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# FILL MATERIAL SAMPLING REPORT

17143 CALDWELL STREET  
DETROIT, WAYNE COUNTY, MICHIGAN 48212



FEBRUARY 16, 2026

PREPARED FOR:

**THE CITY OF DETROIT DEMOLITION DEPARTMENT**

1301 THIRD STREET, SUITE 606

DETROIT, MICHIGAN 48226



# FILL MATERIAL SAMPLING REPORT

17143 CALDWELL STREET  
DETROIT, WAYNE COUNTY, MICHIGAN 48212

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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 17143 Caldwell 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 17143 SB01, 17143 SB02, and 17143 SB03 generally consisted of gray sandy silt to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 17143 SB01, 17143 SB02, and 17143 SB03.
- Concentrations of arsenic, benzo(a)pyrene, and phenanthrene were detected in soil samples 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and/or 17143 SB03 (3-4')\_20260127 in excess of their respective Part 201 groundwater surface water interface protection criteria (GSIPC), drinking water protection criteria (DWPC), and/or direct contact criteria (DCC).
- Concentrations of naphthalene and phenanthrene were detected in soil samples 17143 SB02 (1-2')\_20260127 and/or 17143 SB03 (3-4')\_20260127 in excess of their respective soil volatilization to indoor air pathway (SVIAP).
- Concentrations of 4-4'-DDE, acenaphthene, anthracene, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, carbazole, chloride, chromium (Total), chrysene, copper, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, pyrene, and zinc were detected in soil samples 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and/or 17143 SB03 (3-4')\_20260127 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, and herbicides were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure

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

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

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

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## 1.0 INTRODUCTION

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to conduct sampling and analysis of fill materials at the property commonly addressed as 17143 Caldwell Street, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location as referenced to nearby roads and major geographic features is presented as *Figure 1, Site Location Map*. *Figure 2, Site Layout*, depicts the current layout of the Site.

The purpose of this work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths. The scope of work for this investigation was performed in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. This report presents the findings of this investigation. Soil samples were collected by MSG on January 27, 2026. The findings of this report are valid as of the report date, subject to the limitations presented in *Appendix A, Limitations*.

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

## 2.0 PURPOSE AND SCOPE OF WORK

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

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

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

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

## 3.0 SITE ASSESSMENT METHODOLOGY

The following subsections describe the methodologies employed by MSG at the Site during sampling activities that were conducted on January 27, 2026. A daily field activity report prepared by MSG is presented in *Appendix B, Daily Field Report*.

### 3.1 Preliminary Site Work Activities

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

### 3.2 Soil Sample Collection

The sampling plan for the Site was based on the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and modified in the field (if necessary) based on encountered conditions and professional judgment of MSG's field personnel. MSG advanced three (3) soil borings, designated 17143 SB01, 17143 SB02, and 17143 SB03, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during the completion of this work are provided in *Appendix C, Investigation Photographs*.

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

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

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

### 3.3 Decontamination

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

### 3.4 Analytical Methods

A total of three (3) soil samples designated 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and 17143 SB03 (3-4')\_20260127, were collected as part of this investigation. These soil samples were submitted to ALS Environmental Laboratory (ALS) in Holland, Michigan for laboratory analysis of the following parameters per the requested parameters as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025:

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

### 3.5 Quality Assurance/Quality Control

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

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

## 4.0 SUMMARY OF RESULTS

The following subsections include a discussion of the soil samples that were collected from the Site on January 27, 2026.

### 4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 17143 SB01, 17143 SB02, and 17143 SB03 generally consisted of gray sandy silt to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 17143 SB01, 17143 SB02, and 17143 SB03.

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

### 4.2 Soil Sample Analytical Results

Three (3) soil samples, designated 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and 17143 SB03 (3-4')\_20260127, 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	17143 SB01 (5-6) _20260127	GSIPC <sup>2</sup> / 4,600 DWPC <sup>3</sup> / 4,600	7,210
Benzo(a)pyrene	50-32-8	17143 SB03 (3-4) _20260127	DCC <sup>4</sup> / 2,000	2,100
Phenanthrene	85-01-8	17143 SB02 (1-2) _20260127 17143 SB03 (3-4) _20260127	GSIPC / 2,100	3,190

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

<sup>2</sup>GSIPC – Groundwater Surface Water Interface Protection Criteria

<sup>3</sup>DWPC – Drinking Water Protection Criteria

<sup>4</sup>DCC – Direct Contact Criteria

### 4.3 Exposure Evaluation

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

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

## 5.0 FINDINGS

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

- The stratigraphy encountered during soil boring advancement of 17143 SB01, 17143 SB02, and 17143 SB03 generally consisted of gray sandy silt to six (6) feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 17143 SB01, 17143 SB02, and 17143 SB03.
- Concentrations of arsenic, benzo(a)pyrene, and phenanthrene were detected in soil samples 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and/or 17143 SB03 (3-4')\_20260127 in excess of their respective Part 201 their respective Part 201 GSIPC, DWPC, and/or DCC.
- Concentrations of naphthalene and phenanthrene were detected in soil samples 17143 SB02 (1-2')\_20260127 and/or 17143 SB03 (3-4')\_20260127 in excess of their respective SVIAP.
- Concentrations of 4-4'-DDE, acenaphthene, anthracene, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, carbazole, chloride, chromium (Total), chrysene, copper, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, mercury, pyrene, and zinc were detected in soil samples 17143 SB01 (5-6')\_20260127, 17143 SB02 (1-2')\_20260127, and/or 17143 SB03 (3-4')\_20260127 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, 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. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

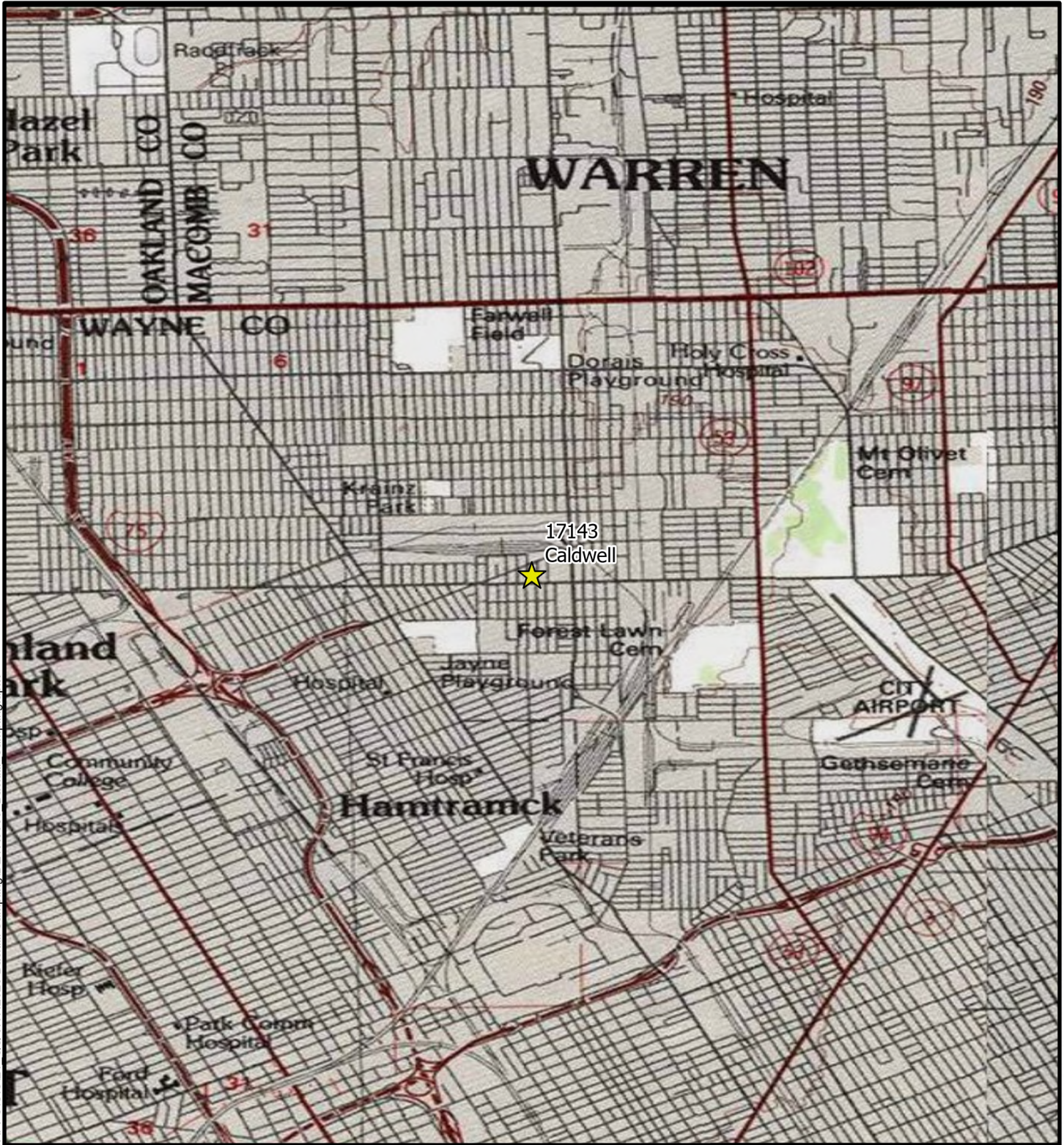
MSG has evaluated the analytical results of the fill material. Based upon the analytical results, we have determined that the material is contaminated above the state's Part 201 GRCC, as applicable.

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

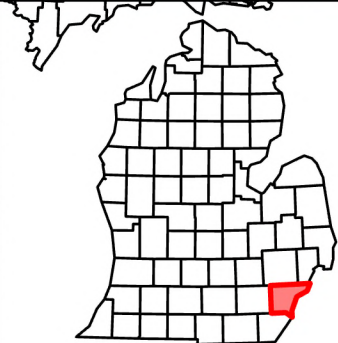
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## FIGURES





Date Saved: 1/8/2026 11:31 AM Coordinate System: GCS WGS 1984  
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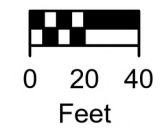
★ Site Location



**FIGURE 1**  
SITE LOCATION

17143 Caldwell, Detroit, MI

DATE 1/8/2026	DRAWN BY JWW	DESIGNED BY JWW	PROJECT NO. DETR0060
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- Sample Locations
- - - Parcels (Current)
- - - Subject Property

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



**FIGURE 2**  
Site Layout

17143 Caldwell, Detroit, MI

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



**Table 1**  
**Soil Sample Analytical Detection Summary**

**Detroit Backfill Sampling**  
**17143 Caldwell, 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	Inorganic Anions/Ions	Metals							Pesticides		
	Chloride	Arsenic (B)	Barium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Mercury (B)	Zinc (B)	4,4'-DDE		
CAS Number	16887-00-6	7440-38-2	7440-39-3	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-66-6	72-55-9		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		
Statewide Default Background Levels	NC	5,800	75,000	18,000	32,000	21,000	130	47,000	NC		
Drinking Water Protection Criteria (DWPC)	5.00E+06	4,600	1.30E+06	30,000	5.80E+06	7.00E+05	1,700	2.40E+06	NLL		
Groundwater Surface Water Interface Protection Criteria (GSIPC)	NC	4,600	4.40E+05 <sup>(G)</sup>	3,300	75,000 <sup>(G)</sup>	6.00E+06 <sup>(G)</sup>	50 <sup>(M:1,2)</sup>	1.60E+05	NLL		
Soil Volatilization to Indoor Air Inhalation (SVIIC)	NC	NLV	NLV	NC	NLV	NLV	48,000	NC	NLV		
Soil Volatilization to Indoor Air Pathway (SVIAP)	NC	NC	NC	NC	NC	NC	22 <sup>(M)</sup>	NC	39,000		
Infinite Source Volatile Soil Inhalation Criteria (VSIC)	NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV		
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)	NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV		
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)	NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV		
Particulate Soil Inhalation Criteria (PSIC)	NC	7.20E+05	3.30E+08	2.60E+05	1.30E+08	1.00E+08	2.00E+07	NC	3.20E+07		
Direct Contact Criteria (DCC)	5.00E+05	7,600	3.70E+07	2.50E+06	2.00E+07	4.00E+05	1.60E+05	1.70E+08	45,000		
Soil Saturation Concentration Screening Levels (Csat)	NC	NA	NA	NC	NA	NA	NA	NC	NA		
Sample ID	Sample Depth (ft)	Sample Date									
17143 SB01	5.0 - 6.0	01/27/2026	<b>52,400</b>	<b>7,210</b>	<b>59,900</b>	<b>13,900</b>	<b>39,600</b>	<b>86,300</b>	<b>35.5</b>	<b>112,000</b>	<b>16.1</b>
17143 SB02	1.0 - 2.0	01/27/2026	<b>52,600</b>	<b>4,810</b>	<b>59,100</b>	<b>9,770</b>	<b>17,600</b>	<b>38,900</b>	<b>40.6</b>	<b>59,600</b>	<b>&lt;71.1</b>
17143 SB03	3.0 - 4.0	01/27/2026	<b>95,100</b>	<b>3,300</b>	<b>62,100</b>	<b>16,100</b>	<b>20,500</b>	<b>34,400</b>	<b>45.7</b>	<b>40,400</b>	<b>&lt;72</b>

**Notes**

Only parameters with one or more detections are shown.

ug/kg = Micrograms per Kilogram.

Exceeds Generic Drinking Water Protection Criteria.

Exceeds Groundwater Surface Water Interface Protection Criteria.

Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.

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

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

**Bold** indicates concentration above laboratory reporting limits.

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

Part 201 GSIPC Hardness specific criteria (G) calculated using a regional hardness value

of the lower portion of the lower peninsula, 150 mg CaCO3/L.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1

through 299.50, updated October 12, 2023.

**Table 1  
Soil Sample Analytical Detection Summary**

**Detroit Backfill Sampling  
17143 Caldwell, Detroit, Michigan**

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024			Semivolatile Organic Compounds (SVOCs)														
			Acenaphthene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Carbazole	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
CAS Number			83-32-9	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	86-74-8	218-01-9	206-44-0	86-73-7	193-39-5	91-20-3	85-01-8	129-00-0
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Statewide Default Background Levels			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Drinking Water Protection Criteria (DWPC)			3.00E+05	41,000	NLL	NLL	NLL	NLL	NLL	9,400	NLL	7.30E+05	3.90E+05	NLL	35,000	56,000	4.80E+05
Groundwater Surface Water Interface Protection Criteria (GSIPC)			8,700	ID	NLL	NLL	NLL	NLL	NLL	1,100	NLL	5,500	5,300	NLL	730	2,100	ID
Soil Volatilization to Indoor Air Inhalation (SVIIC)			1.90E+08	1.00E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	1.00E+09	5.80E+08	NLV	2.50E+05	2.80E+06	1.00E+09
Soil Volatilization to Indoor Air Pathway (SVIAP)			2.00E+05	1.30E+07	1.60E+05 <sup>(M)</sup>	NC	NC	NC	NC	NC	NC	NC	4.70E+05	NC	67 <sup>(M)</sup>	1,700	2.50E+07
Infinite Source Volatile Soil Inhalation Criteria (VSIIC)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIIC 5m)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIIC 2m)			8.10E+07	1.40E+09	NLV	NLV	ID	NLV	NLV	NLV	ID	7.40E+08	1.30E+08	NLV	3.00E+05	1.60E+05	6.50E+08
Particulate Soil Inhalation Criteria (PSIC)			1.40E+10	6.70E+10	ID	1.50E+06	ID	8.00E+08	ID	6.20E+07	ID	9.30E+09	9.30E+09	ID	2.00E+08	6.70E+06	6.70E+09
Direct Contact Criteria (DCC)			4.10E+07	2.30E+08	20,000	2,000	20,000	2.50E+06	2.00E+05	5.30E+05	2.00E+06	4.60E+07	2.70E+07	20,000	1.60E+07	1.60E+06	2.90E+07
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample ID	Sample Depth (ft)	Sample Date															
17143 SB01	5.0 - 6.0	01/27/2026	<52.8	183	745	826	1,030	570	365	<108	819	1,510	95	592	<46.7	797	1,710
17143 SB02	1.0 - 2.0	01/27/2026	298	923	1,500	1,500	1,710	770	632	378	1,520	3,670	429	915	131	3,190	3,740
17143 SB03	3.0 - 4.0	01/27/2026	197	807	2,040	2,100	2,530	1,180	968	<264	2,100	4,660	287	1,360	<115	2,870	4,950

**Notes**

Only parameters with one or more detections are shown.

ug/kg = Micrograms per Kilogram.

Exceeds Generic Drinking Water Protection Criteria.

Exceeds Groundwater Surface Water Interface Protection Criteria.

Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.

