals

EPA 7471B-S (Mid)

Run ID: 3616433

The MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): Hg Batch 2288568

The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: Hg Batch 2288568

Inorganics

EPA 3550C-Moisture

Run ID: 3593104

HN2515418-002: Percent Moisture - The moisture content of the parent sample was below 5%. A significant RPD is not assessed. No qualification is necessary.

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: 13525 St. Aubin SB-1 (1-2)	Lab ID: HN2515418-001
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	4.04		0.282	mg/kg	EPA 6010D
Barium	57.5		0.564	mg/kg	EPA 6010D
Benzo(a)anthracene	154		36.8	µg/kg	EPA 8270E
Benzo(a)pyrene	169		36.8	µg/kg	EPA 8270E
Benzo(b)fluoranthene	334		36.8	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	180		36.8	µg/kg	EPA 8270E
Benzo(k)fluoranthene	334		36.8	µg/kg	EPA 8270E
Chromium	10.4		0.282	mg/kg	EPA 6010D
Chrysene	143		36.8	µg/kg	EPA 8270E
Copper	15.8		0.564	mg/kg	EPA 6010D
Fluoranthene	235		36.8	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	158		36.8	µg/kg	EPA 8270E
Lead	44.9		0.282	mg/kg	EPA 6010D
Mercury	0.0483		0.0200	mg/kg	EPA 7471B
Percent Moisture	9.9		0.1	%	EPA 3550C
Phenanthrene	80.9		36.8	µg/kg	EPA 8270E
Pyrene	235		36.8	µg/kg	EPA 8270E
Zinc	107		0.564	mg/kg	EPA 6010D

CLIENT ID: 13525 St. Aubin SB-2 (3-4)	Lab ID: HN2515418-002
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Acenaphthene	15.1		6.86	µg/kg	EPA 8270E
Anthracene	26.7		6.86	µg/kg	EPA 8270E
Arsenic	6.32		0.273	mg/kg	EPA 6010D
Barium	61.8		0.547	mg/kg	EPA 6010D
Benzo(a)anthracene	59.0		6.86	µg/kg	EPA 8270E
Benzo(a)pyrene	45.2		6.86	µg/kg	EPA 8270E
Benzo(b)fluoranthene	66.5		6.86	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	34.3		6.86	µg/kg	EPA 8270E
Benzo(k)fluoranthene	20.6		6.86	µg/kg	EPA 8270E
Chromium	14.4		0.273	mg/kg	EPA 6010D
Chrysene	51.4		6.86	µg/kg	EPA 8270E
Copper	14.0		0.547	mg/kg	EPA 6010D
Fluoranthene	145		6.86	µg/kg	EPA 8270E
Fluorene	12.3		6.86	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	36.3		6.86	µg/kg	EPA 8270E
Lead	8.48		0.273	mg/kg	EPA 6010D
Percent Moisture	4.8		0.1	%	EPA 3550C
Phenanthrene	143		6.86	µg/kg	EPA 8270E
Pyrene	115		6.86	µg/kg	EPA 8270E
Zinc	34.8		0.547	mg/kg	EPA 6010D

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: 13525 St. Aubin SB-2 (3-4)	Lab ID: HN2515418-002
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Analyte	Results	Flag	MRL	Units	Method
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CLIENT ID: 13525 St. Aubin SB-3 (5-6)	Lab ID: HN2515418-003
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Analyte	Results	Flag	MRL	Units	Method
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Arsenic	5.90		0.327	mg/kg	EPA 6010D
Barium	44.3		0.655	mg/kg	EPA 6010D
Benzo(a)anthracene	24.1		17.2	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	24.1		17.2	µg/kg	EPA 8270E
Chromium	14.4		0.327	mg/kg	EPA 6010D
Chrysene	29.3		17.2	µg/kg	EPA 8270E
Copper	19.0		0.655	mg/kg	EPA 6010D
Lead	6.78		0.327	mg/kg	EPA 6010D
Percent Moisture	9.7		0.1	%	EPA 3550C
Zinc	40.6		0.655	mg/kg	EPA 6010D

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Workorder: HN2515418

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2515418-001	13525 St. Aubin SB-1 (1-2)	SOIL/SOLID	10/15/25 12:55	10/16/25 08:00
HN2515418-002	13525 St. Aubin SB-2 (3-4)	SOIL/SOLID	10/15/25 13:00	10/16/25 08:00
HN2515418-003	13525 St. Aubin SB-3 (5-6)	SOIL/SOLID	10/15/25 13:05	10/16/25 08:00

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 Reporting Limit
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.

Holland Laboratory Certifications¹

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	12/17/2024	12/31/2025
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	11/14/2024	12/31/2025
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/18/2023	09/01/2025
Kansas	NELAP (Secondary)	E-10411	07/09/2024	07/31/2025
Kentucky	Waste Water	KY98004	12/20/2024	12/31/2025
Kentucky	UST	120474	06/24/2024	06/30/2025
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/17/2024	12/31/2025
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2024	6/30/2025
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	06/14/2024	07/31/2025
Texas	NELAP (Secondary)	T104704494	02/12/2025	01/31/2026
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572	03/03/2023	03/03/2026
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/15/2024	08/31/2025

¹ - Scope available upon request

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2) **Lab ID:** HN2515418-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<1.01	U	µg/kg	5.50	1	10/24/25 20:44	10/22/25 09:07
2,4,5-TP (Silvex)	EPA 8151A	<1.80	U	µg/kg	5.50	1	10/24/25 20:44	10/22/25 09:07
2,4-D	EPA 8151A	<2.94	U	µg/kg	11.0	1	10/24/25 20:44	10/22/25 09:07
Surr: DCAA	EPA 8151A	84.0		%REC	10-116	1	10/24/25 20:44	10/22/25 09:07
General Chemistry Parameters								
Percent Moisture	EPA 3550C	9.9		%	0.1	1	10/16/25 10:38	NA
Chloride	EPA 9056A	<3.43	U	mg/kg	11.1	1	10/21/25 00:03	10/20/25 15:35
Metals								
Arsenic	EPA 6010D	4.04		mg/kg	0.282	1	10/24/25 12:56	10/23/25 10:32
Barium	EPA 6010D	57.5		mg/kg	0.564	1	10/24/25 12:56	10/23/25 10:32
Cadmium	EPA 6010D	<0.0463	U	mg/kg	0.564	1	10/24/25 12:56	10/23/25 10:32
Chromium	EPA 6010D	10.4		mg/kg	0.282	1	10/24/25 12:56	10/23/25 10:32
Copper	EPA 6010D	15.8		mg/kg	0.564	1	10/24/25 12:56	10/23/25 10:32
Lead	EPA 6010D	44.9		mg/kg	0.282	1	10/24/25 12:56	10/23/25 10:32
Selenium	EPA 6010D	<0.158	U	mg/kg	0.564	1	10/24/25 12:56	10/23/25 10:32
Silver	EPA 6010D	<0.135	U	mg/kg	0.282	1	10/24/25 12:56	10/23/25 10:32
Zinc	EPA 6010D	107		mg/kg	0.564	1	10/24/25 12:56	10/23/25 10:32
Mercury	EPA 7471B	0.0483		mg/kg	0.0200	1	10/23/25 11:43	10/23/25 09:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<6.90	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
4,4'-DDE	EPA 8081B	<7.11	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
4,4'-DDT	EPA 8081B	<7.18	SU	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Aldrin	EPA 8081B	<7.01	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
alpha-BHC	EPA 8081B	<7.10	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
beta-BHC	EPA 8081B	<7.09	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Chlordane, Technical	EPA 8081B	<10.7	U	µg/kg	27.0	1	10/22/25 00:39	10/21/25 11:23
cis-Chlordane	EPA 8081B	<7.21	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
delta-BHC	EPA 8081B	<7.07	SU	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Dieldrin	EPA 8081B	<7.55	SU	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2)

Lab ID: HN2515418-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<7.25	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Endosulfan II	EPA 8081B	<7.15	SU	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Endosulfan sulfate	EPA 8081B	<6.64	SU	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Endrin	EPA 8081B	<8.73	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Endrin aldehyde	EPA 8081B	<6.84	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Endrin ketone	EPA 8081B	<6.57	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
gamma-BHC (Lindane)	EPA 8081B	<7.08	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Heptachlor	EPA 8081B	<6.96	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Heptachlor epoxide	EPA 8081B	<7.14	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Methoxychlor	EPA 8081B	<7.22	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
Toxaphene	EPA 8081B	<11.7	U	µg/kg	64.8	1	10/22/25 00:39	10/21/25 11:23
trans-Chlordane	EPA 8081B	<7.17	U	µg/kg	10.8	1	10/22/25 00:39	10/21/25 11:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	84.2		%REC	53-151	1	10/22/25 00:39	10/21/25 11:23
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	48.7	S	%REC	67-127	1	10/22/25 00:39	10/21/25 11:23