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

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

**Bold** indicates concentration above laboratory reporting limits.

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

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

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

**APPENDIX A**  
LIMITATIONS



## LIMITATIONS

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

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

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

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

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

**APPENDIX B**  
DAILY FIELD REPORT





**DAILY FIELD REPORT**

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

**Report No.:** 1  
**Job No.:** DETR0060

<b>Date:</b> <u>01/27/2026</u>	<b>Day:</b> <u>Tuesday</u>	<b>Temp:</b> <u>11°</u> (AM) <u>N/A</u> (PM)
<b>MSG Personnel:</b> <u>JDF, WRD, KDW</u>	<b>Cloud Cover:</b> <u>~85%</u> (AM) <u>N/A</u> (PM)	<b>Precip.:</b> <u>N/A</u> (AM) <u>N/A</u> (PM)
<b>Personnel:</b> <u>MSG</u>		
<b>MSG Hours On-Site:</b> <u>~ 1 hour</u>		

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

Summary of Work Performed:
<ul style="list-style-type: none"> <li>Advanced three (3) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs)</li> <li>Collected soil samples from each soil boring (from the interval with the greatest potential to be impacted based on field indicators).</li> </ul>

Field Notes:
<ul style="list-style-type: none"> <li>0912 – MSG onsite (17143 Caldwell)</li> <li>0919 – Unloaded equipment and marked out boring locations</li> <li>0922 – Began drilling SB01</li> <li>0929 – Finished drilling SB01</li> <li>0931 – Began drilling SB02</li> <li>0937 – Finished drilling SB02</li> <li>0939 – Began drilling SB03</li> <li>0945 – Finished drilling SB03</li> <li>0947 – MSG screens soils prior to sampling</li> <li>0951 – Sampled 17143 SB01 (5-6')</li> <li>0958 – Sampled 17143 SB02 (1-2')</li> <li>1005 – Sampled 17143 SB03 (3-4')</li> <li>1012 – Packed up equipment</li> <li>1015 – MSG off site</li> </ul>

Supporting Documentation								
Photograph Taken	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Samples Collected	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Boring/MW Logs	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Photo Log Attached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	COC Attached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Field Note Book Taken	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Problem Identification and Corrective Measures
<u>N/A</u>
Resolved? Yes <input type="checkbox"/> No <input type="checkbox"/>

**APPENDIX C**  
INVESTIGATION PHOTOGRAPHS





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



Photo 2: View of drilling at 17143 SB01, facing northwest.

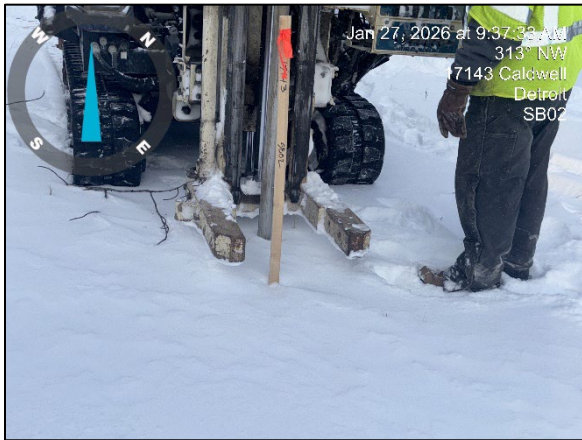


Photo 3: View of drilling at 17143 SB02, facing northwest



Photo 4: View of drilling at 17143 SB03, facing west.



Photo 5: Viewing 17143 SB01, SB02, SB03 soil recovery, facing west.



Photo 6: View of the site post-drilling, facing west

**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 SB01**

Sheet 1 of 1

<b>CLIENT</b> City of Detroit	<b>PROJECT NAME</b> Backfill Soil Sampling
<b>PROJECT NUMBER</b> DETR0060_17143 Caldwell	<b>PROJECT LOCATION</b> 17143 Caldwell, Detroit, MI
<b>DATE STARTED</b> 01-27-2026 <b>COMPLETED</b> 01-27-2026	<b>POSITION</b>
<b>DRILLING CONTRACTOR</b> MSG	<b>SURFACE ELEVATION</b> <b>FINAL DEPTH</b> 6.0 ft
<b>DRILLING METHOD</b> Direct Push	<b>LOGGED BY</b> WRD <b>CHECKED BY</b> SCD
<b>EQUIPMENT</b> Geoprobe 7822DT <b>Operator</b> JF	<b>REMARKS</b>

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Gray, Sandy SILT, Some Clay, Debris (Brick), Dry	0	
			1.5	Mix of Concrete, Brick, Asphalt, Some Sand, Some Clay, Some Silt, Dry	0	
ES		54			0	
5					0	
					0	Collected Soil Sample 17143 SB01(5-6') _20260127 at 0951
			6.0	Terminated at 6.00 ft.	0	
10						

**LEGEND:**

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



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**BOREHOLE NUMBER SB02**

Sheet 1 of 1

**CLIENT** City of Detroit  
**PROJECT NUMBER** DETR0060\_17143 Caldwell  
**DATE STARTED** 01-27-2026 **COMPLETED** 01-27-2026  
**DRILLING CONTRACTOR** MSG  
**DRILLING METHOD** Direct Push  
**EQUIPMENT** Geoprobe 7822DT **Operator** JF

**PROJECT NAME** Backfill Soil Sampling  
**PROJECT LOCATION** 17143 Caldwell, Detroit, MI  
**POSITION** \_\_\_\_\_  
**SURFACE ELEVATION** \_\_\_\_\_ **FINAL DEPTH** 6.0 ft  
**LOGGED BY** WRD **CHECKED BY** SCD  
**REMARKS** \_\_\_\_\_

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Gray, Sandy SILT, Some Clay, Debris (Brick), Dry		
				1.5 Mix of Concrete, Brick, Asphalt, Some Sand, Some Clay, Some Silt, Dry	0	Collected Soil Sample 17143 SB02(1-2') _20260127 at 0958
					0	
ES		50			0	
					0	
5					0	
				6.0 Terminated at 6.00 ft.	0	
10						

**LEGEND:**

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



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**BOREHOLE NUMBER SB03**

Sheet 1 of 1

**CLIENT** City of Detroit  
**PROJECT NUMBER** DETR0060\_17143 Caldwell  
**DATE STARTED** 01-27-2026 **COMPLETED** 01-27-2026  
**DRILLING CONTRACTOR** MSG  
**DRILLING METHOD** Direct Push  
**EQUIPMENT** Geoprobe 7822DT **Operator** JF

**PROJECT NAME** Backfill Soil Sampling  
**PROJECT LOCATION** 17143 Caldwell, Detroit, MI  
**POSITION** \_\_\_\_\_  
**SURFACE ELEVATION** \_\_\_\_\_ **FINAL DEPTH** 6.0 ft  
**LOGGED BY** WRD **CHECKED BY** SCD  
**REMARKS** \_\_\_\_\_

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Gray, Sandy SILT, Some Clay, Debris (Brick), Dry	0	
			1.5	Mix of Concrete, Brick, Asphalt, Some Sand, Some Clay, Some Silt, Dry	0	
ES		46			0	Collected Soil Sample 17143 SB03(3-4') _20260127 at 1005
5					0	
			6.0	Terminated at 6.00 ft.	0	
10						

**LEGEND:**

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



## APPENDIX E

### LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS





right solutions.  
right partner.

February 04, 2026

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

Re: **17143 Caldwell**

Date Received: **01/28/2026**

Work Order: **HN2601254**

Dear Ryan,

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

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

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

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

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

**Kathy Jones-Gronda**

/S/ KATHY JONES-GRONDA

**Project Manager**



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell

**Work Order:** HN2601254  
**Date Received:** 28-Jan-2026

### CASE NARRATIVE

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

#### Sample Receipt

3 soil/solid samples were received for analysis at ALS Environmental on 28-Jan-2026. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

#### WorkOrder: HN2601254

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

#### Organics

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

###### Run ID: 3848508

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:  
bromomethane

Parent Sample HN2601254-001: QC-2433206-005 and -006: The 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): see qc report

Parent Sample HN2601254-001: QC-2433206-005 and -006: The MS/MSD recoveries were above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary: see 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: Please see QC report.

##### EPA 8081B-3546-S (High)

###### Run ID: 3851713

The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: delta-BHC, TCMX

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: Please see QC report

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): delta-BHC, TCMX

The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: Please see QC report.

HN2601254-002: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

HN2601254-003: One or more surrogate recoveries were below the lower control limits. The sample results may be biased low.

HN2601254-003: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

##### EPA 8270E-FULL HN-3546-S

**Run ID: 3855291**

HN2601254-001: 1,1'-Biphenyl (BZ-0) - The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

HN2601254-002: 1,4-Dioxane (1,4- Diethyleneoxide) - The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

HN2601254-003: 1,4-Dioxane (1,4- Diethyleneoxide) - The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

**Metals**

**EPA 6020B-3050B-S**

**Run ID: 3852573**

Samples HN2601254-001 through -003: The reporting limits are elevated for Cd, Se and Ag due to the dilutions needed for high concentrations of non-target analytes.

## SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

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



**CLIENT ID: 17143 SB01 (5-6')\_20260127** **Lab ID: HN2601254-001**

Analyte	Results	Flag	MRL	Units	Method
4,4'-DDE	16.1		10.8	µg/kg	EPA 8081B
Anthracene	183		73.1	µg/kg	EPA 8270E
Arsenic	7.21		3.06	mg/kg	EPA 6020B
Barium	59.9		3.06	mg/kg	EPA 6020B
Benzo(a)anthracene	745		73.1	µg/kg	EPA 8270E
Benzo(a)pyrene	826		73.1	µg/kg	EPA 8270E
Benzo(b)fluoranthene	1030		73.1	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	570		73.1	µg/kg	EPA 8270E
Benzo(k)fluoranthene	365		73.1	µg/kg	EPA 8270E
Chloride	52.4		12.5	mg/kg	EPA 9056A
Chromium	13.9		3.06	mg/kg	EPA 6020B
Chrysene	819		73.1	µg/kg	EPA 8270E
Copper	39.6		3.06	mg/kg	EPA 6020B
Fluoranthene	1510		73.1	µg/kg	EPA 8270E
Fluorene	95.0		73.1	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	592		73.1	µg/kg	EPA 8270E
Lead	86.3		3.06	mg/kg	EPA 6020B
Mercury	0.0355		0.0200	mg/kg	EPA 7471B
Percent Moisture	9.1		0.1	%	EPA 3550C
Phenanthrene	797		73.1	µg/kg	EPA 8270E
Pyrene	1710		73.1	µg/kg	EPA 8270E
Zinc	112		6.11	mg/kg	EPA 6020B

**CLIENT ID: 17143 SB02 (1-2')\_20260127** **Lab ID: HN2601254-002**

Analyte	Results	Flag	MRL	Units	Method
Acenaphthene	298		72.6	µg/kg	EPA 8270E
Anthracene	923		72.6	µg/kg	EPA 8270E
Arsenic	4.81		2.88	mg/kg	EPA 6020B
Barium	59.1		2.88	mg/kg	EPA 6020B
Benzo(a)anthracene	1500		72.6	µg/kg	EPA 8270E
Benzo(a)pyrene	1500		72.6	µg/kg	EPA 8270E
Benzo(b)fluoranthene	1710		72.6	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	770		72.6	µg/kg	EPA 8270E
Benzo(k)fluoranthene	632		72.6	µg/kg	EPA 8270E
Carbazole	378		360	µg/kg	EPA 8270E
Chloride	52.6		11.6	mg/kg	EPA 9056A
Chromium	9.77		2.88	mg/kg	EPA 6020B
Chrysene	1520		72.6	µg/kg	EPA 8270E
Copper	17.6		2.88	mg/kg	EPA 6020B
Fluoranthene	3670		72.6	µg/kg	EPA 8270E
Fluorene	429		72.6	µg/kg	EPA 8270E

# 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: 17143 SB02 (1-2')\_20260127** **Lab ID: HN2601254-002**

Analyte	Results	Flag	MRL	Units	Method
Indeno(1,2,3-cd) pyrene	915		72.6	µg/kg	EPA 8270E
Lead	38.9		2.88	mg/kg	EPA 6020B
Mercury	0.0406		0.0200	mg/kg	EPA 7471B
Naphthalene	131		72.6	µg/kg	EPA 8270E
Percent Moisture	9.6		0.1	%	EPA 3550C
Phenanthrene	3190		72.6	µg/kg	EPA 8270E
Pyrene	3740		72.6	µg/kg	EPA 8270E
Zinc	59.6		5.76	mg/kg	EPA 6020B

**CLIENT ID: 17143 SB03 (3-4')\_20260127** **Lab ID: HN2601254-003**

Analyte	Results	Flag	MRL	Units	Method
Acenaphthene	197		179	µg/kg	EPA 8270E
Anthracene	807		179	µg/kg	EPA 8270E
Arsenic	3.30		3.11	mg/kg	EPA 6020B
Barium	62.1		3.11	mg/kg	EPA 6020B
Benzo(a)anthracene	2040		179	µg/kg	EPA 8270E
Benzo(a)pyrene	2100		179	µg/kg	EPA 8270E
Benzo(b)fluoranthene	2530		179	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	1180		179	µg/kg	EPA 8270E
Benzo(k)fluoranthene	968		179	µg/kg	EPA 8270E
Chloride	95.1		11.2	mg/kg	EPA 9056A
Chromium	16.1		3.11	mg/kg	EPA 6020B
Chrysene	2100		179	µg/kg	EPA 8270E
Copper	20.5		3.11	mg/kg	EPA 6020B
Fluoranthene	4660		179	µg/kg	EPA 8270E
Fluorene	287		179	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	1360		179	µg/kg	EPA 8270E
Lead	34.4		3.11	mg/kg	EPA 6020B
Mercury	0.0457		0.0200	mg/kg	EPA 7471B
Percent Moisture	10.3		0.1	%	EPA 3550C
Phenanthrene	2870		179	µg/kg	EPA 8270E
Pyrene	4950		179	µg/kg	EPA 8270E
Zinc	40.4		6.21	mg/kg	EPA 6020B

# SAMPLE SUMMARY



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Workorder:** HN2601254

<b>Laboratory Sample ID</b>	<b>Client Sample ID</b>	<b>Sample Matrix</b>	<b>Collection Date</b>	<b>Date Received</b>
HN2601254-001	17143 SB01 (5-6')_20260127	SOIL/SOLID	01/27/26 09:51	01/28/26 06:00
HN2601254-002	17143 SB02 (1-2')_20260127	SOIL/SOLID	01/27/26 09:58	01/28/26 06:00
HN2601254-003	17143 SB03 (3-4')_20260127	SOIL/SOLID	01/27/26 10:05	01/28/26 06:00



ALS Environmental

Laboratory location:

# Chain of Custody Form

Page \_\_\_\_ of \_\_\_\_

Environmental Division  
Holland

Work Order Reference  
**HN2601254**



Telephone: +1 616 399 6070

Customer Information		Project Information						Parameter/Method R									
Purchase Order		Project Name	17143 Caldwell				A	VOCs (U.S. EPA Method 8260C (or M									
Work Order		Project Number	DETR0060				B	SVOCs (U.S. EPA Method 8270D (or									
Company Name	Mannik Smith Group	Bill To Company	Mannik Smith Group				C	PCBs (U.S. EPA Method 8082)									
Send Report To	Ryan Montri and Olivia Mitchell	Invoice Attn.					D	Mi 10 Metals (U.S. EPA 6000/7000 S									
Address	2365 South Haggerty Road	Address	2365 South Haggerty Road				E	Chlorides (U.S. EPA Method 9056A)									
							F	Pesticides (U.S. EPA Method 8081B)									
City/State/Zip	Canton, Mi 48188	City/State/Zip	Canton, Mi 48188				G	Herbicides (U.S. EPA Method 8151A)									
Phone	734-397-3100	Phone	734-397-3100				H										
Fax		Fax					I										
e-Mail Address	montri@manniksmithgroup.com	e-Mail Address	omitchell@manniksmithgroup.com				J										
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	17143 SB01 (5-6 ')_2026 01 27	1/27/26	0951	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
2	17143 SB02 (1-2 ')_2026 01 27	1	0958	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
3	17143 SB03 (3-4 ')_2026 01 27	1	1005	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Sampler(s): Please Print & Sign WILEY DAVENPORT		Shipment Method:		Required Turnaround Time:				Results Due Date:									
Relinquished by:		Date:	Time:	Received by:		Notes:				QC Package: (Check Box Below)							
Relinquished by:		Date:	Time:	Received by (Laboratory):		Cooler Temp.				Level II: Standard QC				TRRP-Checklist			
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):		Level III: Std QC + Raw Data				TRRP Level IV							
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035						Level IV: SW846 CLP-Like				Other:							

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group. Signature denotes acceptance of ALS Group USA, Corp. Terms and Conditions - Please click the link below for detailed Terms & Conditions:

<https://www.alsglobal.com/ALSGroupUSACorpTC>

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ALS Holland  
3352 128<sup>th</sup> Ave., Holland MI 49424

ALS Holland Sample Receiving Checklist

Received by: BH

Date/Time: 1/28/26 0600

Carrier Name: QS

Shipping container/cooler in good condition?  Yes / No / Not Present

Custody seals intact on shipping container/cooler? Yes / No /  Not Present

Custody seals intact on sample bottles? Yes / No /  Not Present

Chain of Custody present?  Yes / No

COC signed when relinquished and received?  Yes / No

COC agrees with sample labels?  Yes / No

Samples in proper container/bottle?  Yes / No

Sample containers intact?  Yes / No

Sufficient sample volume for indicated test?  Yes / No

All samples received within holding time?  Yes / No

Container/Temp Blank temperature in compliance?  Yes / No

Temperature(s) (°C): 3.8/3.8c

Thermometer(s): 1R6

Sample(s) received on ice?  Yes / No

Matrix/Matrices: Soil

Cooler(s)/Kit(s): 1

Date/Time sample(s) sent to storage: 1/28/26 0919

Water – VOA vials have zero headspace? Yes / No /  No Vials

Water – pH acceptable upon receipt? Yes / No /  N/A

pH strip lot #: \_\_\_\_\_ < 2 \_\_\_\_\_ > 12 \_\_\_\_\_ Other \_\_\_\_\_

pH adjusted (note adjustments below)? Yes / No /  N/A

pH adjusted by: \_\_\_\_\_

Login Notes:

## REPORT QUALIFIERS AND DEFINITIONS

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

## LABORATORY CERTIFICATIONS<sup>1</sup>

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

1 - Scope available upon request

# ANALYST SUMMARY



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell

**Work Order:** HN2601254

**Sample Name:** 17143 SB01 (5-6')\_20260127  
**Laboratory Code:** HN2601254-001  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 01/27/26  
**Date Received:** 01/28/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		001-AA	2432761		3846386	Nicole Maleski
EPA 6020B	EPA 3050B	001-AA	2435647	Amber Luke	3852573	Stephanie Pierson
EPA 7471B	Method	001-AA	2435684	Maxx Richey	3855553	Maxx Richey
EPA 8081B	EPA 3546	001-AA	2432784	Rachel Plantinga	3851713	Madison VandenBer
EPA 8081B	EPA 3546	001-AA	2432784	Rachel Plantinga	3854936	Madison VandenBer
EPA 8081B	EPA 3546	001-AA	2432784	Rachel Plantinga	3855300	Madison VandenBer
EPA 8082A	EPA 3546	001-AA	2432785	Rachel Plantinga	3849774	Madison VandenBer
EPA 8151A	Method	001-AA	2433998	Willow Julien	3854959	Sam Bruzan
EPA 8260D	EPA 5035A	001-AB	2433206	Jonathan Vazquez	3848508	Nathan Jenkins
EPA 8270E	EPA 3546	001-AA	2433991	Mya Harmer	3855291	Sam Marcotte
EPA 9056A	EPA 9056A	001-AA	2432760	Kelsey Beaudette	3847767	Sage Hansen

**Sample Name:** 17143 SB02 (1-2')\_20260127  
**Laboratory Code:** HN2601254-002  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 01/27/26  
**Date Received:** 01/28/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		002-AA	2432761		3846386	Nicole Maleski
EPA 6020B	EPA 3050B	002-AA	2435647	Amber Luke	3852573	Stephanie Pierson
EPA 7471B	Method	002-AA	2435684	Maxx Richey	3855553	Maxx Richey
EPA 8081B	EPA 3546	002-AA	2432784	Rachel Plantinga	3851713	Madison VandenBer
EPA 8082A	EPA 3546	002-AA	2432785	Rachel Plantinga	3849774	Madison VandenBer
EPA 8151A	Method	002-AA	2433998	Willow Julien	3854959	Sam Bruzan
EPA 8260D	EPA 5035A	002-AB	2433206	Jonathan Vazquez	3848508	Nathan Jenkins
EPA 8270E	EPA 3546	002-AA	2433991	Mya Harmer	3855291	Sam Marcotte
EPA 9056A	EPA 9056A	002-AA	2432760	Kelsey Beaudette	3847767	Sage Hansen

# ANALYST SUMMARY



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell

**Work Order:** HN2601254

**Sample Name:** 17143 SB03 (3-4')\_20260127  
**Laboratory Code:** HN2601254-003  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 01/27/26  
**Date Received:** 01/28/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		003-AA	2432761		3846386	Nicole Maleski
EPA 6020B	EPA 3050B	003-AA	2435647	Amber Luke	3852573	Stephanie Pierson
EPA 7471B	Method	003-AA	2435684	Maxx Richey	3855553	Maxx Richey
EPA 8081B	EPA 3546	003-AA	2432784	Rachel Plantinga	3851713	Madison VandenBer
EPA 8082A	EPA 3546	003-AA	2432785	Rachel Plantinga	3849774	Madison VandenBer
EPA 8151A	Method	003-AA	2433998	Willow Julien	3854959	Sam Bruzan
EPA 8260D	EPA 5035A	003-AB	2433206	Jonathan Vazquez	3848508	Nathan Jenkins
EPA 8270E	EPA 3546	003-AA	2433991	Mya Harmer	3855291	Sam Marcotte
EPA 9056A	EPA 9056A	003-AA	2432760	Kelsey Beaudette	3847767	Sage Hansen

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
<b>Chlorinated Herbicides by GC/ECD</b>								
2,4,5-T	EPA 8151A	<2.31	U	µg/kg	12.5	1	01/31/26 20:05	01/29/26 10:23
2,4,5-TP (Silvex)	EPA 8151A	<4.11	U	µg/kg	12.5	1	01/31/26 20:05	01/29/26 10:23
2,4-D	EPA 8151A	<6.70	U	µg/kg	25.1	1	01/31/26 20:05	01/29/26 10:23
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>74.0</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>01/31/26 20:05</i>	<i>01/29/26 10:23</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>9.1</b>		%	0.1	1	01/28/26 12:33	NA
Chloride	EPA 9056A	<b>52.4</b>		mg/kg	12.5	1	01/28/26 23:54	01/28/26 11:15
<b>Metals</b>								
Arsenic	EPA 6020B	<b>7.21</b>		mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Barium	EPA 6020B	<b>59.9</b>		mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Cadmium	EPA 6020B	<0.183	U	mg/kg	1.22	10	01/30/26 18:13	01/30/26 10:20
Chromium	EPA 6020B	<b>13.9</b>		mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Copper	EPA 6020B	<b>39.6</b>		mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Lead	EPA 6020B	<b>86.3</b>		mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Selenium	EPA 6020B	<2.81	U	mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Silver	EPA 6020B	<0.403	U	mg/kg	3.06	10	01/30/26 18:13	01/30/26 10:20
Zinc	EPA 6020B	<b>112</b>		mg/kg	6.11	10	01/30/26 18:13	01/30/26 10:20
Mercury	EPA 7471B	<b>0.0355</b>		mg/kg	0.0200	1	02/02/26 15:23	01/30/26 12:43
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<6.90	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
4,4'-DDE	EPA 8081B	<b>16.1</b>		µg/kg	10.8	1	02/01/26 21:42	01/28/26 13:25
4,4'-DDT	EPA 8081B	<7.18	U	µg/kg	10.8	1	02/01/26 21:42	01/28/26 13:25
Aldrin	EPA 8081B	<7.01	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
alpha-BHC	EPA 8081B	<7.10	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
beta-BHC	EPA 8081B	<7.09	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Chlordane, Technical	EPA 8081B	<10.7	U	µg/kg	27.0	1	02/01/26 09:29	01/28/26 13:25
cis-Chlordane	EPA 8081B	<7.21	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
delta-BHC	EPA 8081B	<7.07	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Dieldrin	EPA 8081B	<7.55	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<7.25	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Endosulfan II	EPA 8081B	<7.15	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Endosulfan sulfate	EPA 8081B	<6.64	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Endrin	EPA 8081B	<8.73	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Endrin aldehyde	EPA 8081B	<6.84	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Endrin ketone	EPA 8081B	<6.57	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
gamma-BHC (Lindane)	EPA 8081B	<7.08	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Heptachlor	EPA 8081B	<6.96	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Heptachlor epoxide	EPA 8081B	<7.14	SU	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Methoxychlor	EPA 8081B	<7.22	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
Toxaphene	EPA 8081B	<11.7	U	µg/kg	64.7	1	01/29/26 23:50	01/28/26 13:25
trans-Chlordane	EPA 8081B	<7.17	U	µg/kg	10.8	1	01/29/26 23:50	01/28/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>101</b>		<i>%REC</i>	<i>53-151</i>	<i>1</i>	<i>01/29/26 23:50</i>	<i>01/28/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>72.2</b>		<i>%REC</i>	<i>67-127</i>	<i>1</i>	<i>01/29/26 23:50</i>	<i>01/28/26 13:25</i>

### Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1221	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1232	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1242	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1248	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1254	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1260	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1262	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Aroclor 1268	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
Total PCB	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:42	01/28/26 13:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>88.7</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>01/28/26 22:42</i>	<i>01/28/26 13:23</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>63.2</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>01/28/26 22:42</i>	<i>01/28/26 13:23</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<59.3	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<84.3	U	µg/kg	3650	10	01/30/26 20:43	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<262	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
1-Methylnaphthalene	EPA 8270E	<52.6	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<85.6	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,3,4,6-Tetrachlorophenol	EPA 8270E	<268	U	µg/kg	731	10	01/30/26 20:43	01/29/26 09:57
2,4,5-Trichlorophenol	EPA 8270E	<217	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,4,6-Trichlorophenol	EPA 8270E	<97.2	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,4-Dichlorophenol	EPA 8270E	<197	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,4-Dimethylphenol	EPA 8270E	<188	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,4-Dinitrophenol	EPA 8270E	<2670	U	µg/kg	3650	10	01/30/26 20:43	01/29/26 09:57
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<237	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<93.3	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2-Chloronaphthalene	EPA 8270E	<51.1	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
2-Chlorophenol	EPA 8270E	<239	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<305	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2-Methylnaphthalene	EPA 8270E	<37.2	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
2-Methylphenol (o-Cresol)	EPA 8270E	<98.8	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2-Nitroaniline	EPA 8270E	<203	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
2-Nitrophenol	EPA 8270E	<104	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
3&4-Methylphenol	EPA 8270E	<199	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
3,3'-Dichlorobenzidine	EPA 8270E	<171	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
3-Nitroaniline	EPA 8270E	<212	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<200	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
4-Chloro-3-methylphenol	EPA 8270E	<104	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
4-Chloroaniline	EPA 8270E	<186	U	µg/kg	731	10	01/30/26 20:43	01/29/26 09:57
4-Chlorophenyl phenylether	EPA 8270E	<101	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
4-Nitroaniline	EPA 8270E	<567	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
4-Nitrophenol	EPA 8270E	<856	U	µg/kg	3650	10	01/30/26 20:43	01/29/26 09:57
Acenaphthene	EPA 8270E	<52.8	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<63.4	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Acetophenone	EPA 8270E	<57.2	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Anthracene	EPA 8270E	<b>183</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Atrazine	EPA 8270E	<214	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Benzaldehyde	EPA 8270E	<561	U	µg/kg	731	10	01/30/26 20:43	01/29/26 09:57
Benzo(a)anthracene	EPA 8270E	<b>745</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Benzo(a)pyrene	EPA 8270E	<b>826</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Benzo(b)fluoranthene	EPA 8270E	<b>1030</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Benzo(g,h,i)perylene	EPA 8270E	<b>570</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Benzo(k)fluoranthene	EPA 8270E	<b>365</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
bis(2-Chloroethoxy) methane	EPA 8270E	<231	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
bis(2-Chloroethyl) ether	EPA 8270E	<103	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Butyl benzyl phthalate	EPA 8270E	<457	U	µg/kg	731	10	01/30/26 20:43	01/29/26 09:57
Caprolactam	EPA 8270E	<330	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Carbazole	EPA 8270E	<108	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Chrysene	EPA 8270E	<b>819</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<302	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Dibenz(a,h) anthracene	EPA 8270E	<39.5	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Dibenzofuran	EPA 8270E	<53.7	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Diethyl phthalate	EPA 8270E	<124	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Dimethyl phthalate	EPA 8270E	<71.3	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Fluoranthene	EPA 8270E	<b>1510</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Fluorene	EPA 8270E	<b>95.0</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Hexachlorobenzene	EPA 8270E	<106	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Hexachlorobutadiene	EPA 8270E	<86.1	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Hexachlorocyclopentadiene	EPA 8270E	<346	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Hexachloroethane	EPA 8270E	<151	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Indeno(1,2,3-cd) pyrene	EPA 8270E	<b>592</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Isophorone	EPA 8270E	<71.4	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
Methylphenol, Total	EPA 8270E	<98.8	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<46.7	U	µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Nitrobenzene	EPA 8270E	<123	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
n-Nitrosodi-n-propylamine	EPA 8270E	<60.3	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
N-Nitrosodiphenylamine	EPA 8270E	<212	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Pentachlorophenol	EPA 8270E	<290	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Phenanthrene	EPA 8270E	<b>797</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Phenol	EPA 8270E	<184	U	µg/kg	362	10	01/30/26 20:43	01/29/26 09:57
Pyrene	EPA 8270E	<b>1710</b>		µg/kg	73.1	10	01/30/26 20:43	01/29/26 09:57
Pyridine	EPA 8270E	<719	U	µg/kg	1830	10	01/30/26 20:43	01/29/26 09:57
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>60.0</b>		<i>%REC</i>	<i>48-94</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>79.2</b>		<i>%REC</i>	<i>50-103</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>63.0</b>		<i>%REC</i>	<i>43-105</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>95.0</b>		<i>%REC</i>	<i>55-111</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>75.2</b>		<i>%REC</i>	<i>47-100</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>73.0</b>		<i>%REC</i>	<i>49-110</i>	<i>10</i>	<i>01/30/26 20:43</i>	<i>01/29/26 09:57</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<32.2	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,1,2,2-Tetrachloroethane	EPA 8260D	<31.3	SU	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<44.9	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,1,2-Trichloroethane	EPA 8260D	<30.1	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,1-Dichloroethane	EPA 8260D	<25.9	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,1-Dichloroethylene	EPA 8260D	<23.0	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,2,3-Trichlorobenzene	EPA 8260D	<85.1	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
1,2,3-Trichloropropane	EPA 8260D	<29.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,2,4-Trichlorobenzene	EPA 8260D	<80.3	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
1,2,4-Trimethylbenzene	EPA 8260D	<52.0	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<65.3	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<41.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<26.9	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID: 17143 SB01 (5-6')\_20260127** **Lab ID: HN2601254-001**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<41.7	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
1,2-Dichloropropane	EPA 8260D	<52.2	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,3,5-Trimethylbenzene	EPA 8260D	<50.1	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<49.0	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
1,3-Dichloropropene	EPA 8260D	<39.6	U	µg/kg	142	1	01/28/26 15:07	01/28/26 14:46
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<57.6	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<169	U	µg/kg	473	1	01/28/26 15:07	01/28/26 14:46
2-Hexanone	EPA 8260D	<35.2	SU	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<66.1	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Acetone	EPA 8260D	<210	SU	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
Benzene	EPA 8260D	<34.3	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Bromochloromethane	EPA 8260D	<36.1	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Bromodichloromethane	EPA 8260D	<39.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Bromoform	EPA 8260D	<29.8	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Carbon disulfide	EPA 8260D	<36.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Carbon tetrachloride	EPA 8260D	<27.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Chlorobenzene	EPA 8260D	<23.5	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Chlorodibromomethane	EPA 8260D	<39.8	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Chloroethane (Ethyl chloride)	EPA 8260D	<199	SU	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
Chloroform	EPA 8260D	<26.0	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
cis-1,2-Dichloroethylene	EPA 8260D	<45.6	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
cis-1,3-Dichloropropene	EPA 8260D	<53.4	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Cyclohexane	EPA 8260D	<54.3	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<85.8	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
Ethylbenzene	EPA 8260D	<50.3	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Isopropylbenzene	EPA 8260D	<44.8	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
m+p-Xylene	EPA 8260D	<94.5	U	µg/kg	142	1	01/28/26 15:07	01/28/26 14:46
Methyl acetate	EPA 8260D	<84.9	U	µg/kg	591	1	01/28/26 15:07	01/28/26 14:46
Methyl bromide (Bromomethane)	EPA 8260D	<136	SU	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:51  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB01 (5-6')\_20260127

**Lab ID:** HN2601254-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<194	U	µg/kg	236	1	01/28/26 15:07	01/28/26 14:46
Methyl tert-butyl ether (MTBE)	EPA 8260D	<51.7	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Methylcyclohexane	EPA 8260D	<27.0	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Methylene chloride (Dichloromethane)	EPA 8260D	<188	U	µg/kg	591	1	01/28/26 15:07	01/28/26 14:46
o-Xylene	EPA 8260D	<27.4	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Styrene	EPA 8260D	<28.1	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<42.7	SU	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Toluene	EPA 8260D	<58.4	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Total Xylene	EPA 8260D	<27.4	U	µg/kg	213	1	01/28/26 15:07	01/28/26 14:46
trans-1,2-Dichloroethylene	EPA 8260D	<58.5	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
trans-1,3-Dichloropropylene	EPA 8260D	<39.6	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Trichloroethene (Trichloroethylene)	EPA 8260D	<31.8	SU	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<36.2	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
Vinyl chloride (Chloroethene)	EPA 8260D	<47.1	U	µg/kg	70.9	1	01/28/26 15:07	01/28/26 14:46
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>102</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:07</i>	<i>01/28/26 14:46</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>104</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:07</i>	<i>01/28/26 14:46</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>100</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>01/28/26 15:07</i>	<i>01/28/26 14:46</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>98.8</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:07</i>	<i>01/28/26 14:46</i>