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<24.9	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1221	EPA 8082A	<24.9	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1232	EPA 8082A	<24.9	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1242	EPA 8082A	<24.9	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1248	EPA 8082A	<24.9	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1254	EPA 8082A	<20.3	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1260	EPA 8082A	<20.3	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1262	EPA 8082A	<20.3	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Aroclor 1268	EPA 8082A	<20.3	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
Total PCB	EPA 8082A	<20.3	U	µg/kg	72.6	1	10/22/25 11:10	10/21/25 10:06
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	138		%REC	54-146	1	10/22/25 11:10	10/21/25 10:06
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	115		%REC	58-140	1	10/22/25 11:10	10/21/25 10:06

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<29.8	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<42.4	U	µg/kg	1840	5	10/21/25 23:08	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: HN2515418-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<132	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13
1-Methylnaphthalene	EPA 8270E	<26.5	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<43.1	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,3,4,6-Tetrachlorophenol	EPA 8270E	<135	U	µg/kg	368	5	10/21/25 23:08	10/16/25 12:13
2,4,5-Trichlorophenol	EPA 8270E	<109	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,4,6-Trichlorophenol	EPA 8270E	<48.9	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,4-Dichlorophenol	EPA 8270E	<98.9	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,4-Dimethylphenol	EPA 8270E	<94.5	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,4-Dinitrophenol	EPA 8270E	<1340	U	µg/kg	1840	5	10/21/25 23:08	10/16/25 12:13
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<119	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<46.9	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2-Chloronaphthalene	EPA 8270E	<25.7	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
2-Chlorophenol	EPA 8270E	<120	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<153	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2-Methylnaphthalene	EPA 8270E	<18.7	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
2-Methylphenol (o-Cresol)	EPA 8270E	<49.7	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2-Nitroaniline	EPA 8270E	<102	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
2-Nitrophenol	EPA 8270E	<52.4	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
3&4-Methylphenol	EPA 8270E	<100	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
3,3'-Dichlorobenzidine	EPA 8270E	<85.8	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13
3-Nitroaniline	EPA 8270E	<107	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<101	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
4-Chloro-3-methylphenol	EPA 8270E	<52.4	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
4-Chloroaniline	EPA 8270E	<93.4	U	µg/kg	368	5	10/21/25 23:08	10/16/25 12:13
4-Chlorophenyl phenylether	EPA 8270E	<50.8	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
4-Nitroaniline	EPA 8270E	<285	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13
4-Nitrophenol	EPA 8270E	<430	U	µg/kg	1840	5	10/21/25 23:08	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: HN2515418-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthene	EPA 8270E	<26.6	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Acenaphthylene	EPA 8270E	<31.9	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Acetophenone	EPA 8270E	<28.8	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Anthracene	EPA 8270E	<25.9	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Atrazine	EPA 8270E	<108	SU	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Benzaldehyde	EPA 8270E	<282	U	µg/kg	368	5	10/21/25 23:08	10/16/25 12:13
Benzo(a)anthracene	EPA 8270E	154		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Benzo(a)pyrene	EPA 8270E	169		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Benzo(b)fluoranthene	EPA 8270E	334		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Benzo(g,h,i)perylene	EPA 8270E	180		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Benzo(k)fluoranthene	EPA 8270E	334		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
bis(2-Chloroethoxy) methane	EPA 8270E	<116	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
bis(2-Chloroethyl) ether	EPA 8270E	<52.0	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Butyl benzyl phthalate	EPA 8270E	<230	U	µg/kg	368	5	10/21/25 23:08	10/16/25 12:13
Caprolactam	EPA 8270E	<166	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Carbazole	EPA 8270E	<54.2	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Chrysene	EPA 8270E	143		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	<152	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Dibenz(a,h) anthracene	EPA 8270E	<19.8	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Dibenzofuran	EPA 8270E	<27.0	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Diethyl phthalate	EPA 8270E	<62.5	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Dimethyl phthalate	EPA 8270E	<35.8	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Fluoranthene	EPA 8270E	235		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Fluorene	EPA 8270E	<26.7	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Hexachlorobenzene	EPA 8270E	<53.5	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Hexachlorobutadiene	EPA 8270E	<43.3	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Hexachlorocyclopentadiene	EPA 8270E	<174	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Hexachloroethane	EPA 8270E	<76.1	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Indeno(1,2,3-cd) pyrene	EPA 8270E	158		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Isophorone	EPA 8270E	<35.9	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: HN2515418-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methylphenol, Total	EPA 8270E	<49.7	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Naphthalene	EPA 8270E	<23.5	U	µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Nitrobenzene	EPA 8270E	<61.7	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13
n-Nitrosodi-n-propylamine	EPA 8270E	<30.3	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
N-Nitrosodiphenylamine	EPA 8270E	<106	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Pentachlorophenol	EPA 8270E	<146	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Phenanthrene	EPA 8270E	80.9		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Phenol	EPA 8270E	<92.3	U	µg/kg	182	5	10/21/25 23:08	10/16/25 12:13
Pyrene	EPA 8270E	235		µg/kg	36.8	5	10/21/25 23:08	10/16/25 12:13
Pyridine	EPA 8270E	<362	U	µg/kg	919	5	10/21/25 23:08	10/16/25 12:13

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<17.2	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<24.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,1,2-Trichloroethane	EPA 8260D	<16.5	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,1-Dichloroethane	EPA 8260D	<14.2	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,1-Dichloroethylene	EPA 8260D	<12.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,2,3-Trichlorobenzene	EPA 8260D	<46.6	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
1,2,3-Trichloropropane	EPA 8260D	<16.3	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,2,4-Trichlorobenzene	EPA 8260D	<44.0	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
1,2,4-Trimethylbenzene	EPA 8260D	<28.5	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<35.8	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<22.9	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.7	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<22.9	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
1,2-Dichloropropane	EPA 8260D	<28.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,3,5-Trimethylbenzene	EPA 8260D	<27.4	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<26.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
1,3-Dichloropropene	EPA 8260D	<21.7	U	µg/kg	77.7	1	10/23/25 06:26	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: HN2515418-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<31.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<92.5	U	µg/kg	259	1	10/23/25 06:26	10/16/25 15:29
2-Hexanone	EPA 8260D	<19.3	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<36.2	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Acetone	EPA 8260D	<115	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Benzene	EPA 8260D	<18.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Bromochloromethane	EPA 8260D	<19.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Bromodichloromethane	EPA 8260D	<21.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Bromoform	EPA 8260D	<16.4	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Carbon disulfide	EPA 8260D	<20.1	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Carbon tetrachloride	EPA 8260D	<15.2	SU	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Chlorobenzene	EPA 8260D	<12.9	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Chlorodibromomethane	EPA 8260D	<21.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Chloroethane (Ethyl chloride)	EPA 8260D	<109	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Chloroform	EPA 8260D	<14.2	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
cis-1,2-Dichloroethylene	EPA 8260D	<25.0	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
cis-1,3-Dichloropropene	EPA 8260D	<29.3	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Cyclohexane	EPA 8260D	<29.8	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<47.0	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Ethylbenzene	EPA 8260D	<27.6	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Isopropylbenzene	EPA 8260D	<24.5	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
m+p-Xylene	EPA 8260D	<51.8	U	µg/kg	77.7	1	10/23/25 06:26	10/16/25 15:29
Methyl bromide (Bromomethane)	EPA 8260D	<74.3	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Methyl chloride (Chloromethane)	EPA 8260D	<106	U	µg/kg	130	1	10/23/25 06:26	10/16/25 15:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<28.3	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Methylcyclohexane	EPA 8260D	<14.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Methylene chloride (Dichloromethane)	EPA 8260D	<103	U	µg/kg	324	1	10/23/25 06:26	10/16/25 15:29
o-Xylene	EPA 8260D	<15.0	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 12:55
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-1 (1-2) **Lab ID:** HN2515418-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Styrene	EPA 8260D	<15.4	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<23.4	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Toluene	EPA 8260D	<32.0	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Total Xylene	EPA 8260D	<15.0	U	µg/kg	117	1	10/23/25 06:26	10/16/25 15:29
trans-1,2-Dichloroethylene	EPA 8260D	<32.1	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
trans-1,3-Dichloropropylene	EPA 8260D	<21.7	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<17.4	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<19.9	SU	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29
Vinyl chloride (Chloroethene)	EPA 8260D	<25.8	U	µg/kg	38.9	1	10/23/25 06:26	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4) **Lab ID:** HN2515418-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.05	U	µg/kg	11.1	1	10/24/25 21:10	10/22/25 09:07
2,4,5-TP (Silvex)	EPA 8151A	<3.65	U	µg/kg	11.1	1	10/24/25 21:10	10/22/25 09:07
2,4-D	EPA 8151A	<5.94	U	µg/kg	22.2	1	10/24/25 21:10	10/22/25 09:07
Surr: DCAA	EPA 8151A	62.0		%REC	10-116	1	10/24/25 21:10	10/22/25 09:07
General Chemistry Parameters								
Percent Moisture	EPA 3550C	4.8		%	0.1	1	10/16/25 10:38	NA
Chloride	EPA 9056A	<3.26	U	mg/kg	10.5	1	10/21/25 00:13	10/20/25 15:35
Metals								
Arsenic	EPA 6010D	6.32		mg/kg	0.273	1	10/24/25 13:01	10/23/25 10:32
Barium	EPA 6010D	61.8		mg/kg	0.547	1	10/24/25 13:01	10/23/25 10:32
Cadmium	EPA 6010D	<0.0448	U	mg/kg	0.547	1	10/24/25 13:01	10/23/25 10:32
Chromium	EPA 6010D	14.4		mg/kg	0.273	1	10/24/25 13:01	10/23/25 10:32
Copper	EPA 6010D	14.0		mg/kg	0.547	1	10/24/25 13:01	10/23/25 10:32
Lead	EPA 6010D	8.48		mg/kg	0.273	1	10/24/25 13:01	10/23/25 10:32
Selenium	EPA 6010D	<0.153	U	mg/kg	0.547	1	10/24/25 13:01	10/23/25 10:32
Silver	EPA 6010D	<0.131	U	mg/kg	0.273	1	10/24/25 13:01	10/23/25 10:32
Zinc	EPA 6010D	34.8		mg/kg	0.547	1	10/24/25 13:01	10/23/25 10:32
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	10/23/25 11:45	10/23/25 09:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<6.60	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
4,4'-DDE	EPA 8081B	<6.80	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
4,4'-DDT	EPA 8081B	<6.87	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Aldrin	EPA 8081B	<6.71	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
alpha-BHC	EPA 8081B	<6.80	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
beta-BHC	EPA 8081B	<6.78	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Chlordane, Technical	EPA 8081B	<10.2	U	µg/kg	25.8	1	10/22/25 02:11	10/21/25 11:23
cis-Chlordane	EPA 8081B	<6.90	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
delta-BHC	EPA 8081B	<6.76	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Dieldrin	EPA 8081B	<7.22	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4)	Lab ID: HN2515418-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<6.94	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Endosulfan II	EPA 8081B	<6.84	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Endosulfan sulfate	EPA 8081B	<6.35	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Endrin	EPA 8081B	<8.35	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Endrin aldehyde	EPA 8081B	<6.54	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Endrin ketone	EPA 8081B	<6.28	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
gamma-BHC (Lindane)	EPA 8081B	<6.78	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Heptachlor	EPA 8081B	<6.66	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Heptachlor epoxide	EPA 8081B	<6.83	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Methoxychlor	EPA 8081B	<6.90	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
Toxaphene	EPA 8081B	<11.2	U	µg/kg	61.9	1	10/22/25 02:11	10/21/25 11:23
trans-Chlordane	EPA 8081B	<6.86	U	µg/kg	10.3	1	10/22/25 02:11	10/21/25 11:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	106		%REC	53-151	1	10/22/25 02:11	10/21/25 11:23
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	77.4		%REC	67-127	1	10/22/25 02:11	10/21/25 11:23