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
<b>Chlorinated Herbicides by GC/ECD</b>								
2,4,5-T	EPA 8151A	<2.43	U	µg/kg	13.2	1	01/31/26 20:31	01/29/26 10:23
2,4,5-TP (Silvex)	EPA 8151A	<4.33	U	µg/kg	13.2	1	01/31/26 20:31	01/29/26 10:23
2,4-D	EPA 8151A	<7.05	U	µg/kg	26.4	1	01/31/26 20:31	01/29/26 10:23
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>66.0</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>01/31/26 20:31</i>	<i>01/29/26 10:23</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>9.6</b>		%	0.1	1	01/28/26 12:33	NA
Chloride	EPA 9056A	<b>52.6</b>		mg/kg	11.6	1	01/29/26 00:02	01/28/26 11:15
<b>Metals</b>								
Arsenic	EPA 6020B	<b>4.81</b>		mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Barium	EPA 6020B	<b>59.1</b>		mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Cadmium	EPA 6020B	<0.173	U	mg/kg	1.15	10	01/30/26 18:14	01/30/26 10:20
Chromium	EPA 6020B	<b>9.77</b>		mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Copper	EPA 6020B	<b>17.6</b>		mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Lead	EPA 6020B	<b>38.9</b>		mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Selenium	EPA 6020B	<2.65	U	mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Silver	EPA 6020B	<0.380	U	mg/kg	2.88	10	01/30/26 18:14	01/30/26 10:20
Zinc	EPA 6020B	<b>59.6</b>		mg/kg	5.76	10	01/30/26 18:14	01/30/26 10:20
Mercury	EPA 7471B	<b>0.0406</b>		mg/kg	0.0200	1	02/02/26 15:25	01/30/26 12:43
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<69.0	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
4,4'-DDE	EPA 8081B	<71.1	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
4,4'-DDT	EPA 8081B	<71.8	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Aldrin	EPA 8081B	<70.1	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
alpha-BHC	EPA 8081B	<71.0	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
beta-BHC	EPA 8081B	<70.9	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Chlordane, Technical	EPA 8081B	<107	U	µg/kg	270	10	01/29/26 22:07	01/28/26 13:25
cis-Chlordane	EPA 8081B	<72.1	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
delta-BHC	EPA 8081B	<70.6	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Dieldrin	EPA 8081B	<75.5	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<72.5	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Endosulfan II	EPA 8081B	<71.5	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Endosulfan sulfate	EPA 8081B	<66.4	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Endrin	EPA 8081B	<87.3	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Endrin aldehyde	EPA 8081B	<68.4	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Endrin ketone	EPA 8081B	<65.7	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
gamma-BHC (Lindane)	EPA 8081B	<70.8	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Heptachlor	EPA 8081B	<69.6	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Heptachlor epoxide	EPA 8081B	<71.4	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Methoxychlor	EPA 8081B	<72.1	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
Toxaphene	EPA 8081B	<117	U	µg/kg	647	10	01/29/26 22:07	01/28/26 13:25
trans-Chlordane	EPA 8081B	<71.7	U	µg/kg	108	10	01/29/26 22:07	01/28/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>121</b>		<i>%REC</i>	<i>53-151</i>	<i>10</i>	<i>01/29/26 22:07</i>	<i>01/28/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>81.5</b>		<i>%REC</i>	<i>67-127</i>	<i>10</i>	<i>01/29/26 22:07</i>	<i>01/28/26 13:25</i>

### Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1221	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1232	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1242	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1248	EPA 8082A	<24.7	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1254	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1260	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1262	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Aroclor 1268	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
Total PCB	EPA 8082A	<20.1	U	µg/kg	71.9	1	01/28/26 22:54	01/28/26 13:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>87.4</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>01/28/26 22:54</i>	<i>01/28/26 13:23</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>66.6</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>01/28/26 22:54</i>	<i>01/28/26 13:23</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<58.9	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<83.8	U	µg/kg	3630	10	01/30/26 21:11	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<260	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
1-Methylnaphthalene	EPA 8270E	<52.3	U	µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<85.1	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,3,4,6-Tetrachlorophenol	EPA 8270E	<266	U	µg/kg	726	10	01/30/26 21:11	01/29/26 09:57
2,4,5-Trichlorophenol	EPA 8270E	<215	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,4,6-Trichlorophenol	EPA 8270E	<96.6	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,4-Dichlorophenol	EPA 8270E	<195	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,4-Dimethylphenol	EPA 8270E	<187	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,4-Dinitrophenol	EPA 8270E	<2660	U	µg/kg	3630	10	01/30/26 21:11	01/29/26 09:57
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<236	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<92.7	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2-Chloronaphthalene	EPA 8270E	<50.8	U	µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
2-Chlorophenol	EPA 8270E	<238	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<303	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2-Methylnaphthalene	EPA 8270E	<36.9	U	µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
2-Methylphenol (o-Cresol)	EPA 8270E	<98.2	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2-Nitroaniline	EPA 8270E	<202	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
2-Nitrophenol	EPA 8270E	<104	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
3&4-Methylphenol	EPA 8270E	<198	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
3,3'-Dichlorobenzidine	EPA 8270E	<170	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
3-Nitroaniline	EPA 8270E	<211	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<199	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
4-Chloro-3-methylphenol	EPA 8270E	<104	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
4-Chloroaniline	EPA 8270E	<185	U	µg/kg	726	10	01/30/26 21:11	01/29/26 09:57
4-Chlorophenyl phenylether	EPA 8270E	<100	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
4-Nitroaniline	EPA 8270E	<563	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
4-Nitrophenol	EPA 8270E	<851	U	µg/kg	3630	10	01/30/26 21:11	01/29/26 09:57
Acenaphthene	EPA 8270E	<b>298</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<63.0	U	µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Acetophenone	EPA 8270E	<56.9	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Anthracene	EPA 8270E	<b>923</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Atrazine	EPA 8270E	<213	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Benzaldehyde	EPA 8270E	<558	U	µg/kg	726	10	01/30/26 21:11	01/29/26 09:57
Benzo(a)anthracene	EPA 8270E	<b>1500</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Benzo(a)pyrene	EPA 8270E	<b>1500</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Benzo(b)fluoranthene	EPA 8270E	<b>1710</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Benzo(g,h,i)perylene	EPA 8270E	<b>770</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Benzo(k)fluoranthene	EPA 8270E	<b>632</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
bis(2-Chloroethoxy) methane	EPA 8270E	<230	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
bis(2-Chloroethyl) ether	EPA 8270E	<103	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Butyl benzyl phthalate	EPA 8270E	<455	U	µg/kg	726	10	01/30/26 21:11	01/29/26 09:57
Caprolactam	EPA 8270E	<328	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Carbazole	EPA 8270E	<b>378</b>		µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Chrysene	EPA 8270E	<b>1520</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<300	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Dibenz(a,h) anthracene	EPA 8270E	<39.2	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Dibenzofuran	EPA 8270E	<53.4	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Diethyl phthalate	EPA 8270E	<124	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Dimethyl phthalate	EPA 8270E	<70.8	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Fluoranthene	EPA 8270E	<b>3670</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Fluorene	EPA 8270E	<b>429</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Hexachlorobenzene	EPA 8270E	<106	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Hexachlorobutadiene	EPA 8270E	<85.6	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Hexachlorocyclopentadiene	EPA 8270E	<344	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Hexachloroethane	EPA 8270E	<150	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Indeno(1,2,3-cd) pyrene	EPA 8270E	<b>915</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Isophorone	EPA 8270E	<70.9	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
Methylphenol, Total	EPA 8270E	<98.2	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<b>131</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Nitrobenzene	EPA 8270E	<122	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
n-Nitrosodi-n-propylamine	EPA 8270E	<59.9	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
N-Nitrosodiphenylamine	EPA 8270E	<210	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Pentachlorophenol	EPA 8270E	<289	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Phenanthrene	EPA 8270E	<b>3190</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Phenol	EPA 8270E	<182	U	µg/kg	360	10	01/30/26 21:11	01/29/26 09:57
Pyrene	EPA 8270E	<b>3740</b>		µg/kg	72.6	10	01/30/26 21:11	01/29/26 09:57
Pyridine	EPA 8270E	<715	U	µg/kg	1820	10	01/30/26 21:11	01/29/26 09:57
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>58.8</b>		<i>%REC</i>	<i>48-94</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>74.4</b>		<i>%REC</i>	<i>50-103</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>61.0</b>		<i>%REC</i>	<i>43-105</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>92.4</b>		<i>%REC</i>	<i>55-111</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>70.8</b>		<i>%REC</i>	<i>47-100</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>69.0</b>		<i>%REC</i>	<i>49-110</i>	<i>10</i>	<i>01/30/26 21:11</i>	<i>01/29/26 09:57</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<38.9	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,1,2,2-Tetrachloroethane	EPA 8260D	<37.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<54.3	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,1,2-Trichloroethane	EPA 8260D	<36.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,1-Dichloroethane	EPA 8260D	<31.2	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,1-Dichloroethylene	EPA 8260D	<27.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,2,3-Trichlorobenzene	EPA 8260D	<103	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
1,2,3-Trichloropropane	EPA 8260D	<35.9	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,2,4-Trichlorobenzene	EPA 8260D	<97.1	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
1,2,4-Trimethylbenzene	EPA 8260D	<62.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<78.9	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<50.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<32.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<50.4	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
1,2-Dichloropropane	EPA 8260D	<63.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,3,5-Trimethylbenzene	EPA 8260D	<60.5	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<59.2	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
1,3-Dichloropropene	EPA 8260D	<47.8	U	µg/kg	171	1	01/28/26 15:25	01/28/26 14:46
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<69.6	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<204	U	µg/kg	571	1	01/28/26 15:25	01/28/26 14:46
2-Hexanone	EPA 8260D	<42.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<79.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Acetone	EPA 8260D	<254	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
Benzene	EPA 8260D	<41.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Bromochloromethane	EPA 8260D	<43.6	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Bromodichloromethane	EPA 8260D	<48.0	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Bromoform	EPA 8260D	<36.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Carbon disulfide	EPA 8260D	<44.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Carbon tetrachloride	EPA 8260D	<33.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Chlorobenzene	EPA 8260D	<28.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Chlorodibromomethane	EPA 8260D	<48.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Chloroethane (Ethyl chloride)	EPA 8260D	<240	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
Chloroform	EPA 8260D	<31.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
cis-1,2-Dichloroethylene	EPA 8260D	<55.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
cis-1,3-Dichloropropene	EPA 8260D	<64.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Cyclohexane	EPA 8260D	<65.6	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<104	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
Ethylbenzene	EPA 8260D	<60.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Isopropylbenzene	EPA 8260D	<54.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
m+p-Xylene	EPA 8260D	<114	U	µg/kg	171	1	01/28/26 15:25	01/28/26 14:46
Methyl acetate	EPA 8260D	<103	U	µg/kg	714	1	01/28/26 15:25	01/28/26 14:46
Methyl bromide (Bromomethane)	EPA 8260D	<164	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 09:58  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB02 (1-2')\_20260127

**Lab ID:** HN2601254-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<234	U	µg/kg	286	1	01/28/26 15:25	01/28/26 14:46
Methyl tert-butyl ether (MTBE)	EPA 8260D	<62.5	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Methylcyclohexane	EPA 8260D	<32.7	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Methylene chloride (Dichloromethane)	EPA 8260D	<227	U	µg/kg	714	1	01/28/26 15:25	01/28/26 14:46
o-Xylene	EPA 8260D	<33.1	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Styrene	EPA 8260D	<34.0	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<51.6	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Toluene	EPA 8260D	<70.6	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Total Xylene	EPA 8260D	<33.1	U	µg/kg	257	1	01/28/26 15:25	01/28/26 14:46
trans-1,2-Dichloroethylene	EPA 8260D	<70.7	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
trans-1,3-Dichloropropylene	EPA 8260D	<47.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Trichloroethene (Trichloroethylene)	EPA 8260D	<38.4	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<43.8	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
Vinyl chloride (Chloroethene)	EPA 8260D	<56.9	U	µg/kg	85.7	1	01/28/26 15:25	01/28/26 14:46
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>106</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:25</i>	<i>01/28/26 14:46</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>110</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:25</i>	<i>01/28/26 14:46</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>102</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>01/28/26 15:25</i>	<i>01/28/26 14:46</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>102</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:25</i>	<i>01/28/26 14:46</i>

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
<b>Chlorinated Herbicides by GC/ECD</b>								
2,4,5-T	EPA 8151A	<2.49	U	µg/kg	13.5	1	01/31/26 20:44	01/29/26 10:23
2,4,5-TP (Silvex)	EPA 8151A	<4.44	U	µg/kg	13.5	1	01/31/26 20:44	01/29/26 10:23
2,4-D	EPA 8151A	<7.22	U	µg/kg	27.0	1	01/31/26 20:44	01/29/26 10:23
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>84.0</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>01/31/26 20:44</i>	<i>01/29/26 10:23</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>10.3</b>		%	0.1	1	01/28/26 12:33	NA
Chloride	EPA 9056A	<b>95.1</b>		mg/kg	11.2	1	01/29/26 00:11	01/28/26 11:15
<b>Metals</b>								
Arsenic	EPA 6020B	<b>3.30</b>		mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Barium	EPA 6020B	<b>62.1</b>		mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Cadmium	EPA 6020B	<0.186	U	mg/kg	1.24	10	01/30/26 18:16	01/30/26 10:20
Chromium	EPA 6020B	<b>16.1</b>		mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Copper	EPA 6020B	<b>20.5</b>		mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Lead	EPA 6020B	<b>34.4</b>		mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Selenium	EPA 6020B	<2.86	U	mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Silver	EPA 6020B	<0.410	U	mg/kg	3.11	10	01/30/26 18:16	01/30/26 10:20
Zinc	EPA 6020B	<b>40.4</b>		mg/kg	6.21	10	01/30/26 18:16	01/30/26 10:20
Mercury	EPA 7471B	<b>0.0457</b>		mg/kg	0.0200	1	02/02/26 15:27	01/30/26 12:43
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<69.9	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
4,4'-DDE	EPA 8081B	<72.0	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
4,4'-DDT	EPA 8081B	<72.7	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Aldrin	EPA 8081B	<71.0	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
alpha-BHC	EPA 8081B	<71.9	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
beta-BHC	EPA 8081B	<71.8	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Chlordane, Technical	EPA 8081B	<108	U	µg/kg	273	10	01/29/26 22:19	01/28/26 13:25
cis-Chlordane	EPA 8081B	<73.0	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
delta-BHC	EPA 8081B	<71.6	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Dieldrin	EPA 8081B	<76.4	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<73.5	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Endosulfan II	EPA 8081B	<72.4	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Endosulfan sulfate	EPA 8081B	<67.2	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Endrin	EPA 8081B	<88.4	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Endrin aldehyde	EPA 8081B	<69.3	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Endrin ketone	EPA 8081B	<66.5	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
gamma-BHC (Lindane)	EPA 8081B	<71.7	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Heptachlor	EPA 8081B	<70.5	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Heptachlor epoxide	EPA 8081B	<72.3	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Methoxychlor	EPA 8081B	<73.1	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
Toxaphene	EPA 8081B	<118	U	µg/kg	656	10	01/29/26 22:19	01/28/26 13:25
trans-Chlordane	EPA 8081B	<72.6	U	µg/kg	109	10	01/29/26 22:19	01/28/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>94.0</b>		<i>%REC</i>	<i>53-151</i>	<i>10</i>	<i>01/29/26 22:19</i>	<i>01/28/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>63.0</b>	<i>S</i>	<i>%REC</i>	<i>67-127</i>	<i>10</i>	<i>01/29/26 22:19</i>	<i>01/28/26 13:25</i>

### Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<25.0	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1221	EPA 8082A	<25.0	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1232	EPA 8082A	<25.0	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1242	EPA 8082A	<25.0	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1248	EPA 8082A	<25.0	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1254	EPA 8082A	<20.4	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1260	EPA 8082A	<20.4	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1262	EPA 8082A	<20.4	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Aroclor 1268	EPA 8082A	<20.4	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
Total PCB	EPA 8082A	<20.4	U	µg/kg	72.9	1	01/28/26 23:06	01/28/26 13:23
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>83.5</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>01/28/26 23:06</i>	<i>01/28/26 13:23</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>60.1</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>01/28/26 23:06</i>	<i>01/28/26 13:23</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<145	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<207	U	µg/kg	8950	10	01/30/26 21:39	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<643	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
1-Methylnaphthalene	EPA 8270E	<129	U	µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<210	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,3,4,6-Tetrachlorophenol	EPA 8270E	<656	U	µg/kg	1790	10	01/30/26 21:39	01/29/26 09:57
2,4,5-Trichlorophenol	EPA 8270E	<531	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,4,6-Trichlorophenol	EPA 8270E	<238	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,4-Dichlorophenol	EPA 8270E	<482	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,4-Dimethylphenol	EPA 8270E	<461	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,4-Dinitrophenol	EPA 8270E	<6550	U	µg/kg	8950	10	01/30/26 21:39	01/29/26 09:57
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<582	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<229	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2-Chloronaphthalene	EPA 8270E	<125	U	µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
2-Chlorophenol	EPA 8270E	<586	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<748	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2-Methylnaphthalene	EPA 8270E	<91.1	U	µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
2-Methylphenol (o-Cresol)	EPA 8270E	<242	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2-Nitroaniline	EPA 8270E	<498	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
2-Nitrophenol	EPA 8270E	<255	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
3&4-Methylphenol	EPA 8270E	<488	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
3,3'-Dichlorobenzidine	EPA 8270E	<418	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
3-Nitroaniline	EPA 8270E	<520	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<491	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
4-Chloro-3-methylphenol	EPA 8270E	<255	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
4-Chloroaniline	EPA 8270E	<455	U	µg/kg	1790	10	01/30/26 21:39	01/29/26 09:57
4-Chlorophenyl phenylether	EPA 8270E	<248	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
4-Nitroaniline	EPA 8270E	<1390	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
4-Nitrophenol	EPA 8270E	<2100	U	µg/kg	8950	10	01/30/26 21:39	01/29/26 09:57
Acenaphthene	EPA 8270E	<b>197</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<155	U	µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Acetophenone	EPA 8270E	<140	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Anthracene	EPA 8270E	<b>807</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Atrazine	EPA 8270E	<525	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Benzaldehyde	EPA 8270E	<1380	U	µg/kg	1790	10	01/30/26 21:39	01/29/26 09:57
Benzo(a)anthracene	EPA 8270E	<b>2040</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Benzo(a)pyrene	EPA 8270E	<b>2100</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Benzo(b)fluoranthene	EPA 8270E	<b>2530</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Benzo(g,h,i)perylene	EPA 8270E	<b>1180</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Benzo(k)fluoranthene	EPA 8270E	<b>968</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
bis(2-Chloroethoxy) methane	EPA 8270E	<568	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
bis(2-Chloroethyl) ether	EPA 8270E	<254	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Butyl benzyl phthalate	EPA 8270E	<1120	U	µg/kg	1790	10	01/30/26 21:39	01/29/26 09:57
Caprolactam	EPA 8270E	<809	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Carbazole	EPA 8270E	<264	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Chrysene	EPA 8270E	<b>2100</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<741	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Dibenz(a,h) anthracene	EPA 8270E	<96.8	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Dibenzofuran	EPA 8270E	<132	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Diethyl phthalate	EPA 8270E	<305	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Dimethyl phthalate	EPA 8270E	<175	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Fluoranthene	EPA 8270E	<b>4660</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Fluorene	EPA 8270E	<b>287</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Hexachlorobenzene	EPA 8270E	<261	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Hexachlorobutadiene	EPA 8270E	<211	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Hexachlorocyclopentadiene	EPA 8270E	<850	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Hexachloroethane	EPA 8270E	<371	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Indeno(1,2,3-cd) pyrene	EPA 8270E	<b>1360</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Isophorone	EPA 8270E	<175	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
Methylphenol, Total	EPA 8270E	<242	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<115	U	µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Nitrobenzene	EPA 8270E	<301	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
n-Nitrosodi-n-propylamine	EPA 8270E	<148	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
N-Nitrosodiphenylamine	EPA 8270E	<519	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Pentachlorophenol	EPA 8270E	<712	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Phenanthrene	EPA 8270E	<b>2870</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Phenol	EPA 8270E	<450	U	µg/kg	887	10	01/30/26 21:39	01/29/26 09:57
Pyrene	EPA 8270E	<b>4950</b>		µg/kg	179	10	01/30/26 21:39	01/29/26 09:57
Pyridine	EPA 8270E	<1760	U	µg/kg	4480	10	01/30/26 21:39	01/29/26 09:57
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>77.0</b>		<i>%REC</i>	<i>48-94</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>81.8</b>		<i>%REC</i>	<i>50-103</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>73.8</b>		<i>%REC</i>	<i>43-105</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>97.2</b>		<i>%REC</i>	<i>55-111</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>77.8</b>		<i>%REC</i>	<i>47-100</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>77.0</b>		<i>%REC</i>	<i>49-110</i>	<i>10</i>	<i>01/30/26 21:39</i>	<i>01/29/26 09:57</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<36.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,1,2,2-Tetrachloroethane	EPA 8260D	<35.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<50.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,1,2-Trichloroethane	EPA 8260D	<34.0	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,1-Dichloroethane	EPA 8260D	<29.2	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,1-Dichloroethylene	EPA 8260D	<25.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,2,3-Trichlorobenzene	EPA 8260D	<96.0	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
1,2,3-Trichloropropane	EPA 8260D	<33.5	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,2,4-Trichlorobenzene	EPA 8260D	<90.6	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
1,2,4-Trimethylbenzene	EPA 8260D	<58.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<73.6	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<47.0	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<30.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<47.0	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
1,2-Dichloropropane	EPA 8260D	<58.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,3,5-Trimethylbenzene	EPA 8260D	<56.5	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<55.2	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
1,3-Dichloropropene	EPA 8260D	<44.7	U	µg/kg	160	1	01/28/26 15:44	01/28/26 14:46
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<65.0	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<190	U	µg/kg	533	1	01/28/26 15:44	01/28/26 14:46
2-Hexanone	EPA 8260D	<39.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<74.5	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Acetone	EPA 8260D	<237	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
Benzene	EPA 8260D	<38.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Bromochloromethane	EPA 8260D	<40.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Bromodichloromethane	EPA 8260D	<44.8	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Bromoform	EPA 8260D	<33.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Carbon disulfide	EPA 8260D	<41.4	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Carbon tetrachloride	EPA 8260D	<31.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Chlorobenzene	EPA 8260D	<26.6	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Chlorodibromomethane	EPA 8260D	<44.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Chloroethane (Ethyl chloride)	EPA 8260D	<224	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
Chloroform	EPA 8260D	<29.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
cis-1,2-Dichloroethylene	EPA 8260D	<51.4	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
cis-1,3-Dichloropropene	EPA 8260D	<60.2	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Cyclohexane	EPA 8260D	<61.2	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<96.8	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
Ethylbenzene	EPA 8260D	<56.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Isopropylbenzene	EPA 8260D	<50.5	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
m+p-Xylene	EPA 8260D	<107	U	µg/kg	160	1	01/28/26 15:44	01/28/26 14:46
Methyl acetate	EPA 8260D	<95.8	U	µg/kg	666	1	01/28/26 15:44	01/28/26 14:46
Methyl bromide (Bromomethane)	EPA 8260D	<153	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601254  
**Date Collected:** 01/27/26 10:05  
**Date Received:** 01/28/26 06:00

**CLIENT ID:** 17143 SB03 (3-4')\_20260127

**Lab ID:** HN2601254-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<219	U	µg/kg	267	1	01/28/26 15:44	01/28/26 14:46
Methyl tert-butyl ether (MTBE)	EPA 8260D	<58.3	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Methylcyclohexane	EPA 8260D	<30.5	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Methylene chloride (Dichloromethane)	EPA 8260D	<212	U	µg/kg	666	1	01/28/26 15:44	01/28/26 14:46
o-Xylene	EPA 8260D	<30.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Styrene	EPA 8260D	<31.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<48.2	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Toluene	EPA 8260D	<65.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Total Xylene	EPA 8260D	<30.9	U	µg/kg	240	1	01/28/26 15:44	01/28/26 14:46
trans-1,2-Dichloroethylene	EPA 8260D	<66.0	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
trans-1,3-Dichloropropylene	EPA 8260D	<44.7	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Trichloroethene (Trichloroethylene)	EPA 8260D	<35.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<40.9	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
Vinyl chloride (Chloroethene)	EPA 8260D	<53.2	U	µg/kg	80.0	1	01/28/26 15:44	01/28/26 14:46
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>106</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:44</i>	<i>01/28/26 14:46</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>105</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:44</i>	<i>01/28/26 14:46</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>102</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>01/28/26 15:44</i>	<i>01/28/26 14:46</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>99.6</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>01/28/26 15:44</i>	<i>01/28/26 14:46</i>



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433998

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3854959

**Chlorinated Herbicides by GC/ECD**

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2433998-002

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 18:46  
**Prep Date:** 01/29/26 10:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	33.0	µg/kg	5.00	50		66.0	10-119			
2,4,5-TP (Silvex)	31.0	µg/kg	5.00	50		62.0	10-101			
2,4-D	32.0	µg/kg	10.0	50		64.0	10-128			
Surr: DCAA	<b>42.0</b>	µg/kg		50		84.0	10-116			

**MB** CLIENT ID: Method Blank Lab ID: QC-MRG2-2433997001

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 18:33  
**Prep Date:** 01/29/26 10:24

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	<b>42.0</b>	µg/kg		50		84.0	10-116			

**MS** CLIENT ID: Batch QC Lab ID: QC-MRG2-2433998005

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 18:59  
**Prep Date:** 01/29/26 10:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	68.6	µg/kg	13.8	118.3	<2.18	58.0	10-119			
2,4,5-TP (Silvex)	63.9	µg/kg	13.8	118.3	<3.88	54.0	10-101			
2,4-D	80.4	µg/kg	27.6	118.3	<6.32	68.0	10-128			
Surr: DCAA	<b>87.5</b>	µg/kg		118.3		74.0	10-116			

**MSD** CLIENT ID: Batch QC Lab ID: QC-MRG2-2433998006

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 01/31/26 19:12  
**Prep Date:** 01/29/26 10:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	77.7	µg/kg	13.7	117.73	<2.17	66.0	10-119	12.4	30	
2,4,5-TP (Silvex)	77.7	µg/kg	13.7	117.73	<3.86	66.0	10-101	19.5	30	
2,4-D	89.5	µg/kg	27.4	117.73	<6.29	76.0	10-128	10.6	30	
Surr: DCAA	<b>98.9</b>	µg/kg		117.73		84.0	10-116	12.2	30	

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432760

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3847767

General Chemistry Parameters

**MB** CLIENT ID: Method Blank Lab ID: QC-2432760-001

Method: EPA 9056A Dilution: 1 Analysis Date: 01/28/26 22:01  
 Prep Date: 01/28/26 11:16

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-2432760-002

Method: EPA 9056A Dilution: 1 Analysis Date: 01/28/26 22:09  
 Prep Date: 01/28/26 11:16

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	94.8	mg/kg	10.0	100		94.8	87-110			

**MS** CLIENT ID: Batch QC Lab ID: QC-2432760-004

Method: EPA 9056A Dilution: 1 Analysis Date: 01/28/26 22:25  
 Prep Date: 01/28/26 11:16

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	96.1	mg/kg	11.4	100.17	15.7	82.1	87-110			S

**MSD** CLIENT ID: Batch QC Lab ID: QC-2432760-005

Method: EPA 9056A Dilution: 1 Analysis Date: 01/28/26 22:33  
 Prep Date: 01/28/26 11:16

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	101	mg/kg	11.4	99.99	15.7	87.3	87-110	5.07	15	

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432761

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3846386

**General Chemistry Parameters**

**MB** CLIENT ID: Method Blank Lab ID: QC-2432761-001  
**Method:** EPA 3550C Dilution: 1 Analysis Date: 01/28/26 12:33  
 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-2432761-002  
**Method:** EPA 3550C Dilution: 1 Analysis Date: 01/28/26 12:33  
 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: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2432761-004  
**Method:** EPA 3550C Dilution: 1 Analysis Date: 01/28/26 12:33  
 Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	8.2	%	0.1		9.1			9.58	10	

**DUP** CLIENT ID: Batch QC Lab ID: QC-2432761-015  
**Method:** EPA 3550C Dilution: 1 Analysis Date: 01/28/26 12:33  
 Prep Date: NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	11.9	%	0.1		11.1			7.12	10	

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2435647

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3852573

**Metals**

**MB** CLIENT ID: Method Blank Lab ID: QC-2435647-001

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 01/30/26 17:43  
**Prep Date:** 01/30/26 10:21

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

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2435647-002

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 01/30/26 17:45  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.77	mg/kg	0.250	5		95.4	80-120			
Barium	4.87	mg/kg	0.250	5		97.4	80-120			
Cadmium	4.86	mg/kg	0.100	5		97.1	80-120			
Chromium	4.70	mg/kg	0.250	5		94.0	80-120			
Copper	4.73	mg/kg	0.250	5		94.5	80-120			
Lead	4.85	mg/kg	0.250	5		96.9	80-120			
Selenium	4.73	mg/kg	0.250	5		94.6	80-120			
Silver	4.81	mg/kg	0.250	5		96.3	80-120			
Zinc	4.71	mg/kg	0.500	5		94.2	80-120			

**MS** CLIENT ID: Batch QC Lab ID: QC-2435647-004

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 01/30/26 17:53  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	7.63	mg/kg	0.321	5.3763	3.55	86.6	75-125			
Cadmium	4.16	mg/kg	0.128	5.3763	<0.0161	77.7	75-125			
Copper	10.1	mg/kg	0.321	5.3763	5.97	95.1	75-125			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2435647-005

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 01/30/26 17:55  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	7.92	mg/kg	0.323	5.4171	3.55	91.3	75-125	3.75	20	
Cadmium	4.09	mg/kg	0.129	5.4171	<0.0163	75.8	75-125	1.68	20	
Copper	10.8	mg/kg	0.323	5.4171	5.97	107	75-125	6.51	20	

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2435647

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3852573

**The following samples were analyzed in this batch:** HN2601254-001, HN2601254-002, HN2601254-003

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2435647

**Work Order:** HN2601254  
**Date Collected:** 01/16/26 08:40  
**Date Received:** 01/23/26 13:30  
**Run ID:** 3854060

**Metals**

**MS** CLIENT ID: Batch QC Lab ID: QC-2435647-004

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/01/26 13:11  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Barium	134	mg/kg	3.21	5	140	NC	75-125			O
Chromium	21.0	mg/kg	3.21	5.3763	15.1	156	75-125			S
Lead	18.0	mg/kg	3.21	5.3763	13.2	129	75-125			S
Selenium	5.05	mg/kg	3.21	5.3763	<2.47	84.6	75-125			
Silver	5.47	mg/kg	3.21	5.3763	<0.355	100	75-125			
Zinc	34.8	mg/kg	6.42	5	26.6	NC	75-125			O

**MSD** CLIENT ID: Batch QC Lab ID: QC-2435647-005

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/01/26 13:13  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Barium	140	mg/kg	3.23	5	140	NC	75-125	4.49	20	O
Chromium	23.1	mg/kg	3.23	5.4171	15.1	193	75-125	9.48	20	S
Lead	16.2	mg/kg	3.23	5.4171	13.2	94.7	75-125	10.5	20	
Selenium	5.39	mg/kg	3.23	5.4171	<2.49	90.3	75-125	6.56	20	
Silver	5.65	mg/kg	3.23	5.4171	<0.358	103	75-125	3.10	20	
Zinc	35.3	mg/kg	6.47	5	26.6	NC	75-125	1.64	20	O

**PDS** CLIENT ID: Batch QC Lab ID: QC-2435647-007

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/01/26 13:16  
**Prep Date:** 01/30/26 10:21

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Barium	184	mg/kg	3.27	54.705	140	122	75-125			
Chromium	77.0	mg/kg	3.27	54.705	15.1	118	75-125			
Lead	71.5	mg/kg	3.27	54.705	13.2	111	75-125			
Selenium	58.5	mg/kg	3.27	54.705	<2.52	106	75-125			
Silver	49.5	mg/kg	3.27	54.705	<0.361	90.4	75-125			
Zinc	86.7	mg/kg	6.53	54.705	26.6	118	75-125			

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2435684

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855553

**Metals**

**MB CLIENT ID: Method Blank Lab ID: QC-2435684-001**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/02/26 15:13  
**Prep Date:** 01/30/26 12:44

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-2435684-002**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/02/26 16:23  
**Prep Date:** 01/30/26 12:44

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.181	mg/kg	0.0200	0.1665		109	80-120			

**MS CLIENT ID: Batch QC Lab ID: QC-2435684-004**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/02/26 15:19  
**Prep Date:** 01/30/26 12:44

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.213	mg/kg	0.0218	0.15113	0.0310	124	75-125			

**MSD CLIENT ID: Batch QC Lab ID: QC-2435684-005**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/02/26 15:21  
**Prep Date:** 01/30/26 12:44

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.195	mg/kg	0.0230	0.15984	0.0310	106	75-125	8.87	35	

**The following samples were analyzed in this batch:** HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432784

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3851713

**Organochlorine Pesticides by GC/ECD**

**MB** CLIENT ID: Method Blank Lab ID: QC-2432784-001

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 19:03  
**Prep Date:** 01/28/26 13:26

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	45.5	µg/kg		33.33		137	53-151			
Surr: Tetrachloro-m-xylene	35.3	µg/kg		33.33		106	67-127			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2432784-002

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 19:15  
**Prep Date:** 01/28/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	35.6	µg/kg	10.0	33.33		107	55-141			
4,4'-DDE	33.8	µg/kg	10.0	33.33		102	55-143			
4,4'-DDT	35.1	µg/kg	10.0	33.33		105	50-144			
Aldrin	33.7	µg/kg	10.0	33.33		101	57-141			
alpha-BHC	32.2	µg/kg	10.0	33.33		96.7	58-144			
beta-BHC	32.3	µg/kg	10.0	33.33		96.9	55-147			
cis-Chlordane	34.0	µg/kg	10.0	33.33		102	58-142			
delta-BHC	28.3	µg/kg	10.0	33.33		84.9	59-142			
Dieldrin	37.1	µg/kg	10.0	33.33		111	59-142			
Endosulfan I	33.7	µg/kg	10.0	33.33		101	57-145			
Endosulfan II	34.0	µg/kg	10.0	33.33		102	58-138			
Endosulfan sulfate	34.0	µg/kg	10.0	33.33		102	54-136			
Endrin	34.5	µg/kg	10.0	33.33		103	45-150			