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<23.7	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1221	EPA 8082A	<23.7	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1232	EPA 8082A	<23.7	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1242	EPA 8082A	<23.7	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1248	EPA 8082A	<23.7	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1254	EPA 8082A	<19.3	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1260	EPA 8082A	<19.3	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1262	EPA 8082A	<19.3	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Aroclor 1268	EPA 8082A	<19.3	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
Total PCB	EPA 8082A	<19.3	U	µg/kg	69.1	1	10/18/25 17:20	10/16/25 13:05
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	115		%REC	54-146	1	10/18/25 17:20	10/16/25 13:05
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	101		%REC	58-140	1	10/18/25 17:20	10/16/25 13:05

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<5.56	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<7.90	U	µg/kg	342	1	10/21/25 19:36	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4)

Lab ID: HN2515418-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<24.6	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13
1-Methylnaphthalene	EPA 8270E	<4.94	U	µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<8.03	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,3,4,6-Tetrachlorophenol	EPA 8270E	<25.1	U	µg/kg	68.6	1	10/21/25 19:36	10/16/25 12:13
2,4,5-Trichlorophenol	EPA 8270E	<20.3	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,4,6-Trichlorophenol	EPA 8270E	<9.12	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,4-Dichlorophenol	EPA 8270E	<18.4	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,4-Dimethylphenol	EPA 8270E	<17.6	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,4-Dinitrophenol	EPA 8270E	<251	U	µg/kg	342	1	10/21/25 19:36	10/16/25 12:13
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<22.3	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<8.75	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2-Chloronaphthalene	EPA 8270E	<4.79	U	µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
2-Chlorophenol	EPA 8270E	<22.4	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<28.6	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2-Methylnaphthalene	EPA 8270E	<3.49	U	µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
2-Methylphenol (o-Cresol)	EPA 8270E	<9.26	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2-Nitroaniline	EPA 8270E	<19.0	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
2-Nitrophenol	EPA 8270E	<9.77	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
3&4-Methylphenol	EPA 8270E	<18.7	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
3,3'-Dichlorobenzidine	EPA 8270E	<16.0	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13
3-Nitroaniline	EPA 8270E	<19.9	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<18.8	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
4-Chloro-3-methylphenol	EPA 8270E	<9.77	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
4-Chloroaniline	EPA 8270E	<17.4	U	µg/kg	68.6	1	10/21/25 19:36	10/16/25 12:13
4-Chlorophenyl phenylether	EPA 8270E	<9.47	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
4-Nitroaniline	EPA 8270E	<53.2	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13
4-Nitrophenol	EPA 8270E	<80.3	U	µg/kg	342	1	10/21/25 19:36	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4) **Lab ID:** HN2515418-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthene	EPA 8270E	15.1		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Acenaphthylene	EPA 8270E	<5.94	U	µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Acetophenone	EPA 8270E	<5.37	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Anthracene	EPA 8270E	26.7		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Atrazine	EPA 8270E	<20.1	SU	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Benzaldehyde	EPA 8270E	<52.6	U	µg/kg	68.6	1	10/21/25 19:36	10/16/25 12:13
Benzo(a)anthracene	EPA 8270E	59.0		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Benzo(a)pyrene	EPA 8270E	45.2		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Benzo(b)fluoranthene	EPA 8270E	66.5		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Benzo(g,h,i)perylene	EPA 8270E	34.3		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Benzo(k)fluoranthene	EPA 8270E	20.6		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
bis(2-Chloroethoxy) methane	EPA 8270E	<21.7	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
bis(2-Chloroethyl) ether	EPA 8270E	<9.71	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Butyl benzyl phthalate	EPA 8270E	<42.9	U	µg/kg	68.6	1	10/21/25 19:36	10/16/25 12:13
Caprolactam	EPA 8270E	<30.9	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Carbazole	EPA 8270E	<10.1	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Chrysene	EPA 8270E	51.4		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	<28.4	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Dibenz(a,h) anthracene	EPA 8270E	<3.70	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Dibenzofuran	EPA 8270E	<5.04	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Diethyl phthalate	EPA 8270E	<11.7	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Dimethyl phthalate	EPA 8270E	<6.68	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Fluoranthene	EPA 8270E	145		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Fluorene	EPA 8270E	12.3		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Hexachlorobenzene	EPA 8270E	<9.97	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Hexachlorobutadiene	EPA 8270E	<8.07	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Hexachlorocyclopentadiene	EPA 8270E	<32.5	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Hexachloroethane	EPA 8270E	<14.2	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Indeno(1,2,3-cd) pyrene	EPA 8270E	36.3		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Isophorone	EPA 8270E	<6.69	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4)	Lab ID: HN2515418-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methylphenol, Total	EPA 8270E	<9.26	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Naphthalene	EPA 8270E	<4.38	U	µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Nitrobenzene	EPA 8270E	<11.5	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13
n-Nitrosodi-n-propylamine	EPA 8270E	<5.66	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
N-Nitrosodiphenylamine	EPA 8270E	<19.8	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Pentachlorophenol	EPA 8270E	<27.2	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Phenanthrene	EPA 8270E	143		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Phenol	EPA 8270E	<17.2	U	µg/kg	33.9	1	10/21/25 19:36	10/16/25 12:13
Pyrene	EPA 8270E	115		µg/kg	6.86	1	10/21/25 19:36	10/16/25 12:13
Pyridine	EPA 8270E	<67.5	U	µg/kg	171	1	10/21/25 19:36	10/16/25 12:13

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<16.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<15.6	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<22.4	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,1,2-Trichloroethane	EPA 8260D	<15.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,1-Dichloroethane	EPA 8260D	<12.9	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,1-Dichloroethylene	EPA 8260D	<11.5	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,2,3-Trichlorobenzene	EPA 8260D	<42.4	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
1,2,3-Trichloropropane	EPA 8260D	<14.8	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,2,4-Trichlorobenzene	EPA 8260D	<40.1	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
1,2,4-Trimethylbenzene	EPA 8260D	<25.9	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<32.6	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<20.8	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<13.4	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<20.8	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
1,2-Dichloropropane	EPA 8260D	<26.1	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,3,5-Trimethylbenzene	EPA 8260D	<25.0	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<24.4	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
1,3-Dichloropropene	EPA 8260D	<19.8	U	µg/kg	70.7	1	10/23/25 06:42	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4)	Lab ID: HN2515418-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<28.7	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<84.2	U	µg/kg	236	1	10/23/25 06:42	10/16/25 15:29
2-Hexanone	EPA 8260D	<17.5	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<33.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Acetone	EPA 8260D	<105	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Benzene	EPA 8260D	<17.1	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Bromochloromethane	EPA 8260D	<18.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Bromodichloromethane	EPA 8260D	<19.8	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Bromoform	EPA 8260D	<14.9	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Carbon disulfide	EPA 8260D	<18.3	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Carbon tetrachloride	EPA 8260D	<13.8	SU	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Chlorobenzene	EPA 8260D	<11.7	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Chlorodibromomethane	EPA 8260D	<19.9	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Chloroethane (Ethyl chloride)	EPA 8260D	<99.1	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Chloroform	EPA 8260D	<13.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
cis-1,2-Dichloroethylene	EPA 8260D	<22.7	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
cis-1,3-Dichloropropene	EPA 8260D	<26.6	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Cyclohexane	EPA 8260D	<27.1	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<42.8	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Ethylbenzene	EPA 8260D	<25.1	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Isopropylbenzene	EPA 8260D	<22.3	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
m+p-Xylene	EPA 8260D	<47.2	U	µg/kg	70.7	1	10/23/25 06:42	10/16/25 15:29
Methyl bromide (Bromomethane)	EPA 8260D	<67.7	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Methyl chloride (Chloromethane)	EPA 8260D	<96.7	U	µg/kg	118	1	10/23/25 06:42	10/16/25 15:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<25.8	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Methylcyclohexane	EPA 8260D	<13.5	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Methylene chloride (Dichloromethane)	EPA 8260D	<93.9	U	µg/kg	295	1	10/23/25 06:42	10/16/25 15:29
o-Xylene	EPA 8260D	<13.7	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:00
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-2 (3-4) **Lab ID:** HN2515418-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Styrene	EPA 8260D	<14.0	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<21.3	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Toluene	EPA 8260D	<29.2	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Total Xylene	EPA 8260D	<13.7	U	µg/kg	106	1	10/23/25 06:42	10/16/25 15:29
trans-1,2-Dichloroethylene	EPA 8260D	<29.2	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
trans-1,3-Dichloropropylene	EPA 8260D	<19.8	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<15.9	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<18.1	SU	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29
Vinyl chloride (Chloroethene)	EPA 8260D	<23.5	U	µg/kg	35.4	1	10/23/25 06:42	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6) **Lab ID:** HN2515418-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.54	U	µg/kg	13.8	1	10/24/25 21:22	10/22/25 09:07
2,4,5-TP (Silvex)	EPA 8151A	<4.54	U	µg/kg	13.8	1	10/24/25 21:22	10/22/25 09:07
2,4-D	EPA 8151A	<7.38	U	µg/kg	27.7	1	10/24/25 21:22	10/22/25 09:07
Surr: DCAA	EPA 8151A	16.0		%REC	10-116	1	10/24/25 21:22	10/22/25 09:07
General Chemistry Parameters								
Percent Moisture	EPA 3550C	9.7		%	0.1	1	10/16/25 10:38	NA
Chloride	EPA 9056A	<3.43	U	mg/kg	11.1	1	10/21/25 00:23	10/20/25 15:35
Metals								
Arsenic	EPA 6010D	5.90		mg/kg	0.327	1	10/24/25 13:07	10/23/25 10:32
Barium	EPA 6010D	44.3		mg/kg	0.655	1	10/24/25 13:07	10/23/25 10:32
Cadmium	EPA 6010D	<0.0537	U	mg/kg	0.655	1	10/24/25 13:07	10/23/25 10:32
Chromium	EPA 6010D	14.4		mg/kg	0.327	1	10/24/25 13:07	10/23/25 10:32
Copper	EPA 6010D	19.0		mg/kg	0.655	1	10/24/25 13:07	10/23/25 10:32
Lead	EPA 6010D	6.78		mg/kg	0.327	1	10/24/25 13:07	10/23/25 10:32
Selenium	EPA 6010D	<0.183	U	mg/kg	0.655	1	10/24/25 13:07	10/23/25 10:32
Silver	EPA 6010D	<0.157	U	mg/kg	0.327	1	10/24/25 13:07	10/23/25 10:32
Zinc	EPA 6010D	40.6		mg/kg	0.655	1	10/24/25 13:07	10/23/25 10:32
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	10/23/25 11:47	10/23/25 09:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<17.4	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
4,4'-DDE	EPA 8081B	<17.9	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
4,4'-DDT	EPA 8081B	<18.1	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Aldrin	EPA 8081B	<17.7	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
alpha-BHC	EPA 8081B	<17.9	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
beta-BHC	EPA 8081B	<17.9	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Chlordane, Technical	EPA 8081B	<27.0	U	µg/kg	68.0	1	10/22/25 02:22	10/21/25 11:23
cis-Chlordane	EPA 8081B	<18.2	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
delta-BHC	EPA 8081B	<17.8	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Dieldrin	EPA 8081B	<19.0	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6)	Lab ID: HN2515418-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<18.3	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Endosulfan II	EPA 8081B	<18.0	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Endosulfan sulfate	EPA 8081B	<16.7	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Endrin	EPA 8081B	<22.0	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Endrin aldehyde	EPA 8081B	<17.2	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Endrin ketone	EPA 8081B	<16.5	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
gamma-BHC (Lindane)	EPA 8081B	<17.8	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Heptachlor	EPA 8081B	<17.6	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Heptachlor epoxide	EPA 8081B	<18.0	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Methoxychlor	EPA 8081B	<18.2	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
Toxaphene	EPA 8081B	<29.4	U	µg/kg	163	1	10/22/25 02:22	10/21/25 11:23
trans-Chlordane	EPA 8081B	<18.1	U	µg/kg	27.2	1	10/22/25 02:22	10/21/25 11:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	131		%REC	53-151	1	10/22/25 02:22	10/21/25 11:23
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	92.8		%REC	67-127	1	10/22/25 02:22	10/21/25 11:23

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<60.2	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1221	EPA 8082A	<60.2	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1232	EPA 8082A	<60.2	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1242	EPA 8082A	<60.2	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1248	EPA 8082A	<60.2	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1254	EPA 8082A	<49.0	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1260	EPA 8082A	<49.0	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1262	EPA 8082A	<49.0	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Aroclor 1268	EPA 8082A	<49.0	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
Total PCB	EPA 8082A	<49.0	U	µg/kg	175	1	10/18/25 17:32	10/16/25 13:05
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	108		%REC	54-146	1	10/18/25 17:32	10/16/25 13:05
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	94.8		%REC	58-140	1	10/18/25 17:32	10/16/25 13:05

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<14.0	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<19.9	U	µg/kg	860	1	10/21/25 19:57	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6)	Lab ID: HN2515418-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<61.8	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13
1-Methylnaphthalene	EPA 8270E	<12.4	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<20.2	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,3,4,6-Tetrachlorophenol	EPA 8270E	<63.1	U	µg/kg	172	1	10/21/25 19:57	10/16/25 12:13
2,4,5-Trichlorophenol	EPA 8270E	<51.0	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,4,6-Trichlorophenol	EPA 8270E	<22.9	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,4-Dichlorophenol	EPA 8270E	<46.4	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,4-Dimethylphenol	EPA 8270E	<44.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,4-Dinitrophenol	EPA 8270E	<630	U	µg/kg	860	1	10/21/25 19:57	10/16/25 12:13
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<55.9	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<22.0	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2-Chloronaphthalene	EPA 8270E	<12.0	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
2-Chlorophenol	EPA 8270E	<56.4	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<71.9	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2-Methylnaphthalene	EPA 8270E	<8.76	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
2-Methylphenol (o-Cresol)	EPA 8270E	<23.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2-Nitroaniline	EPA 8270E	<47.8	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
2-Nitrophenol	EPA 8270E	<24.5	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
3&4-Methylphenol	EPA 8270E	<47.0	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
3,3'-Dichlorobenzidine	EPA 8270E	<40.2	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13
3-Nitroaniline	EPA 8270E	<50.0	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<47.2	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
4-Chloro-3-methylphenol	EPA 8270E	<24.5	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
4-Chloroaniline	EPA 8270E	<43.8	U	µg/kg	172	1	10/21/25 19:57	10/16/25 12:13
4-Chlorophenyl phenylether	EPA 8270E	<23.8	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
4-Nitroaniline	EPA 8270E	<134	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13
4-Nitrophenol	EPA 8270E	<202	U	µg/kg	860	1	10/21/25 19:57	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6)	Lab ID: HN2515418-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthene	EPA 8270E	<12.5	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Acenaphthylene	EPA 8270E	<14.9	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Acetophenone	EPA 8270E	<13.5	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Anthracene	EPA 8270E	<12.1	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Atrazine	EPA 8270E	<50.5	SU	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Benzaldehyde	EPA 8270E	<132	U	µg/kg	172	1	10/21/25 19:57	10/16/25 12:13
Benzo(a)anthracene	EPA 8270E	24.1		µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Benzo(a)pyrene	EPA 8270E	<10.6	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Benzo(b)fluoranthene	EPA 8270E	<12.8	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Benzo(g,h,i)perylene	EPA 8270E	24.1		µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Benzo(k)fluoranthene	EPA 8270E	<13.0	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
bis(2-Chloroethoxy) methane	EPA 8270E	<54.5	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
bis(2-Chloroethyl) ether	EPA 8270E	<24.4	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Butyl benzyl phthalate	EPA 8270E	<108	U	µg/kg	172	1	10/21/25 19:57	10/16/25 12:13
Caprolactam	EPA 8270E	<77.7	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Carbazole	EPA 8270E	<25.4	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Chrysene	EPA 8270E	29.3		µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	<71.2	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Dibenz(a,h) anthracene	EPA 8270E	<9.30	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Dibenzofuran	EPA 8270E	<12.7	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Diethyl phthalate	EPA 8270E	<29.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Dimethyl phthalate	EPA 8270E	<16.8	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Fluoranthene	EPA 8270E	<8.27	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Fluorene	EPA 8270E	<12.5	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Hexachlorobenzene	EPA 8270E	<25.1	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Hexachlorobutadiene	EPA 8270E	<20.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Hexachlorocyclopentadiene	EPA 8270E	<81.7	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Hexachloroethane	EPA 8270E	<35.7	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Indeno(1,2,3-cd) pyrene	EPA 8270E	<12.0	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Isophorone	EPA 8270E	<16.8	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6)	Lab ID: HN2515418-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methylphenol, Total	EPA 8270E	<23.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Naphthalene	EPA 8270E	<11.0	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Nitrobenzene	EPA 8270E	<28.9	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13
n-Nitrosodi-n-propylamine	EPA 8270E	<14.2	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
N-Nitrosodiphenylamine	EPA 8270E	<49.9	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Pentachlorophenol	EPA 8270E	<68.4	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Phenanthrene	EPA 8270E	<8.01	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Phenol	EPA 8270E	<43.3	U	µg/kg	85.3	1	10/21/25 19:57	10/16/25 12:13
Pyrene	EPA 8270E	<8.59	U	µg/kg	17.2	1	10/21/25 19:57	10/16/25 12:13
Pyridine	EPA 8270E	<170	U	µg/kg	431	1	10/21/25 19:57	10/16/25 12:13