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432784

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3851713

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2432784-002

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 19:15  
**Prep Date:** 01/28/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin aldehyde	37.9	µg/kg	10.0	33.33		114	41-147			
Endrin ketone	34.5	µg/kg	10.0	33.33		104	54-146			
gamma-BHC (Lindane)	32.7	µg/kg	10.0	33.33		98.2	58-145			
Heptachlor	33.8	µg/kg	10.0	33.33		101	51-145			
Heptachlor epoxide	34.4	µg/kg	10.0	33.33		103	59-143			
Methoxychlor	34.1	µg/kg	10.0	33.33		102	43-144			
trans-Chlordane	34.4	µg/kg	10.0	33.33		103	56-145			
Surr: Decachlorobiphenyl	43.7	µg/kg		33.33		131	51-151			
Surr: Tetrachloro-m-xylene	33.2	µg/kg		33.33		99.6	67-127			

**MS** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2432784-005

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 23:27  
**Prep Date:** 01/28/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	32.9	µg/kg	10.8	32.807	<6.29	90.9	55-141			
Aldrin	22.0	µg/kg	10.8	32.807	<6.40	67.0	57-141			
alpha-BHC	20.6	µg/kg	10.8	32.807	<6.48	62.8	58-144			
beta-BHC	21.2	µg/kg	10.8	32.807	<6.46	64.7	55-147			
cis-Chlordane	28.6	µg/kg	10.8	32.807	<6.58	76.7	58-142			
delta-BHC	18.2	µg/kg	10.8	32.807	<6.44	55.4	59-142			S
Dieldrin	26.4	µg/kg	10.8	32.807	<6.88	78.2	59-142			
Endosulfan I	21.6	µg/kg	10.8	32.807	<6.62	65.8	57-145			
Endosulfan II	22.8	µg/kg	10.8	32.807	<6.52	69.5	58-138			
Endosulfan sulfate	23.6	µg/kg	10.8	32.807	<6.05	71.8	54-135			
Endrin	24.3	µg/kg	10.8	32.807	<7.96	74.0	45-150			
Endrin aldehyde	28.7	µg/kg	10.8	32.807	<6.24	87.4	41-147			
Endrin ketone	27.0	µg/kg	10.8	32.807	<5.99	82.3	54-146			
gamma-BHC (Lindane)	19.9	µg/kg	10.8	32.807	<6.46	60.8	58-145			
Heptachlor	19.4	µg/kg	10.8	32.807	<6.35	59.2	51-145			
Heptachlor epoxide	23.2	µg/kg	10.8	32.807	<6.51	68.7	59-143			
Methoxychlor	25.4	µg/kg	10.8	32.807	<6.58	77.5	43-144			
trans-Chlordane	25.5	µg/kg	10.8	32.807	<6.54	73.1	56-145			
Surr: Decachlorobiphenyl	31.0	µg/kg		32.807		94.4	53-151			
Surr: Tetrachloro-m-xylene	20.5	µg/kg		32.807		62.6	67-127			S

**MSD** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2432784-006

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 23:39  
**Prep Date:** 01/28/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	30.3	µg/kg	10.8	32.689	<6.39	83.2	55-141	8.35	20	
Aldrin	19.3	µg/kg	10.8	32.689	<6.50	59.1	57-141	12.9	20	
alpha-BHC	17.7	µg/kg	10.8	32.689	<6.58	54.0	58-144	15.4	20	S



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432784

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3851713

**MSD** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2432784-006

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 01/29/26 23:39  
**Prep Date:** 01/28/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
beta-BHC	18.7	µg/kg	10.8	32.689	<6.57	57.3	55-147	12.6	20	
cis-Chlordane	23.9	µg/kg	10.8	32.689	<6.68	62.8	58-142	17.7	20	
delta-BHC	15.6	µg/kg	10.8	32.689	<6.55	47.9	59-142	14.9	20	S
Dieldrin	23.5	µg/kg	10.8	32.689	<6.99	69.8	59-142	11.4	20	
Endosulfan I	18.7	µg/kg	10.8	32.689	<6.72	57.1	57-145	14.5	20	
Endosulfan II	18.8	µg/kg	10.8	32.689	<6.62	57.5	58-138	19.3	20	S
Endosulfan sulfate	19.9	µg/kg	10.8	32.689	<6.15	60.8	54-135	17.0	20	
Endrin	21.2	µg/kg	10.8	32.689	<8.09	64.9	45-150	13.4	20	
Endrin aldehyde	46.2	µg/kg	10.8	32.689	<6.34	141	41-147	46.9	20	R
Endrin ketone	23.4	µg/kg	10.8	32.689	<6.08	71.7	54-146	14.1	20	
gamma-BHC (Lindane)	17.2	µg/kg	10.8	32.689	<6.56	52.8	58-145	14.5	20	S
Heptachlor	16.6	µg/kg	10.8	32.689	<6.45	50.7	51-145	15.8	20	S
Heptachlor epoxide	19.8	µg/kg	10.8	32.689	<6.62	58.4	59-143	16.1	20	S
Methoxychlor	22.8	µg/kg	10.8	32.689	<6.69	69.8	43-144	10.8	20	
trans-Chlordane	21.1	µg/kg	10.8	32.689	<6.64	59.9	56-145	18.9	20	
<i>Surr: Decachlorobiphenyl</i>	<b>27.5</b>	µg/kg		32.689		84.2	53-151	11.8	30	
<i>Surr: Tetrachloro-m-xylene</i>	<b>17.8</b>	µg/kg		32.689		54.3	67-127	14.6	30	S

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432785

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3849774

**Polychlorinated Biphenyls (PCBs) by GC/ECD**

**MB** CLIENT ID: Method Blank Lab ID: QC-2432785-001

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 01/28/26 21:08  
**Prep Date:** 01/28/26 13:24

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	41.0	µg/kg		33.3		123	54-146			
Surr: Tetrachloro-m-xylene	32.0	µg/kg		33.3		95.9	58-140			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2432785-002

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 01/28/26 21:20  
**Prep Date:** 01/28/26 13:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	852	µg/kg	66.7	833		102	71-135			
Aroclor 1260	804	µg/kg	66.7	833		96.5	67-135			
Surr: Decachlorobiphenyl	41.3	µg/kg		33.3		124	54-146			
Surr: Tetrachloro-m-xylene	29.7	µg/kg		33.3		89.2	58-140			

**MS** CLIENT ID: Batch QC Lab ID: QC-2432785-005

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 01/28/26 21:55  
**Prep Date:** 01/28/26 13:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	809	µg/kg	74.1	823.07	<22.6	98.3	71-135			
Aroclor 1260	752	µg/kg	74.1	823.07	<18.4	91.4	67-135			
Surr: Decachlorobiphenyl	38.5	µg/kg		32.903		117	54-146			
Surr: Tetrachloro-m-xylene	28.5	µg/kg		32.903		86.7	58-140			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2432785-006

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 01/28/26 22:07  
**Prep Date:** 01/28/26 13:24

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	789	µg/kg	74.0	822.36	<22.9	95.9	71-135	2.48	20	
Aroclor 1260	737	µg/kg	74.0	822.36	<18.6	89.7	67-135	1.98	20	
Surr: Decachlorobiphenyl	37.8	µg/kg		32.875		115	54-146	1.90	30	
Surr: Tetrachloro-m-xylene	27.9	µg/kg		32.875		84.9	58-140	2.24	30	

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2432785

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3849774

**The following samples were analyzed in this batch:** HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

## Semivolatile Organic Compounds by GC-MS

**MB** CLIENT ID: Method Blank Lab ID: QC-2433991-001

**Method:** EPA 8270E

**Dilution:** 1

**Analysis Date:** 01/30/26 14:36

**Prep Date:** 01/29/26 09:58

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:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

<b>MB</b>	<b>CLIENT ID: Method Blank</b>	<b>Lab ID: QC-2433991-001</b>
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**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 14:36  
**Prep Date:** 01/29/26 09:58

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
<i>Surr: 2,4,6-Tribromophenol</i>	<b>2540</b>	<i>µg/kg</i>		3333		76.2	48-94			
<i>Surr: 2-Fluorobiphenyl</i>	<b>2460</b>	<i>µg/kg</i>		3333		73.8	50-103			
<i>Surr: 2-Fluorophenol</i>	<b>2590</b>	<i>µg/kg</i>		3333		77.6	43-105			
<i>Surr: 4-Terphenyl-d14</i>	<b>3110</b>	<i>µg/kg</i>		3333		93.3	55-111			
<i>Surr: Nitrobenzene-d5</i>	<b>2850</b>	<i>µg/kg</i>		3333		85.6	47-100			
<i>Surr: Phenol-d6</i>	<b>2800</b>	<i>µg/kg</i>		3333		83.9	49-110			

<b>LCS</b>	<b>CLIENT ID: Laboratory Control Sample</b>	<b>Lab ID: QC-2433991-002</b>
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**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 15:05  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1080	µg/kg	33.0	1333		81.4	57-101			
1,2,4,5-Tetrachlorobenzene	1040	µg/kg	33.0	1333		77.8	54-98			
1-Methylnaphthalene	1060	µg/kg	6.67	1333		79.6	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	1050	µg/kg	33.0	1333		78.7	50-101			
2,3,4,6-Tetrachlorophenol	1100	µg/kg	67.0	1333		82.9	48-103			

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

<b>LCS</b>	<b>CLIENT ID: Laboratory Control Sample</b>	<b>Lab ID: QC-2433991-002</b>
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<b>Method:</b> EPA 8270E	<b>Dilution:</b> 1	<b>Analysis Date:</b> 01/30/26 15:05
<b>Prep Date:</b> 01/29/26 09:58		

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	
								RPD	Limit Qual
2,4,5-Trichlorophenol	1010	µg/kg	33.0	1333		75.9	54-98		
2,4,6-Trichlorophenol	963	µg/kg	33.0	1333		72.3	56-97		
2,4-Dichlorophenol	1080	µg/kg	33.0	1333		80.7	54-99		
2,4-Dimethylphenol	850	µg/kg	33.0	1333		63.8	47-102		
2,4-Dinitrophenol	<244	µg/kg	333	1333		23.3	10-100		U
2,4-Dinitrotoluene (2,4-DNT)	981	µg/kg	33.0	1333		73.6	62-105		
2,6-Dinitrotoluene (2,6-DNT)	1030	µg/kg	33.0	1333		77.1	62-103		
2-Chloronaphthalene	898	µg/kg	6.67	1333		67.4	57-101		
2-Chlorophenol	997	µg/kg	33.0	1333		74.8	52-102		
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	599	µg/kg	33.0	1333		45.0	42-104		
2-Methylnaphthalene	1050	µg/kg	6.67	1333		78.9	55-102		
2-Methylphenol (o-Cresol)	1000	µg/kg	33.0	1333		75.1	54-103		
2-Nitroaniline	877	µg/kg	33.0	1333		65.8	57-103		
2-Nitrophenol	1060	µg/kg	33.0	1333		79.2	52-102		
3&4-Methylphenol	1010	µg/kg	33.0	1333		76.1	56-103		
3,3'-Dichlorobenzidine	669	µg/kg	167	1333		50.2	41-91		
3-Nitroaniline	652	µg/kg	33.0	1333		48.9	35-107		
4-Bromophenyl phenyl ether (BDE-3)	1070	µg/kg	33.0	1333		80.2	63-104		
4-Chloro-3-methylphenol	1130	µg/kg	33.0	1333		84.9	57-103		
4-Chloroaniline	1060	µg/kg	67.0	1333		79.7	32-99		
4-Chlorophenyl phenylether	1010	µg/kg	33.0	1333		76.0	62-100		
4-Nitroaniline	273	µg/kg	167	1333		20.5	19-124		
4-Nitrophenol	1060	µg/kg	333	1333		79.4	44-106		
Acenaphthene	975	µg/kg	6.67	1333		73.2	60-101		
Acenaphthylene	997	µg/kg	6.67	1333		74.8	59-101		
Acetophenone	979	µg/kg	33.0	1333		73.4	54-102		
Anthracene	1040	µg/kg	6.67	1333		78.3	63-96		
Atrazine	1190	µg/kg	33.0	1333		89.0	60-110		
Benzaldehyde	155	µg/kg	67.0	1333		11.6	10-143		
Benzo(a)anthracene	1040	µg/kg	6.67	1333		77.9	66-102		
Benzo(a)pyrene	1120	µg/kg	6.67	1333		83.8	66-105		
Benzo(b)fluoranthene	972	µg/kg	6.67	1333		72.9	67-105		
Benzo(g,h,i)perylene	1070	µg/kg	6.67	1333		80.3	59-110		
Benzo(k)fluoranthene	1090	µg/kg	6.67	1333		82.0	68-106		
bis(2-Chloroethoxy)methane	1050	µg/kg	33.0	1333		78.7	54-102		
bis(2-Chloroethyl) ether	937	µg/kg	33.0	1333		70.3	51-101		
Butyl benzyl phthalate	1190	µg/kg	67.0	1333		89.2	59-107		
Caprolactam	879	µg/kg	33.0	1333		66.0	49-103		
Carbazole	1040	µg/kg	33.0	1333		78.2	63-103		
Chrysene	1220	µg/kg	6.67	1333		91.4	66-105		
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1240	µg/kg	33.0	1333		93.3	63-101		
Dibenz(a,h) anthracene	1050	µg/kg	33.0	1333		78.7	61-109		
Dibenzofuran	989	µg/kg	33.0	1333		74.2	61-101		
Diethyl phthalate	1040	µg/kg	33.0	1333		77.7	63-105		



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2433991-002

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 15:05  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Dimethyl phthalate	1010	µg/kg	33.0	1333		75.6	64-104			
Fluoranthene	1050	µg/kg	6.67	1333		79.1	66-105			
Fluorene	975	µg/kg	6.67	1333		73.1	62-101			
Hexachlorobenzene	1030	µg/kg	33.0	1333		77.4	61-104			
Hexachlorobutadiene	1050	µg/kg	33.0	1333		79.0	52-99			
Hexachlorocyclopentadiene	827	µg/kg	33.0	1333		62.1	39-106			
Hexachloroethane	942	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	1040	µg/kg	167	1333		78.3	55-101			
Methylphenol, Total	2020	µg/kg	67.0	2667		75.6	54-103			
Naphthalene	1000	µg/kg	6.67	1333		75.4	54-99			
Nitrobenzene	1040	µg/kg	167	1333		78.3	53-100			
n-Nitrosodi-n-propylamine	994	µg/kg	33.0	1333		74.6	52-104			
N-Nitrosodiphenylamine	1030	µg/kg	33.0	1333		77.3	61-104			
Pentachlorophenol	830	µg/kg	33.0	1333		62.3	35-100			
Phenanthrene	978	µg/kg	6.67	1333		73.4	64-101			
Phenol	1150	µg/kg	33.0	1333		86.2	51-107			
Pyrene	1230	µg/kg	6.67	1333		92.5	62-114			
Pyridine	715	µg/kg	167	1333		53.7	40-84			
Surr: 2,4,6-Tribromophenol	2690	µg/kg		3333		80.8	48-94			
Surr: 2-Fluorobiphenyl	2480	µg/kg		3333		74.4	50-103			
Surr: 2-Fluorophenol	2570	µg/kg		3333		77.0	43-105			
Surr: 4-Terphenyl-d14	3020	µg/kg		3333		90.5	55-111			
Surr: Nitrobenzene-d5	3010	µg/kg		3333		90.2	47-100			
Surr: Phenol-d6	2770	µg/kg		3333		83.1	49-110			

**MS** CLIENT ID: Batch QC Lab ID: QC-2433991-005

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 15:33  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1050	µg/kg	35.9	1313.7	<5.33	80.3	57-101			
1,2,4,5-Tetrachlorobenzene	1030	µg/kg	363	1313.7	<7.58	78.6	54-98			
1-Methylnaphthalene	1050	µg/kg	7.26	1313.7	<4.73	79.6	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	1040	µg/kg	35.9	1313.7	<7.70	78.9	50-101			
2,3,4,6-Tetrachlorophenol	1100	µg/kg	72.6	1313.7	<24.1	83.5	48-103			
2,4,5-Trichlorophenol	1020	µg/kg	35.9	1313.7	<19.5	77.5	54-98			
2,4,6-Trichlorophenol	976	µg/kg	35.9	1313.7	<8.74	74.3	56-97			
2,4-Dichlorophenol	1070	µg/kg	35.9	1313.7	<17.7	81.3	54-99			
2,4-Dimethylphenol	633	µg/kg	35.9	1313.7	<16.9	48.2	47-102			
2,4-Dinitrophenol	<240	µg/kg	363	1313.7	<240	25.1	10-100			U
2,4-Dinitrotoluene (2,4-DNT)	950	µg/kg	35.9	1313.7	<21.3	72.3	62-105			
2,6-Dinitrotoluene (2,6-DNT)	992	µg/kg	35.9	1313.7	<8.39	75.5	62-103			
2-Chloronaphthalene	885	µg/kg	7.26	1313.7	<4.59	67.4	57-101			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