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.7	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,1,2,2-Tetrachloroethane	EPA 8260D	<17.2	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<24.7	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,1,2-Trichloroethane	EPA 8260D	<16.6	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,1-Dichloroethane	EPA 8260D	<14.2	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,1-Dichloroethylene	EPA 8260D	<12.6	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,2,3-Trichlorobenzene	EPA 8260D	<46.8	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
1,2,3-Trichloropropane	EPA 8260D	<16.3	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,2,4-Trichlorobenzene	EPA 8260D	<44.2	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
1,2,4-Trimethylbenzene	EPA 8260D	<28.6	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<35.9	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<23.0	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.8	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<23.0	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
1,2-Dichloropropane	EPA 8260D	<28.8	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,3,5-Trimethylbenzene	EPA 8260D	<27.6	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<27.0	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
1,3-Dichloropropene	EPA 8260D	<21.8	U	µg/kg	78.1	1	10/23/25 06:58	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6) **Lab ID:** HN2515418-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<31.7	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<92.9	U	µg/kg	260	1	10/23/25 06:58	10/16/25 15:29
2-Hexanone	EPA 8260D	<19.4	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<36.4	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Acetone	EPA 8260D	<116	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Benzene	EPA 8260D	<18.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Bromochloromethane	EPA 8260D	<19.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Bromodichloromethane	EPA 8260D	<21.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Bromoform	EPA 8260D	<16.4	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Carbon disulfide	EPA 8260D	<20.2	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Carbon tetrachloride	EPA 8260D	<15.3	SU	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Chlorobenzene	EPA 8260D	<13.0	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Chlorodibromomethane	EPA 8260D	<21.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Chloroethane (Ethyl chloride)	EPA 8260D	<109	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Chloroform	EPA 8260D	<14.3	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
cis-1,2-Dichloroethylene	EPA 8260D	<25.1	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
cis-1,3-Dichloropropene	EPA 8260D	<29.4	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Cyclohexane	EPA 8260D	<29.9	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<47.2	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Ethylbenzene	EPA 8260D	<27.7	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Isopropylbenzene	EPA 8260D	<24.7	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
m+p-Xylene	EPA 8260D	<52.1	U	µg/kg	78.1	1	10/23/25 06:58	10/16/25 15:29
Methyl bromide (Bromomethane)	EPA 8260D	<74.7	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Methyl chloride (Chloromethane)	EPA 8260D	<107	U	µg/kg	130	1	10/23/25 06:58	10/16/25 15:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	<28.5	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Methylcyclohexane	EPA 8260D	<14.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Methylene chloride (Dichloromethane)	EPA 8260D	<104	U	µg/kg	325	1	10/23/25 06:58	10/16/25 15:29
o-Xylene	EPA 8260D	<15.1	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID

Work Order: HN2515418
Date Collected: 10/15/25 13:05
Date Received: 10/16/25 08:00

CLIENT ID: 13525 St. Aubin SB-3 (5-6) **Lab ID:** HN2515418-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Styrene	EPA 8260D	<15.5	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<23.5	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Toluene	EPA 8260D	<32.2	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Total Xylene	EPA 8260D	<15.1	U	µg/kg	117	1	10/23/25 06:58	10/16/25 15:29
trans-1,2-Dichloroethylene	EPA 8260D	<32.2	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
trans-1,3-Dichloropropylene	EPA 8260D	<21.8	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Trichloroethene (Trichloroethylene)	EPA 8260D	<17.5	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<20.0	SU	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29
Vinyl chloride (Chloroethene)	EPA 8260D	<25.9	U	µg/kg	39.0	1	10/23/25 06:58	10/16/25 15:29



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2290565

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3623700

Chlorinated Herbicides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2290565-001
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 19:00
Prep Date: 10/22/25 09:08

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	78.0	µg/kg		50		156	10-116			S

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2290565-002
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 19:13
Prep Date: 10/22/25 09:08

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	30.0	µg/kg	5.00	50		60.0	10-119			
2,4,5-TP (Silvex)	27.0	µg/kg	5.00	50		54.0	10-101			
2,4-D	28.0	µg/kg	10.0	50		56.0	10-128			
Surr: DCAA	37.0	µg/kg		50		74.0	10-116			

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2278958

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3593104

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2278958-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/16/25 10:38
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-2278958-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/16/25 10:38
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		100.0	98-102			

DUP	CLIENT ID: 13525 St. Aubin SB-2 (3-4)	Lab ID: QC-2278958-015
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/16/25 10:38
Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	4.2	%	0.1		4.8			13.0	10	R

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2286473

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3606696

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2286473-001
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/20/25 21:46
Prep Date: 10/20/25 15:35

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-2286473-002
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/20/25 21:56
Prep Date: 10/20/25 15:35

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	96.3	mg/kg	10.0	100		96.3	87-110			

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288570

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3616433

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2288570-001
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/23/25 11:18
Prep Date: 10/23/25 09:32

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-2288570-002
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/23/25 11:20
Prep Date: 10/23/25 09:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.168	mg/kg	0.0200	0.1665		101	80-120			

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2293152

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3621340

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2293152-001
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Method: EPA 6010D

Dilution: 1

Analysis Date: 10/24/25 11:32

Prep Date: 10/23/25 10:33

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	<0.163	mg/kg	0.250							U
Barium	<0.310	mg/kg	0.500							U
Cadmium	<0.0410	mg/kg	0.500							U
Chromium	<0.150	mg/kg	0.250							U
Copper	<0.370	mg/kg	0.500							U
Lead	<0.200	mg/kg	0.250							U
Selenium	<0.140	mg/kg	0.500							U
Silver	<0.120	mg/kg	0.250							U
Zinc	<0.480	mg/kg	0.500							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2293152-002
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Method: EPA 6010D

Dilution: 1

Analysis Date: 10/24/25 11:38

Prep Date: 10/23/25 10:33

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.70	mg/kg	0.250	5		94.0	80-120			
Barium	4.89	mg/kg	0.500	5		97.8	80-120			
Cadmium	4.83	mg/kg	0.500	5		96.6	80-120			
Chromium	5.01	mg/kg	0.250	5		100	80-120			
Copper	5.08	mg/kg	0.500	5		102	80-120			
Lead	4.90	mg/kg	0.250	5		98.0	80-120			
Selenium	4.75	mg/kg	0.500	5		94.9	80-120			
Silver	5.03	mg/kg	0.250	5		101	80-120			
Zinc	4.98	mg/kg	0.500	5		99.6	80-120			

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288434

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3614355

Organochlorine Pesticides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2288434-001
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/21/25 23:53

Prep Date: 10/21/25 11:24

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	48.6	µg/kg		33.33		146	53-151			
Surr: Tetrachloro-m-xylene	33.6	µg/kg		33.33		101	67-127			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2288434-002
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/22/25 00:04