**MS** CLIENT ID: Batch QC Lab ID: QC-2433991-005

**Method:** EPA 8270E

**Dilution:** 1

**Analysis Date:** 01/30/26 15:33

**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2-Chlorophenol	980	µg/kg	35.9	1313.7	<21.5	74.6	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	737	µg/kg	35.9	1313.7	<27.4	56.1	42-104			
2-Methylnaphthalene	1030	µg/kg	7.26	1313.7	<3.34	78.7	55-102			
2-Methylphenol (o-Cresol)	975	µg/kg	35.9	1313.7	<8.88	74.2	54-103			
2-Nitroaniline	853	µg/kg	35.9	1313.7	<18.2	65.0	57-103			
2-Nitrophenol	1050	µg/kg	35.9	1313.7	<9.36	79.8	52-102			
3&4-Methylphenol	996	µg/kg	35.9	1313.7	<17.9	75.8	56-103			
3,3'-Dichlorobenzidine	<15.3	µg/kg	181	1313.7	<15.3	3.05	41-91			SU
3-Nitroaniline	167	µg/kg	35.9	1313.7	<19.1	12.7	35-107			S
4-Bromophenyl phenyl ether (BDE-3)	1050	µg/kg	35.9	1313.7	<18.0	79.9	63-104			
4-Chloro-3-methylphenol	1110	µg/kg	35.9	1313.7	<9.36	84.4	57-103			
4-Chloroaniline	628	µg/kg	72.6	1313.7	<16.7	47.8	32-99			
4-Chlorophenyl phenylether	986	µg/kg	35.9	1313.7	<9.08	75.0	62-100			
4-Nitroaniline	<51.0	µg/kg	181	1313.7	<51.0	12.5	19-124			SU
4-Nitrophenol	1100	µg/kg	363	1313.7	<76.9	83.6	44-106			
Acenaphthene	949	µg/kg	7.26	1313.7	<4.75	72.3	60-101			
Acenaphthylene	972	µg/kg	7.26	1313.7	<5.70	74.0	59-101			
Acetophenone	983	µg/kg	35.9	1313.7	<5.14	74.8	54-102			
Anthracene	1020	µg/kg	7.26	1313.7	<4.63	77.7	63-96			
Atrazine	1160	µg/kg	35.9	1313.7	<19.2	88.5	60-110			
Benzaldehyde	324	µg/kg	72.6	1313.7	91.1	18.4	10-143			
Benzo(a)anthracene	1050	µg/kg	7.26	1313.7	26.2	78.4	66-102			
Benzo(a)pyrene	1130	µg/kg	7.26	1313.7	41.5	83.2	66-105			
Benzo(b)fluoranthene	1010	µg/kg	7.26	1313.7	55.4	72.9	67-105			
Benzo(g,h,i)perylene	1110	µg/kg	7.26	1313.7	30.6	82.1	59-110			
Benzo(k)fluoranthene	1110	µg/kg	7.26	1313.7	17.5	83.4	68-106			
bis(2-Chloroethoxy)methane	1040	µg/kg	35.9	1313.7	<20.8	78.9	54-102			
bis(2-Chloroethyl) ether	1120	µg/kg	35.9	1313.7	<9.30	85.5	51-101			
Butyl benzyl phthalate	1220	µg/kg	72.6	1313.7	<41.1	92.7	59-107			
Caprolactam	892	µg/kg	35.9	1313.7	<29.6	67.9	49-103			
Carbazole	978	µg/kg	35.9	1313.7	<9.68	74.5	63-103			
Chrysene	1250	µg/kg	7.26	1313.7	29.9	93.2	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1390	µg/kg	35.9	1313.7	294	85.3	63-101			
Dibenz(a,h) anthracene	1050	µg/kg	35.9	1313.7	6.56	79.4	61-109			
Dibenzofuran	972	µg/kg	35.9	1313.7	<4.83	74.0	61-101			
Diethyl phthalate	1010	µg/kg	35.9	1313.7	<11.2	76.7	63-105			
Dimethyl phthalate	984	µg/kg	35.9	1313.7	<6.41	74.9	64-104			
Fluoranthene	1090	µg/kg	7.26	1313.7	33.5	81.0	66-105			
Fluorene	959	µg/kg	7.26	1313.7	<4.77	73.0	62-101			
Hexachlorobenzene	1010	µg/kg	35.9	1313.7	<9.56	76.8	61-104			
Hexachlorobutadiene	1050	µg/kg	35.9	1313.7	<7.74	79.6	52-99			
Hexachlorocyclopentadiene	795	µg/kg	35.9	1313.7	<32.1	60.5	39-106			
Hexachloroethane	955	µg/kg	35.9	1313.7	<13.6	72.7	59-99			
Indeno(1,2,3-cd) pyrene	1200	µg/kg	7.26	1313.7	38.6	88.9	57-114			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

**MS CLIENT ID: Batch QC Lab ID: QC-2433991-005**

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 15:33  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isophorone	1030	µg/kg	181	1313.7	<6.42	78.5	55-101			
Methylphenol, Total	1970	µg/kg	35.9	2628.4	<8.88	75.0	54-103			
Naphthalene	1000	µg/kg	7.26	1313.7	<4.20	76.1	54-99			
Nitrobenzene	1040	µg/kg	181	1313.7	<11.0	79.1	53-100			
n-Nitrosodi-n-propylamine	992	µg/kg	35.9	1313.7	<5.42	75.5	52-104			
N-Nitrosodiphenylamine	1000	µg/kg	35.9	1313.7	<19.0	76.2	61-104			
Pentachlorophenol	863	µg/kg	35.9	1313.7	<26.1	65.7	35-100			
Phenanthrene	987	µg/kg	7.26	1313.7	14.6	74.1	64-101			
Phenol	1090	µg/kg	35.9	1313.7	<16.5	83.0	51-107			
Pyrene	1300	µg/kg	7.26	1313.7	35.7	96.8	52-114			
Pyridine	882	µg/kg	181	1313.7	<64.7	67.1	40-84			
<i>Surr: 2,4,6-Tribromophenol</i>	<b>2700</b>	µg/kg		3284.8		82.0	48-94			
<i>Surr: 2-Fluorobiphenyl</i>	<b>2440</b>	µg/kg		3284.8		74.2	50-103			
<i>Surr: 2-Fluorophenol</i>	<b>2500</b>	µg/kg		3284.8		76.0	43-105			
<i>Surr: 4-Terphenyl-d14</i>	<b>3000</b>	µg/kg		3284.8		91.4	55-111			
<i>Surr: Nitrobenzene-d5</i>	<b>2910</b>	µg/kg		3284.8		88.7	47-100			
<i>Surr: Phenol-d6</i>	<b>2700</b>	µg/kg		3284.8		82.1	49-110			

**MSD CLIENT ID: Batch QC Lab ID: QC-2433991-006**

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 16:01  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	948	µg/kg	35.3	1290	<5.41	73.5	57-101	10.6	30	
1,2,4,5-Tetrachlorobenzene	938	µg/kg	356	1290	<7.69	72.7	54-98	9.62	30	
1-Methylnaphthalene	950	µg/kg	7.13	1290	<4.80	73.6	56-100	9.65	30	
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	924	µg/kg	35.3	1290	<7.81	71.6	50-101	11.5	30	
2,3,4,6-Tetrachlorophenol	964	µg/kg	71.3	1290	<24.4	74.7	48-103	12.9	30	
2,4,5-Trichlorophenol	912	µg/kg	35.3	1290	<19.8	70.7	54-98	11.0	30	
2,4,6-Trichlorophenol	894	µg/kg	35.3	1290	<8.87	69.3	56-97	8.79	30	
2,4-Dichlorophenol	975	µg/kg	35.3	1290	<17.9	75.6	54-99	9.09	30	
2,4-Dimethylphenol	745	µg/kg	35.3	1290	<17.1	57.8	47-102	16.3	30	
2,4-Dinitrophenol	<244	µg/kg	356	1290	<244	25.4	10-100	NC		U
2,4-Dinitrotoluene (2,4-DNT)	854	µg/kg	35.3	1290	<21.6	66.2	62-105	10.7	30	
2,6-Dinitrotoluene (2,6-DNT)	902	µg/kg	35.3	1290	<8.51	69.9	62-103	9.52	30	
2-Chloronaphthalene	803	µg/kg	7.13	1290	<4.66	62.3	57-101	9.69	30	
2-Chlorophenol	889	µg/kg	35.3	1290	<21.8	68.9	52-102	9.76	30	
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	710	µg/kg	35.3	1290	<27.8	55.1	42-104	3.71	30	
2-Methylnaphthalene	934	µg/kg	7.13	1290	<3.39	72.4	55-102	10.2	30	
2-Methylphenol (o-Cresol)	900	µg/kg	35.3	1290	<9.01	69.8	54-103	8.00	30	
2-Nitroaniline	765	µg/kg	35.3	1290	<18.5	59.3	57-103	11.0	30	
2-Nitrophenol	963	µg/kg	35.3	1290	<9.50	74.7	52-102	8.43	30	
3&4-Methylphenol	907	µg/kg	35.3	1290	<18.2	70.3	56-103	9.35	30	
3,3'-Dichlorobenzidine	<15.6	µg/kg	178	1290	<15.6	6.30	41-91	1.82	30	US

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

<b>MSD</b>	<b>CLIENT ID: Batch QC</b>	<b>Lab ID: QC-2433991-006</b>
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**Method:** EPA 8270E

**Dilution:** 1

**Analysis Date:** 01/30/26 16:01

**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
3-Nitroaniline	312	µg/kg	35.3	1290	<19.4	24.2	35-107	60.5	30	RS
4-Bromophenyl phenyl ether (BDE-3)	942	µg/kg	35.3	1290	<18.3	73.0	63-104	10.8	30	
4-Chloro-3-methylphenol	997	µg/kg	35.3	1290	<9.50	77.3	57-103	10.7	30	
4-Chloroaniline	593	µg/kg	71.3	1290	<16.9	46.0	32-99	5.77	30	
4-Chlorophenyl phenylether	888	µg/kg	35.3	1290	<9.21	68.8	62-100	10.4	30	
4-Nitroaniline	198	µg/kg	178	1290	<51.7	15.4	19-124	8.75	30	S
4-Nitrophenol	999	µg/kg	356	1290	<78.1	77.5	44-106	9.46	30	
Acenaphthene	864	µg/kg	7.13	1290	<4.82	67.0	60-101	9.43	30	
Acenaphthylene	877	µg/kg	7.13	1290	<5.78	68.0	59-101	10.2	30	
Acetophenone	877	µg/kg	35.3	1290	<5.22	68.0	54-102	11.3	30	
Anthracene	921	µg/kg	7.13	1290	<4.70	71.4	63-96	10.3	30	
Atrazine	1040	µg/kg	35.3	1290	<19.5	80.4	60-110	11.4	30	
Benzaldehyde	539	µg/kg	71.3	1290	91.1	35.4	10-143	49.8	30	R
Benzo(a)anthracene	947	µg/kg	7.13	1290	26.2	71.6	66-102	10.6	30	
Benzo(a)pyrene	1020	µg/kg	7.13	1290	41.5	76.4	66-105	9.99	30	
Benzo(b)fluoranthene	909	µg/kg	7.13	1290	55.4	66.6	67-105	10.3	30	S
Benzo(g,h,i)perylene	981	µg/kg	7.13	1290	30.6	73.9	59-110	11.9	30	
Benzo(k)fluoranthene	995	µg/kg	7.13	1290	17.5	75.9	68-106	11.1	30	
bis(2-Chloroethoxy)methane	934	µg/kg	35.3	1290	<21.1	72.4	54-102	10.4	30	
bis(2-Chloroethyl) ether	973	µg/kg	35.3	1290	<9.44	75.4	51-101	14.4	30	
Butyl benzyl phthalate	1070	µg/kg	71.3	1290	<41.7	83.1	59-107	12.7	30	
Caprolactam	798	µg/kg	35.3	1290	<30.1	61.9	49-103	11.1	30	
Carbazole	890	µg/kg	35.3	1290	<9.82	69.0	63-103	9.49	30	
Chrysene	1120	µg/kg	7.13	1290	29.9	84.7	66-105	11.0	30	
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1310	µg/kg	35.3	1290	294	81.0	63-101	5.59	30	
Dibenz(a,h) anthracene	934	µg/kg	35.3	1290	6.56	72.0	61-109	11.5	30	
Dibenzofuran	879	µg/kg	35.3	1290	<4.90	68.1	61-101	10.1	30	
Diethyl phthalate	895	µg/kg	35.3	1290	<11.3	69.4	63-105	11.7	30	
Dimethyl phthalate	885	µg/kg	35.3	1290	<6.50	68.6	64-104	10.6	30	
Fluoranthene	997	µg/kg	7.13	1290	33.5	75.0	66-105	9.23	30	
Fluorene	861	µg/kg	7.13	1290	<4.84	66.7	62-101	10.8	30	
Hexachlorobenzene	917	µg/kg	35.3	1290	<9.70	71.1	61-104	9.60	30	
Hexachlorobutadiene	932	µg/kg	35.3	1290	<7.85	72.2	52-99	11.5	30	
Hexachlorocyclopentadiene	709	µg/kg	35.3	1290	<32.6	55.0	39-106	11.4	30	
Hexachloroethane	841	µg/kg	35.3	1290	<13.8	65.2	59-99	12.7	30	
Indeno(1,2,3-cd) pyrene	1060	µg/kg	7.13	1290	38.6	79.6	57-114	12.5	30	
Isophorone	929	µg/kg	178	1290	<6.51	72.0	55-101	10.4	30	
Methylphenol, Total	1810	µg/kg	67.0	2581	<9.01	70.0	54-103	8.68	30	
Naphthalene	905	µg/kg	7.13	1290	<4.26	70.2	54-99	9.96	30	
Nitrobenzene	935	µg/kg	178	1290	<11.2	72.5	53-100	10.5	30	
n-Nitrosodi-n-propylamine	871	µg/kg	35.3	1290	<5.50	67.5	52-104	13.0	30	
N-Nitrosodiphenylamine	907	µg/kg	35.3	1290	<19.3	70.3	61-104	9.81	30	
Pentachlorophenol	808	µg/kg	35.3	1290	<26.5	62.7	35-100	6.57	30	
Phenanthrene	877	µg/kg	7.13	1290	14.6	66.9	64-101	11.8	30	
Phenol	991	µg/kg	35.3	1290	<16.7	76.8	51-107	9.52	30	

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433991

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3855291

**MSD** CLIENT ID: Batch QC Lab ID: QC-2433991-006

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 01/30/26 16:01  
**Prep Date:** 01/29/26 09:58

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Pyrene	1130	µg/kg	7.13	1290	35.7	85.4	52-114	13.9	30	
Pyridine	785	µg/kg	178	1290	<65.6	60.8	40-84	11.7	30	
Surr: 2,4,6-Tribromophenol	<b>2430</b>	µg/kg		3225.5		75.4	48-94	10.2	30	
Surr: 2-Fluorobiphenyl	<b>2220</b>	µg/kg		3225.5		68.7	50-103	9.57	30	
Surr: 2-Fluorophenol	<b>2240</b>	µg/kg		3225.5		69.5	43-105	10.7	30	
Surr: 4-Terphenyl-d14	<b>2640</b>	µg/kg		3225.5		81.9	55-111	12.8	30	
Surr: Nitrobenzene-d5	<b>2630</b>	µg/kg		3225.5		81.6	47-100	10.1	30	
Surr: Phenol-d6	<b>2420</b>	µg/kg		3225.5		75.0	49-110	10.9	30	

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**Volatile Organic Compounds by GC-MS**

**MB** CLIENT ID: Method Blank Lab ID: QC-2433206-001

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 14:48  
**Prep Date:** 01/28/26 14:47

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:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**MB** CLIENT ID: Method Blank Lab ID: QC-2433206-001

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 14:48  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isopropylbenzene	<19.0	µg/kg	30.0							U
m+p-Xylene	<40.0	µg/kg	60.0							U
Methyl acetate	<35.9	µg/kg	250							U
Methyl bromide (Bromomethane)	<57.4	µg/kg	100							U
Methyl chloride (Chloromethane)	<82.0	µg/kg	100							U
Methyl tert-butyl ether (MTBE)	<21.9	µg/kg	30.0							U
Methylcyclohexane	<11.4	µg/kg	30.0							U
Methylene chloride (Dichloromethane)	<79.6	µg/kg	250							U
o-Xylene	<11.6	µg/kg	30.0							U
Styrene	<11.9	µg/kg	30.0							U
Tetrachloroethylene (Perchloroethylene)	<18.1	µg/kg	30.0							U
Toluene	<24.7	µg/kg	30.0							U
Total Xylene	<11.6	µg/kg	90.0							U
trans-1,2-Dichloroethylene	<24.8	µg/kg	30.0							U
trans-1,3-Dichloropropylene	<16.8	µg/kg	30.0							U
Trichloroethene (Trichloroethylene)	<13.4	µg/kg	30.0							U
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	<15.3	µg/kg	30.0							U
Vinyl chloride (Chloroethene)	<19.9	µg/kg	30.0							U
Surr: 1,2-Dichloroethane-d4	1070	µg/kg		1000		107	80-120			
Surr: 4-Bromofluorobenzene	1010	µg/kg		1000		101	80-120			
Surr: Dibromofluoromethane	1010	µg/kg		1000		101	72-120			
Surr: Toluene-d8	956	µg/kg		1000		95.6	80-120			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2433206-002

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/29/26 08:09  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	960	µg/kg	30.0	1000		96.0	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)	984	µg/kg	30.0	1000		98.4	62-129			
1,1,2-Trichloroethane	928	µg/kg	30.0	1000		92.8	80-123			
1,1-Dichloroethane	935	µg/kg	30.0	1000		93.5	74-124			
1,1-Dichloroethylene	969	µg/kg	30.0	1000		96.9	68-131			
1,2,3-Trichlorobenzene	878	µg/kg	100	1000		87.8	60-135			
1,2,3-Trichloropropane	978	µg/kg	30.0	1000		97.8	77-121			
1,2,4-Trichlorobenzene	871	µg/kg	100	1000		87.1	63-130			
1,2,4-Trimethylbenzene	914	µg/kg	30.0	1000		91.4	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	854	µg/kg	100	1000		85.4	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	926	µg/kg	30.0	1000		92.6	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	922	µg/kg	30.0	1000		92.2	77-122			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2433206-002