Prep Date: 10/21/25 11:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	38.1	µg/kg	10.0	33.33		114	55-141			
4,4'-DDE	37.4	µg/kg	10.0	33.33		112	55-143			
4,4'-DDT	30.8	µg/kg	10.0	33.33		92.4	50-144			
Aldrin	34.5	µg/kg	10.0	33.33		103	57-141			
alpha-BHC	35.1	µg/kg	10.0	33.33		105	58-144			
beta-BHC	35.9	µg/kg	10.0	33.33		108	55-147			
cis-Chlordane	34.1	µg/kg	10.0	33.33		102	58-142			
delta-BHC	30.0	µg/kg	10.0	33.33		90.0	59-142			
Dieldrin	34.9	µg/kg	10.0	33.33		105	59-142			
Endosulfan I	34.8	µg/kg	10.0	33.33		105	57-145			
Endosulfan II	35.5	µg/kg	10.0	33.33		107	58-138			
Endosulfan sulfate	35.4	µg/kg	10.0	33.33		106	54-136			
Endrin	31.0	µg/kg	10.0	33.33		92.9	45-150			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288434

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3614355

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2288434-002
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/22/25 00:04

Prep Date: 10/21/25 11:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin aldehyde	41.8	µg/kg	10.0	33.33		126	41-147			
Endrin ketone	34.8	µg/kg	10.0	33.33		104	54-146			
gamma-BHC (Lindane)	34.7	µg/kg	10.0	33.33		104	58-145			
Heptachlor	32.0	µg/kg	10.0	33.33		95.9	51-145			
Heptachlor epoxide	34.9	µg/kg	10.0	33.33		105	59-143			
Methoxychlor	30.1	µg/kg	10.0	33.33		90.3	43-144			
trans-Chlordane	34.5	µg/kg	10.0	33.33		103	56-145			
Surr: Decachlorobiphenyl	45.6	µg/kg		33.33		137	51-151			
Surr: Tetrachloro-m-xylene	32.3	µg/kg		33.33		96.9	67-127			

MS	CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: QC-2288434-005
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/22/25 00:16

Prep Date: 10/21/25 11:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	22.6	µg/kg	11.0	33.088	<6.34	64.2	55-141			
4,4'-DDE	30.1	µg/kg	11.0	33.088	8.08	68.9	55-143			
4,4'-DDT	25.0	µg/kg	11.0	33.088	<6.60	56.2	50-144			
Aldrin	20.2	µg/kg	11.0	33.088	<6.45	61.2	57-141			
alpha-BHC	20.6	µg/kg	11.0	33.088	<6.53	62.3	58-144			
beta-BHC	19.9	µg/kg	11.0	33.088	<6.52	60.1	55-147			
cis-Chlordane	20.1	µg/kg	11.0	33.088	<6.63	60.7	58-142			
delta-BHC	15.9	µg/kg	11.0	33.088	<6.50	48.2	59-142			S
Dieldrin	20.0	µg/kg	11.0	33.088	<6.94	60.4	59-142			
Endosulfan I	19.2	µg/kg	11.0	33.088	<6.67	58.1	57-145			
Endosulfan II	18.0	µg/kg	11.0	33.088	<6.57	54.3	58-138			S
Endosulfan sulfate	18.0	µg/kg	11.0	33.088	<6.11	54.4	54-135			
Endrin	19.0	µg/kg	11.0	33.088	<8.03	57.5	45-150			
Endrin aldehyde	20.8	µg/kg	11.0	33.088	<6.29	63.0	41-147			
Endrin ketone	18.9	µg/kg	11.0	33.088	<6.04	57.3	54-146			
gamma-BHC (Lindane)	20.5	µg/kg	11.0	33.088	<6.51	61.9	58-145			
Heptachlor	18.9	µg/kg	11.0	33.088	<6.41	57.2	51-145			
Heptachlor epoxide	20.0	µg/kg	11.0	33.088	<6.57	60.5	59-143			
Methoxychlor	17.1	µg/kg	11.0	33.088	<6.64	51.6	43-144			
trans-Chlordane	19.9	µg/kg	11.0	33.088	<6.59	60.3	56-145			
Surr: Decachlorobiphenyl	26.7	µg/kg		33.088		80.7	53-151			
Surr: Tetrachloro-m-xylene	17.3	µg/kg		33.088		52.2	67-127			S

MSD	CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: QC-2288434-006
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/22/25 00:27

Prep Date: 10/21/25 11:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	21.9	µg/kg	10.8	32.361	<6.39	63.4	55-141	3.25	20	



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288434

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3614355

MSD	CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: QC-2288434-006
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/22/25 00:27

Prep Date: 10/21/25 11:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDE	27.3	µg/kg	10.8	32.361	8.08	62.0	55-143	9.57	20	
4,4'-DDT	20.1	µg/kg	10.8	32.361	<6.65	42.6	50-144	21.3	20	RS
Aldrin	20.0	µg/kg	10.8	32.361	<6.50	62.0	57-141	0.922	20	
alpha-BHC	20.6	µg/kg	10.8	32.361	<6.58	63.7	58-144	0.0009	20	
							60			
beta-BHC	19.7	µg/kg	10.8	32.361	<6.57	60.8	55-147	0.980	20	
cis-Chlordane	19.2	µg/kg	10.8	32.361	<6.68	59.4	58-142	4.47	20	
delta-BHC	15.6	µg/kg	10.8	32.361	<6.55	48.1	59-142	2.53	20	S
Dieldrin	19.1	µg/kg	10.8	32.361	<6.99	58.9	59-142	4.74	20	S
Endosulfan I	18.6	µg/kg	10.8	32.361	<6.72	57.4	57-145	3.43	20	
Endosulfan II	17.8	µg/kg	10.8	32.361	<6.62	55.1	58-138	0.759	20	S
Endosulfan sulfate	16.7	µg/kg	10.8	32.361	<6.15	51.8	54-135	7.21	20	S
Endrin	17.2	µg/kg	10.8	32.361	<8.09	53.0	45-150	10.4	20	
Endrin aldehyde	19.3	µg/kg	10.8	32.361	<6.34	59.8	41-147	7.51	20	
Endrin ketone	18.3	µg/kg	10.8	32.361	<6.08	56.5	54-146	3.63	20	
gamma-BHC (Lindane)	20.1	µg/kg	10.8	32.361	<6.56	62.2	58-145	1.74	20	
Heptachlor	17.0	µg/kg	10.8	32.361	<6.45	52.6	51-145	10.7	20	
Heptachlor epoxide	19.2	µg/kg	10.8	32.361	<6.62	59.3	59-143	4.23	20	
Methoxychlor	15.5	µg/kg	10.8	32.361	<6.69	47.9	43-144	9.76	20	
trans-Chlordane	19.7	µg/kg	10.8	32.361	<6.64	60.9	56-145	1.23	20	
Surr: Decachlorobiphenyl	29.0	µg/kg		32.361		89.5	53-151	8.19	30	
Surr: Tetrachloro-m-xylene	19.0	µg/kg		32.361		58.9	67-127	9.86	30	S

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279041

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3605132

Polychlorinated Biphenyls (PCBs) by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2279041-001
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/18/25 15:10
Prep Date: 10/16/25 13:06

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	33.1	µg/kg		33.3		99.4	54-146			
Surr: Tetrachloro-m-xylene	29.1	µg/kg		33.3		87.4	58-140			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279041-002
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/18/25 15:22
Prep Date: 10/16/25 13:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	786	µg/kg	66.7	833		94.4	71-135			
Aroclor 1260	806	µg/kg	66.7	833		96.7	67-135			
Surr: Decachlorobiphenyl	37.6	µg/kg		33.3		113	54-146			
Surr: Tetrachloro-m-xylene	31.6	µg/kg		33.3		95.0	58-140			

The following samples were analyzed in this batch: HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288188

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3614644

Polychlorinated Biphenyls (PCBs) by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2288188-001
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/22/25 10:23
Prep Date: 10/21/25 10:07

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	48.8	µg/kg		33.3		147	54-146			S
Surr: Tetrachloro-m-xylene	42.2	µg/kg		33.3		127	58-140			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2288188-002
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/22/25 10:35
Prep Date: 10/21/25 10:07

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	869	µg/kg	66.7	833		104	71-135			
Aroclor 1260	829	µg/kg	66.7	833		99.6	67-135			
Surr: Decachlorobiphenyl	43.2	µg/kg		33.3		130	54-146			
Surr: Tetrachloro-m-xylene	36.5	µg/kg		33.3		110	58-140			

MS	CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: QC-2288188-005
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/22/25 10:46
Prep Date: 10/21/25 10:07

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	868	µg/kg	73.7	830.14	<22.8	105	71-135			
Aroclor 1260	875	µg/kg	73.7	830.14	<18.6	105	67-135			
Surr: Decachlorobiphenyl	43.2	µg/kg		33.186		130	54-146			
Surr: Tetrachloro-m-xylene	33.5	µg/kg		33.186		101	58-140			

MSD	CLIENT ID: 13525 St. Aubin SB-1 (1-2)	Lab ID: QC-2288188-006
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Method: EPA 8082A **Dilution:** 1 **Analysis Date:** 10/22/25 10:58
Prep Date: 10/21/25 10:07

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	814	µg/kg	72.8	819.16	<22.9	99.4	71-135	6.44	20	
Aroclor 1260	820	µg/kg	72.8	819.16	<18.6	100	67-135	6.50	20	
Surr: Decachlorobiphenyl	44.6	µg/kg		32.747		136	54-146	3.37	30	
Surr: Tetrachloro-m-xylene	33.5	µg/kg		32.747		102	58-140	0.0999	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288188