**Method:** EPA 8260D

**Dilution:** 1

**Analysis Date:** 01/29/26 08:09

**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichloroethane (Ethylene dichloride)	959	µg/kg	100	1000		95.9	70-130			
1,2-Dichloropropane	942	µg/kg	30.0	1000		94.2	71-130			
1,3,5-Trimethylbenzene	961	µg/kg	100	1000		96.1	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	916	µg/kg	30.0	1000		91.6	78-121			
1,3-Dichloropropene	1840	µg/kg	60.0	2000		92.1	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	916	µg/kg	30.0	1000		91.6	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	1020	µg/kg	200	1000		102	47-164			
2-Hexanone	1100	µg/kg	30.0	1000		110	70-137			
4-Methyl-2-pentanone (MIBK)	1350	µg/kg	30.0	1000		135	57-200			
Acetone	1070	µg/kg	100	1000		107	52-190			
Benzene	980	µg/kg	30.0	1000		98.0	78-122			
Bromochloromethane	927	µg/kg	30.0	1000		92.7	68-130			
Bromodichloromethane	915	µg/kg	30.0	1000		91.5	75-125			
Bromoform	980	µg/kg	30.0	1000		98.0	59-120			
Carbon disulfide	971	µg/kg	30.0	1000		97.1	60-163			
Carbon tetrachloride	1020	µg/kg	30.0	1000		102	69-123			
Chlorobenzene	926	µg/kg	30.0	1000		92.6	79-120			
Chlorodibromomethane	955	µg/kg	30.0	1000		95.5	57-123			
Chloroethane (Ethyl chloride)	866	µg/kg	100	1000		86.6	38-132			
Chloroform	900	µg/kg	30.0	1000		90.0	72-122			
cis-1,2-Dichloroethylene	963	µg/kg	30.0	1000		96.3	74-125			
cis-1,3-Dichloropropene	908	µg/kg	30.0	1000		90.8	62-124			
Dichlorodifluoromethane (Freon-12)	530	µg/kg	100	1000		53.0	28-137			
Ethylbenzene	939	µg/kg	30.0	1000		93.9	75-121			
Isopropylbenzene	988	µg/kg	30.0	1000		98.8	74-121			
m+p-Xylene	1940	µg/kg	60.0	2000		96.8	67-129			
Methyl acetate	919	µg/kg	250	1000		91.9	61-125			
Methyl bromide (Bromomethane)	562	µg/kg	100	1000		56.2	31-169			
Methyl chloride (Chloromethane)	636	µg/kg	100	1000		63.6	24-119			
Methyl tert-butyl ether (MTBE)	952	µg/kg	30.0	1000		95.2	79-139			
Methylene chloride (Dichloromethane)	974	µg/kg	250	1000		97.4	62-135			
o-Xylene	965	µg/kg	30.0	1000		96.5	75-120			
Styrene	944	µg/kg	30.0	1000		94.4	74-126			
Tetrachloroethylene (Perchloroethylene)	994	µg/kg	30.0	1000		99.4	76-128			
Toluene	936	µg/kg	30.0	1000		93.6	76-120			
Total Xylene	2900	µg/kg	90.0	3000		96.7	67-129			
trans-1,2-Dichloroethylene	926	µg/kg	30.0	1000		92.6	72-127			
trans-1,3-Dichloropropylene	935	µg/kg	30.0	1000		93.5	66-120			
Trichloroethene (Trichloroethylene)	982	µg/kg	30.0	1000		98.2	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	774	µg/kg	30.0	1000		77.4	51-115			
Vinyl chloride (Chloroethene)	652	µg/kg	30.0	1000		65.2	43-128			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2433206-002

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/29/26 08:09  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 1,2-Dichloroethane-d4	996	µg/kg		1000		99.6	80-120			
Surr: 4-Bromofluorobenzene	976	µg/kg		1000		97.6	80-120			
Surr: Dibromofluoromethane	1020	µg/kg		1000		102	72-120			
Surr: Toluene-d8	1010	µg/kg		1000		101	80-120			

**MS** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2433206-005

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 21:19  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2150	µg/kg	70.9	2057.6	<28.0	105	75-121			
1,1,2,2-Tetrachloroethane	1200	µg/kg	70.9	2057.6	<27.2	58.5	79-125			S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2330	µg/kg	70.9	2057.6	<39.1	113	62-129			
1,1,2-Trichloroethane	2020	µg/kg	70.9	2057.6	<26.2	98.4	80-123			
1,1-Dichloroethane	2110	µg/kg	70.9	2057.6	<22.5	102	74-124			
1,1-Dichloroethylene	2120	µg/kg	70.9	2057.6	<20.0	103	68-131			
1,2,3-Trichlorobenzene	2130	µg/kg	236	2057.6	<74.1	103	60-135			
1,2,3-Trichloropropane	2100	µg/kg	70.9	2057.6	<25.8	102	77-121			
1,2,4-Trichlorobenzene	1940	µg/kg	236	2057.6	<70.0	94.2	63-130			
1,2,4-Trimethylbenzene	2100	µg/kg	70.9	2057.6	<45.3	102	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	1740	µg/kg	236	2057.6	<56.8	84.8	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	2060	µg/kg	70.9	2057.6	<36.3	100.0	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	1960	µg/kg	70.9	2057.6	<23.4	95.4	77-122			
1,2-Dichloroethane (Ethylene dichloride)	2070	µg/kg	236	2057.6	<54.2	101	70-130			
1,2-Dichloropropane	2100	µg/kg	70.9	2057.6	<45.5	102	71-130			
1,3,5-Trimethylbenzene	2190	µg/kg	236	2057.6	<43.6	106	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	1960	µg/kg	70.9	2057.6	<42.6	95.2	78-121			
1,3-Dichloropropene	4010	µg/kg	142	4115.2	<34.5	97.5	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	2000	µg/kg	70.9	2057.6	<50.2	97.2	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	2980	µg/kg	473	2057.6	<147	139	47-164			
2-Hexanone	3440	µg/kg	70.9	2057.6	<30.6	167	70-137			S
4-Methyl-2-pentanone (MIBK)	2450	µg/kg	70.9	2057.6	<57.5	119	57-200			
Acetone	5040	µg/kg	236	2057.6	<183	239	52-190			S
Benzene	2160	µg/kg	70.9	2057.6	<29.9	105	78-122			
Bromochloromethane	2170	µg/kg	70.9	2057.6	<31.4	106	68-130			
Bromodichloromethane	2020	µg/kg	70.9	2057.6	<34.6	98.0	75-125			
Bromoform	2020	µg/kg	70.9	2057.6	<26.0	98.4	59-120			
Carbon disulfide	1880	µg/kg	70.9	2057.6	<32.0	91.6	60-163			
Carbon tetrachloride	2240	µg/kg	70.9	2057.6	<24.2	109	69-123			
Chlorobenzene	2070	µg/kg	70.9	2057.6	<20.5	100	79-120			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**MS** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2433206-005

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 21:19  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chlorodibromomethane	1990	µg/kg	70.9	2057.6	<34.7	96.6	57-123			
Chloroethane (Ethyl chloride)	463	µg/kg	236	2057.6	<173	22.5	38-132			S
Chloroform	2130	µg/kg	70.9	2057.6	<22.6	104	72-122			
cis-1,2-Dichloroethylene	2190	µg/kg	70.9	2057.6	<39.7	106	74-125			
cis-1,3-Dichloropropene	1960	µg/kg	70.9	2057.6	<46.5	95.2	62-124			
Dichlorodifluoromethane (Freon-12)	1110	µg/kg	236	2057.6	<74.7	54.2	28-137			
Ethylbenzene	2200	µg/kg	70.9	2057.6	<43.8	107	75-121			
Isopropylbenzene	2190	µg/kg	70.9	2057.6	<39.0	106	74-121			
m+p-Xylene	4420	µg/kg	142	4115.2	<82.3	108	67-129			
Methyl acetate	2390	µg/kg	591	2057.6	<73.9	113	61-125			
Methyl bromide (Bromomethane)	472	µg/kg	236	2057.6	<118	23.0	31-169			S
Methyl chloride (Chloromethane)	1200	µg/kg	236	2057.6	<169	58.4	24-119			
Methyl tert-butyl ether (MTBE)	2120	µg/kg	70.9	2057.6	<45.0	103	79-139			
Methylene chloride (Dichloromethane)	2010	µg/kg	591	2057.6	<164	97.9	62-135			
o-Xylene	2210	µg/kg	70.9	2057.6	<23.9	108	75-120			
Styrene	2140	µg/kg	70.9	2057.6	<24.5	104	74-126			
Tetrachloroethylene (Perchloroethylene)	3620	µg/kg	70.9	2057.6	<37.2	176	76-128			S
Toluene	2140	µg/kg	70.9	2057.6	<50.9	104	76-120			
Total Xylene	6640	µg/kg	213	6172.8	<23.9	108	67-129			
trans-1,2-Dichloroethylene	2160	µg/kg	70.9	2057.6	<50.9	105	72-127			
trans-1,3-Dichloropropylene	2050	µg/kg	70.9	2057.6	<34.5	99.8	66-120			
Trichloroethene (Trichloroethylene)	2800	µg/kg	70.9	2057.6	<27.7	136	75-122			S
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1900	µg/kg	70.9	2057.6	<31.6	92.2	51-115			
Vinyl chloride (Chloroethene)	1280	µg/kg	70.9	2057.6	<41.0	62.2	43-128			
Surr: 1,2-Dichloroethane-d4	2040	µg/kg		2057.6		99.2	80-120			
Surr: 4-Bromofluorobenzene	2080	µg/kg		2057.6		101	80-120			
Surr: Dibromofluoromethane	2090	µg/kg		2057.6		102	72-120			
Surr: Toluene-d8	2060	µg/kg		2057.6		99.9	80-120			

**MSD** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2433206-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 21:38  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2190	µg/kg	70.9	2057.6	<28.0	106	75-121	1.61	30	
1,1,2,2-Tetrachloroethane	1240	µg/kg	70.9	2057.6	<27.2	60.2	79-125	2.95	30	S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2380	µg/kg	70.9	2057.6	<39.1	116	62-129	2.19	30	
1,1,2-Trichloroethane	2070	µg/kg	70.9	2057.6	<26.2	101	80-123	2.41	30	
1,1-Dichloroethane	2200	µg/kg	70.9	2057.6	<22.5	107	74-124	4.58	30	
1,1-Dichloroethylene	2190	µg/kg	70.9	2057.6	<20.0	106	68-131	3.25	30	
1,2,3-Trichlorobenzene	2190	µg/kg	236	2057.6	<74.1	106	60-135	2.81	30	
1,2,3-Trichloropropane	2030	µg/kg	70.9	2057.6	<25.8	98.6	77-121	3.44	30	
1,2,4-Trichlorobenzene	2010	µg/kg	236	2057.6	<70.0	97.6	63-130	3.44	30	

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**MSD** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2433206-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 21:38  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	2080	µg/kg	70.9	2057.6	<45.3	101	64-126	1.04	30	
1,2-Dibromo-3-chloropropane (DBCP)	1780	µg/kg	236	2057.6	<56.8	86.4	55-135	1.87	30	
1,2-Dibromoethane (EDB, Ethylene dibromide)	2080	µg/kg	70.9	2057.6	<36.3	101	63-155	1.24	30	
1,2-Dichlorobenzene (o-Dichlorobenzene)	2090	µg/kg	70.9	2057.6	<23.4	101	77-122	6.05	30	
1,2-Dichloroethane (Ethylene dichloride)	2210	µg/kg	236	2057.6	<54.2	107	70-130	6.49	30	
1,2-Dichloropropane	2190	µg/kg	70.9	2057.6	<45.5	106	71-130	4.08	30	
1,3,5-Trimethylbenzene	2230	µg/kg	236	2057.6	<43.6	109	66-130	2.19	30	
1,3-Dichlorobenzene (m-Dichlorobenzene)	2070	µg/kg	70.9	2057.6	<42.6	100	78-121	5.31	30	
1,3-Dichloropropene	4150	µg/kg	142	4115.2	<34.5	101	62-124	3.40	30	
1,4-Dichlorobenzene (p-Dichlorobenzene)	2080	µg/kg	70.9	2057.6	<50.2	101	78-122	4.13	30	
2-Butanone (Methyl ethyl ketone, MEK)	3020	µg/kg	473	2057.6	<147	140	47-164	1.17	30	
2-Hexanone	3550	µg/kg	70.9	2057.6	<30.6	172	70-137	3.15	30	S
4-Methyl-2-pentanone (MIBK)	2630	µg/kg	70.9	2057.6	<57.5	128	57-200	7.18	30	
Acetone	5370	µg/kg	236	2057.6	<183	255	52-190	6.34	30	S
Benzene	2330	µg/kg	70.9	2057.6	<29.9	113	78-122	7.56	30	
Bromochloromethane	2100	µg/kg	70.9	2057.6	<31.4	102	68-130	3.37	30	
Bromodichloromethane	2150	µg/kg	70.9	2057.6	<34.6	104	75-125	6.32	30	
Bromoform	2030	µg/kg	70.9	2057.6	<26.0	98.6	59-120	0.203	30	
Carbon disulfide	2040	µg/kg	70.9	2057.6	<32.0	99.1	60-163	7.87	30	
Carbon tetrachloride	2290	µg/kg	70.9	2057.6	<24.2	111	69-123	2.27	30	
Chlorobenzene	2100	µg/kg	70.9	2057.6	<20.5	102	79-120	1.63	30	
Chlorodibromomethane	2040	µg/kg	70.9	2057.6	<34.7	99.4	57-123	2.76	30	
Chloroethane (Ethyl chloride)	419	µg/kg	236	2057.6	<173	20.4	38-132	10.0	30	S
Chloroform	2190	µg/kg	70.9	2057.6	<22.6	106	72-122	2.62	30	
cis-1,2-Dichloroethylene	2250	µg/kg	70.9	2057.6	<39.7	109	74-125	2.74	30	
cis-1,3-Dichloropropene	2030	µg/kg	70.9	2057.6	<46.5	98.5	62-124	3.35	30	
Dichlorodifluoromethane (Freon-12)	1100	µg/kg	236	2057.6	<74.7	53.7	28-137	0.834	30	
Ethylbenzene	2240	µg/kg	70.9	2057.6	<43.8	109	75-121	1.76	30	
Isopropylbenzene	2190	µg/kg	70.9	2057.6	<39.0	106	74-121	0.235	30	
m+p-Xylene	4520	µg/kg	142	4115.2	<82.3	110	67-129	2.09	30	
Methyl acetate	2600	µg/kg	591	2057.6	<73.9	123	61-125	8.50	30	
Methyl bromide (Bromomethane)	588	µg/kg	236	2057.6	<118	28.6	31-169	21.9	30	S
Methyl chloride (Chloromethane)	1290	µg/kg	236	2057.6	<169	62.5	24-119	6.78	30	
Methyl tert-butyl ether (MTBE)	2200	µg/kg	70.9	2057.6	<45.0	107	79-139	3.76	30	
Methylene chloride (Dichloromethane)	2060	µg/kg	591	2057.6	<164	99.9	62-135	2.02	30	
o-Xylene	2250	µg/kg	70.9	2057.6	<23.9	110	75-120	1.84	30	
Styrene	2150	µg/kg	70.9	2057.6	<24.5	105	74-126	0.623	30	
Tetrachloroethylene (Perchloroethylene)	3740	µg/kg	70.9	2057.6	<37.2	182	76-128	3.05	30	S
Toluene	2190	µg/kg	70.9	2057.6	<50.9	107	76-120	2.23	30	
Total Xylene	6770	µg/kg	213	6172.8	<23.9	110	67-129	2.01	30	

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 17143 Caldwell  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2433206

**Work Order:** HN2601254  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3848508

**MSD** CLIENT ID: 17143 SB01 (5-6')\_20260127 Lab ID: QC-2433206-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 01/28/26 21:38  
**Prep Date:** 01/28/26 14:47

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
trans-1,2-Dichloroethylene	2280	µg/kg	70.9	2057.6	<50.9	111	72-127	5.24	30	
trans-1,3-Dichloropropylene	2130	µg/kg	70.9	2057.6	<34.5	103	66-120	3.45	30	
Trichloroethene (Trichloroethylene)	2850	µg/kg	70.9	2057.6	<27.7	138	75-122	1.82	30	S
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1940	µg/kg	70.9	2057.6	<31.6	94.4	51-115	2.36	30	
Vinyl chloride (Chloroethene)	1300	µg/kg	70.9	2057.6	<41.0	63.0	43-128	1.36	30	
Surr: 1,2-Dichloroethane-d4	<b>2120</b>	µg/kg		2057.6		103	80-120	3.76	30	
Surr: 4-Bromofluorobenzene	<b>2090</b>	µg/kg		2057.6		102	80-120	0.543	30	
Surr: Dibromofluoromethane	<b>2050</b>	µg/kg		2057.6		99.8	72-120	1.84	30	
Surr: Toluene-d8	<b>2030</b>	µg/kg		2057.6		98.6	80-120	1.31	30	

The following samples were analyzed in this batch: HN2601254-001, HN2601254-002, HN2601254-003