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3614644

The following samples were analyzed in this batch: HN2515418-001



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279011

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3612730

Semivolatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2279011-001
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/21/25 15:44

Prep Date: 10/16/25 12:14

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



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279011

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3612730

MB	CLIENT ID: Method Blank	Lab ID: QC-2279011-001
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/21/25 15:44

Prep Date: 10/16/25 12:14

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279011-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/21/25 16:05

Prep Date: 10/16/25 12:14

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	977	µg/kg	33.0	1333		73.3	57-101			
1,2,4,5-Tetrachlorobenzene	956	µg/kg	333	1333		71.7	54-98			
1-Methylnaphthalene	987	µg/kg	6.67	1333		74.1	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	937	µg/kg	33.0	1333		70.3	50-101			
2,3,4,6-Tetrachlorophenol	889	µg/kg	67.0	1333		66.7	48-103			
2,4,5-Trichlorophenol	1010	µg/kg	33.0	1333		75.5	54-98			
2,4,6-Trichlorophenol	1060	µg/kg	33.0	1333		79.6	56-97			
2,4-Dichlorophenol	954	µg/kg	33.0	1333		71.6	54-99			
2,4-Dimethylphenol	881	µg/kg	33.0	1333		66.1	47-102			
2,4-Dinitrophenol	802	µg/kg	333	1333		60.2	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1040	µg/kg	33.0	1333		78.0	62-105			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279011

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3612730

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279011-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/21/25 16:05

Prep Date: 10/16/25 12:14

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,6-Dinitrotoluene (2,6-DNT)	1050	µg/kg	33.0	1333		79.1	62-103			
2-Chloronaphthalene	1050	µg/kg	6.67	1333		78.5	57-101			
2-Chlorophenol	953	µg/kg	33.0	1333		71.5	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	915	µg/kg	33.0	1333		68.7	42-104			
2-Methylnaphthalene	972	µg/kg	6.67	1333		72.9	55-102			
2-Methylphenol (o-Cresol)	912	µg/kg	33.0	1333		68.4	54-103			
2-Nitroaniline	1050	µg/kg	33.0	1333		78.4	57-103			
2-Nitrophenol	988	µg/kg	33.0	1333		74.1	52-102			
3&4-Methylphenol	930	µg/kg	33.0	1333		69.8	56-103			
3,3'-Dichlorobenzidine	811	µg/kg	167	1333		60.9	41-91			
3-Nitroaniline	806	µg/kg	33.0	1333		60.5	35-107			
4-Bromophenyl phenyl ether (BDE-3)	1040	µg/kg	33.0	1333		78.2	63-104			
4-Chloro-3-methylphenol	935	µg/kg	33.0	1333		70.1	57-103			
4-Chloroaniline	979	µg/kg	67.0	1333		73.4	32-99			
4-Chlorophenyl phenylether	1040	µg/kg	33.0	1333		78.4	62-100			
4-Nitroaniline	595	µg/kg	167	1333		44.6	19-124			
4-Nitrophenol	996	µg/kg	333	1333		74.7	44-106			
Acenaphthene	1050	µg/kg	6.67	1333		78.5	60-101			
Acenaphthylene	1080	µg/kg	6.67	1333		80.8	59-101			
Acetophenone	921	µg/kg	33.0	1333		69.1	54-102			
Anthracene	1030	µg/kg	6.67	1333		77.1	63-96			
Atrazine	<19.5	µg/kg	33.0	1333		0.00	60-110			SU
Benzaldehyde	421	µg/kg	67.0	1333		31.6	10-143			
Benzo(a)anthracene	1030	µg/kg	6.67	1333		77.3	66-102			
Benzo(a)pyrene	1050	µg/kg	6.67	1333		78.9	66-105			
Benzo(b)fluoranthene	1040	µg/kg	6.67	1333		77.7	67-105			
Benzo(g,h,i)perylene	1060	µg/kg	6.67	1333		79.8	59-110			
Benzo(k)fluoranthene	1060	µg/kg	6.67	1333		79.7	68-106			
bis(2-Chloroethoxy)methane	937	µg/kg	33.0	1333		70.3	54-102			
bis(2-Chloroethyl) ether	940	µg/kg	33.0	1333		70.5	51-101			
Butyl benzyl phthalate	1030	µg/kg	67.0	1333		77.6	59-107			
Caprolactam	928	µg/kg	33.0	1333		69.6	49-103			
Carbazole	1010	µg/kg	33.0	1333		76.0	63-103			
Chrysene	1040	µg/kg	6.67	1333		77.9	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1080	µg/kg	33.0	1333		81.3	63-101			
Dibenz(a,h) anthracene	1070	µg/kg	33.0	1333		80.2	61-109			
Dibenzofuran	1060	µg/kg	33.0	1333		79.4	61-101			
Diethyl phthalate	1030	µg/kg	33.0	1333		77.4	63-105			
Dimethyl phthalate	1040	µg/kg	33.0	1333		77.7	64-104			
Fluoranthene	1020	µg/kg	6.67	1333		76.2	66-105			
Fluorene	1040	µg/kg	6.67	1333		78.2	62-101			
Hexachlorobenzene	1010	µg/kg	33.0	1333		75.5	61-104			
Hexachlorobutadiene	985	µg/kg	33.0	1333		73.9	52-99			
Hexachlorocyclopentadiene	1010	µg/kg	33.0	1333		75.5	39-106			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279011

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3612730

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279011-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/21/25 16:05

Prep Date: 10/16/25 12:14

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Hexachloroethane	943	µg/kg	33.0	1333		70.7	59-99			
Indeno(1,2,3-cd) pyrene	1170	µg/kg	6.67	1333		87.7	57-114			
Isophorone	968	µg/kg	167	1333		72.6	55-101			
Methylphenol, Total	1840	µg/kg	67.0	2667		69.1	54-103			
Naphthalene	1020	µg/kg	6.67	1333		76.3	54-99			
Nitrobenzene	1010	µg/kg	167	1333		75.8	53-100			
n-Nitrosodi-n-propylamine	933	µg/kg	33.0	1333		70.0	52-104			
N-Nitrosodiphenylamine	1030	µg/kg	33.0	1333		77.0	61-104			
Pentachlorophenol	883	µg/kg	33.0	1333		66.3	35-100			
Phenanthrene	1030	µg/kg	6.67	1333		77.0	64-101			
Phenol	935	µg/kg	33.0	1333		70.1	51-107			
Pyrene	1040	µg/kg	6.67	1333		78.0	62-114			
Pyridine	872	µg/kg	167	1333		65.4	40-84			

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2280030

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3616792

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2280030-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/23/25 04:15

Prep Date: 10/16/25 15:30

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



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2280030

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3616792

MB	CLIENT ID: Method Blank	Lab ID: QC-2280030-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/23/25 04:15

Prep Date: 10/16/25 15:30

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 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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2280030-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/23/25 03:27

Prep Date: 10/16/25 15:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1140	µg/kg	30.0	1000		114	75-121			
1,1,2,2-Tetrachloroethane	986	µg/kg	30.0	1000		98.6	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1030	µg/kg	30.0	1000		103	62-129			
1,1,2-Trichloroethane	942	µg/kg	30.0	1000		94.2	80-123			
1,1-Dichloroethane	1010	µg/kg	30.0	1000		101	74-124			
1,1-Dichloroethylene	1030	µg/kg	30.0	1000		103	68-131			
1,2,3-Trichlorobenzene	960	µg/kg	100	1000		96.0	60-135			
1,2,3-Trichloropropane	988	µg/kg	30.0	1000		98.8	77-121			
1,2,4-Trichlorobenzene	960	µg/kg	100	1000		96.0	63-130			
1,2,4-Trimethylbenzene	922	µg/kg	30.0	1000		92.2	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	1010	µg/kg	100	1000		101	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	921	µg/kg	30.0	1000		92.1	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	1000	µg/kg	30.0	1000		100	77-122			
1,2-Dichloroethane (Ethylene dichloride)	1060	µg/kg	100	1000		106	70-130			
1,2-Dichloropropane	968	µg/kg	30.0	1000		96.8	71-130			
1,3,5-Trimethylbenzene	980	µg/kg	100	1000		98.0	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	999	µg/kg	30.0	1000		99.9	78-121			



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2280030

Work Order: HN2515418
Date Collected: NA
Date Received: NA
Run ID: 3616792

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2280030-002			
Method: EPA 8260D		Dilution: 1		Analysis Date: 10/23/25 03:27		Prep Date: 10/16/25 15:30			
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit Qual
1,3-Dichloropropene	1850	µg/kg	60.0	2000		92.4	62-124		
1,4-Dichlorobenzene (p-Dichlorobenzene)	1010	µg/kg	30.0	1000		101	78-122		
2-Butanone (Methyl ethyl ketone, MEK)	1060	µg/kg	200	1000		106	47-164		
2-Hexanone	996	µg/kg	30.0	1000		99.6	70-137		
4-Methyl-2-pentanone (MIBK)	1380	µg/kg	30.0	1000		138	57-200		
Acetone	1060	µg/kg	100	1000		106	52-190		
Benzene	1010	µg/kg	30.0	1000		101	78-122		
Bromochloromethane	1040	µg/kg	30.0	1000		104	68-130		
Bromodichloromethane	1110	µg/kg	30.0	1000		111	75-125		
Bromoform	926	µg/kg	30.0	1000		92.6	59-120		
Carbon disulfide	1300	µg/kg	30.0	1000		130	60-163		
Carbon tetrachloride	1310	µg/kg	30.0	1000		131	69-123		S
Chlorobenzene	961	µg/kg	30.0	1000		96.1	79-120		
Chlorodibromomethane	914	µg/kg	30.0	1000		91.4	57-123		
Chloroethane (Ethyl chloride)	1030	µg/kg	100	1000		103	38-132		
Chloroform	1020	µg/kg	30.0	1000		102	72-122		
cis-1,2-Dichloroethylene	1060	µg/kg	30.0	1000		106	74-125		
cis-1,3-Dichloropropene	1050	µg/kg	30.0	1000		105	62-124		
Dichlorodifluoromethane (Freon-12)	887	µg/kg	100	1000		88.7	28-137		
Ethylbenzene	976	µg/kg	30.0	1000		97.6	75-121		
Isopropylbenzene	995	µg/kg	30.0	1000		99.5	74-121		
m+p-Xylene	1960	µg/kg	60.0	2000		98.0	67-129		
Methyl bromide (Bromomethane)	1070	µg/kg	100	1000		107	31-169		
Methyl chloride (Chloromethane)	870	µg/kg	100	1000		87.0	24-119		
Methyl tert-butyl ether (MTBE)	1200	µg/kg	30.0	1000		120	79-139		
Methylene chloride (Dichloromethane)	1060	µg/kg	250	1000		106	62-135		
o-Xylene	990	µg/kg	30.0	1000		99.0	75-120		
Styrene	942	µg/kg	30.0	1000		94.2	74-126		
Tetrachloroethylene (Perchloroethylene)	1000	µg/kg	30.0	1000		100.0	76-128		
Toluene	963	µg/kg	30.0	1000		96.3	76-120		
Total Xylene	2950	µg/kg	90.0	3000		98.3	67-129		
trans-1,2-Dichloroethylene	1030	µg/kg	30.0	1000		103	72-127		
trans-1,3-Dichloropropylene	798	µg/kg	30.0	1000		79.8	66-120		
Trichloroethene (Trichloroethylene)	946	µg/kg	30.0	1000		94.6	75-122		
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1200	µg/kg	30.0	1000		120	51-115		S
Vinyl chloride (Chloroethene)	926	µg/kg	30.0	1000		92.6	43-128		

The following samples were analyzed in this batch: HN2515418-001, HN2515418-002, HN2515418-003

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: DETR0060

Work Order: HN2515418

Sample Name: 13525 St. Aubin SB-1 (1-2)
Laboratory Code: HN2515418-001
Sample Matrix: SOIL/SOLID

Date Collected: 10/15/25
Date Received: 10/16/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		001-AB	2278958		3593104	Nicole Maleski
EPA 6010D	EPA 3050B	001-AA	2293152	Weston Kotecki	3621340	Denise Coffey
EPA 7471B	Method	001-AA	2288570	Maxx Richey	3616433	Maxx Richey
EPA 8081B	EPA 3546	001-AA	2288434	Mya Harmer	3614355	Madison VandenBer
EPA 8082A	EPA 3546	001-AA	2288188	Rachel Plantinga	3614644	Nathaniel Dietlin
EPA 8151A	Method	001-AA	2290565	Willow Julien	3623700	Kathy Malmyga
EPA 8260D	EPA 5035A	001-AC	2280030	Jonathan Vazquez	3616792	Caroline Cox
EPA 8270E	EPA 3546	001-AA	2279011	Rachel Plantinga	3612730	Sam Bruzan
EPA 9056A	EPA 9056A	001-AB	2286473	Quoc Nguyen	3606696	Sage Hansen

Sample Name: 13525 St. Aubin SB-2 (3-4)
Laboratory Code: HN2515418-002
Sample Matrix: SOIL/SOLID

Date Collected: 10/15/25
Date Received: 10/16/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		002-AB	2278958		3593104	Nicole Maleski
EPA 6010D	EPA 3050B	002-AA	2293152	Weston Kotecki	3621340	Denise Coffey
EPA 7471B	Method	002-AA	2288570	Maxx Richey	3616433	Maxx Richey
EPA 8081B	EPA 3546	002-AA	2288434	Mya Harmer	3614355	Madison VandenBer
EPA 8082A	EPA 3546	002-AA	2279041	Willow Julien	3605132	Nathaniel Dietlin
EPA 8151A	Method	002-AA	2290565	Willow Julien	3623700	Kathy Malmyga
EPA 8260D	EPA 5035A	002-AC	2280030	Jonathan Vazquez	3616792	Caroline Cox
EPA 8270E	EPA 3546	002-AA	2279011	Rachel Plantinga	3612730	Sam Bruzan
EPA 9056A	EPA 9056A	002-AB	2286473	Quoc Nguyen	3606696	Sage Hansen

Sample Name: 13525 St. Aubin SB-3 (5-6)
Laboratory Code: HN2515418-003
Sample Matrix: SOIL/SOLID

Date Collected: 10/15/25
Date Received: 10/16/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		003-AB	2278958		3593104	Nicole Maleski

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: DETR0060

Work Order: HN2515418

Sample Name: 13525 St. Aubin SB-3 (5-6)
Laboratory Code: HN2515418-003
Sample Matrix: SOIL/SOLID

Date Collected: 10/15/25
Date Received: 10/16/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6010D	EPA 3050B	003-AA	2293152	Weston Kotecki	3621340	Denise Coffey
EPA 7471B	Method	003-AA	2288570	Maxx Richey	3616433	Maxx Richey
EPA 8081B	EPA 3546	003-AA	2288434	Mya Harmer	3614355	Madison VandenBer
EPA 8082A	EPA 3546	003-AA	2279041	Willow Julien	3605132	Nathaniel Dietlin
EPA 8151A	Method	003-AA	2290565	Willow Julien	3623700	Kathy Malmyga
EPA 8260D	EPA 5035A	003-AC	2280030	Jonathan Vazquez	3616792	Caroline Cox
EPA 8270E	EPA 3546	003-AA	2279011	Rachel Plantinga	3612730	Sam Bruzan
EPA 9056A	EPA 9056A	003-AB	2286473	Quoc Nguyen	3606696	Sage Hansen



ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 1

Customer Information		Project Information		Parameter/Method Request for Analysis															
Purchase Order		Project Name	13525 St. Aubin	A VOCs (U.S. EPA Method 8260C (or Method 8260))															
Work Order	Quote ID - 11631	Project Number	DETR0060	B SVOCs (U.S. EPA Method 8270D (or Method 8270))															
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C PCBs (U.S. EPA Method 8082)															
Send Report To	Ryan Montri	Invoice Attn.		D Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)															
Address	2365 Haggerty Rd South Suite 100	Address	2365 Haggerty Rd South Suite 100	E Chlorides (U.S. EPA Method 9056A)															
				F Pesticides (U.S. EPA Method 8081B (or Method 8081))															
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G Herbicides (U.S. EPA Method 8151A (or Method 8151))															
Phone	734-397-3100	Phone	734-397-3100	H Place on Hold, Pending Data															
Fax		Fax		I															
e-Mail Address	RMontri@manniksmithgroup.com	e-Mail Address		J															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	13525 St. Aubin SB-1 (1'-2')	10-15-25	1255	Soil	7	4	X												
2	13525 St. Aubin SB-2 (3'-4')		1300	Soil	7	4	X												
3	13525 St. Aubin SB-3 (5'-6')		1305	Soil	7	4	X												
4	13525 St. Aubin (0'-6') comp		1310	Soil	—	2								X			X		
5																			
6																			
7																			
8																			
9																			
10																			

Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:		Other	
Eddie Bosos/Edmund Bosos				☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hou			
Relinquished by:	Date:	Time:	Received by:	Notes: Quote# HN-061825-N			
Edmund Bosos	10-15-25	1408					
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler Temp.	QC Package: (Check Box)		
Colleen	10/15	1700	QS		☐ Level II: Standard QC ☐ TRRP-Checklist		
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	5.7C	☐ Level III: Std QC + Raw Data ☐ TRRP Level IV		
AB	10/16/25	0930		11/6	☐ Level IV: SW846 CLP-Like		
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035				Other:			

Environmental Division
Holland
Work Order Reference
HN2515418

Telephone : +1 616 399 6070

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 Sample Receiving Checklist

Received by:

Alyssa B

Date/Time:

10/16/25 1800

Carrier Name:

OS

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):

5.7c / 5.7c

Thermometer(s):

1KG

Sample(s) received on ice?

☒ Yes / No

Matrix/Matrices:

soil

Cooler(s)/Kit(s):

—

Date/Time sample(s) sent to storage:

10/16/25 0930

Water – VOA vials have zero headspace?

Yes / No / ☒ No Vials

Water – pH acceptable upon receipt?

Yes / No / ☒ N/ApH strip lot #: < 2 > 12 Other

pH adjusted (note adjustments below)?

Yes / No / ☒ N/A

pH adjusted by:

Login Notes: