

**DRAFT**

# FILL MATERIAL SAMPLING REPORT

12722 HAMBURG STREET  
DETROIT, WAYNE COUNTY, MICHIGAN 48205



FEBRUARY 25, 2026

PREPARED FOR:

**THE CITY OF DETROIT DEMOLITION DEPARTMENT**

1301 THIRD STREET, SUITE 606

DETROIT, MICHIGAN 48226



# FILL MATERIAL SAMPLING REPORT

12722 HAMBURG STREET  
DETROIT, WAYNE COUNTY, MICHIGAN 48205

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SENIOR PROJECT MANAGER

## 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 12722 Hamburg 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 12722 SB01, 12722 SB02, and 12722 SB03 generally consisted of brown silty sand with gravel to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities.
- Concentrations of arsenic were detected in soil samples 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and/or 12722 SB03 (5-6')\_20260203 in excess of Part 201 groundwater surface water interface protection criteria (GSIPC) and drinking water protection criteria (DWPC).
- Concentrations of barium, chromium (Total), copper, lead, and zinc were detected in soil samples 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and/or 12722 SB03 (5-6')\_20260203 at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- SVOCs, VOCs, PCBs, chloride, pesticides, and herbicides were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable.

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

MSG warrants that no substantive information or documentation was deleted, omitted, or changed that would otherwise cause the MSG to reach a different conclusion. Furthermore, MSG understands that the COD and its agencies and

authorities may rely upon the overall completeness, accuracy, and conclusions in this report and hereby provides reliance on the contents presented herein.

DRAFT

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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 12722 Hamburg 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 February 3, 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 February 3, 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 12722 SB01, 12722 SB02, and 12722 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 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and 12722 SB03 (5-6')\_20260203, 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 February 3, 2026.

### 4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 12722 SB01, 12722 SB02, and 12722 SB03 generally consisted of brown silty sand with gravel 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.

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 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and 12722 SB03 (5-6')\_20260203, 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	12722 SB01 (1-2')_20260203 12722 SB02 (3-4')_20260203 12722 SB03 (5-6')_20260203	GSIPC <sup>2</sup> / 4,600 DWPC <sup>3</sup> / 4,600	7,230

<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

### 4.3 Exposure Evaluation

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

Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking

water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration, therefore, the groundwater surface water exposure pathway can be considered not applicable.

## 5.0 FINDINGS

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

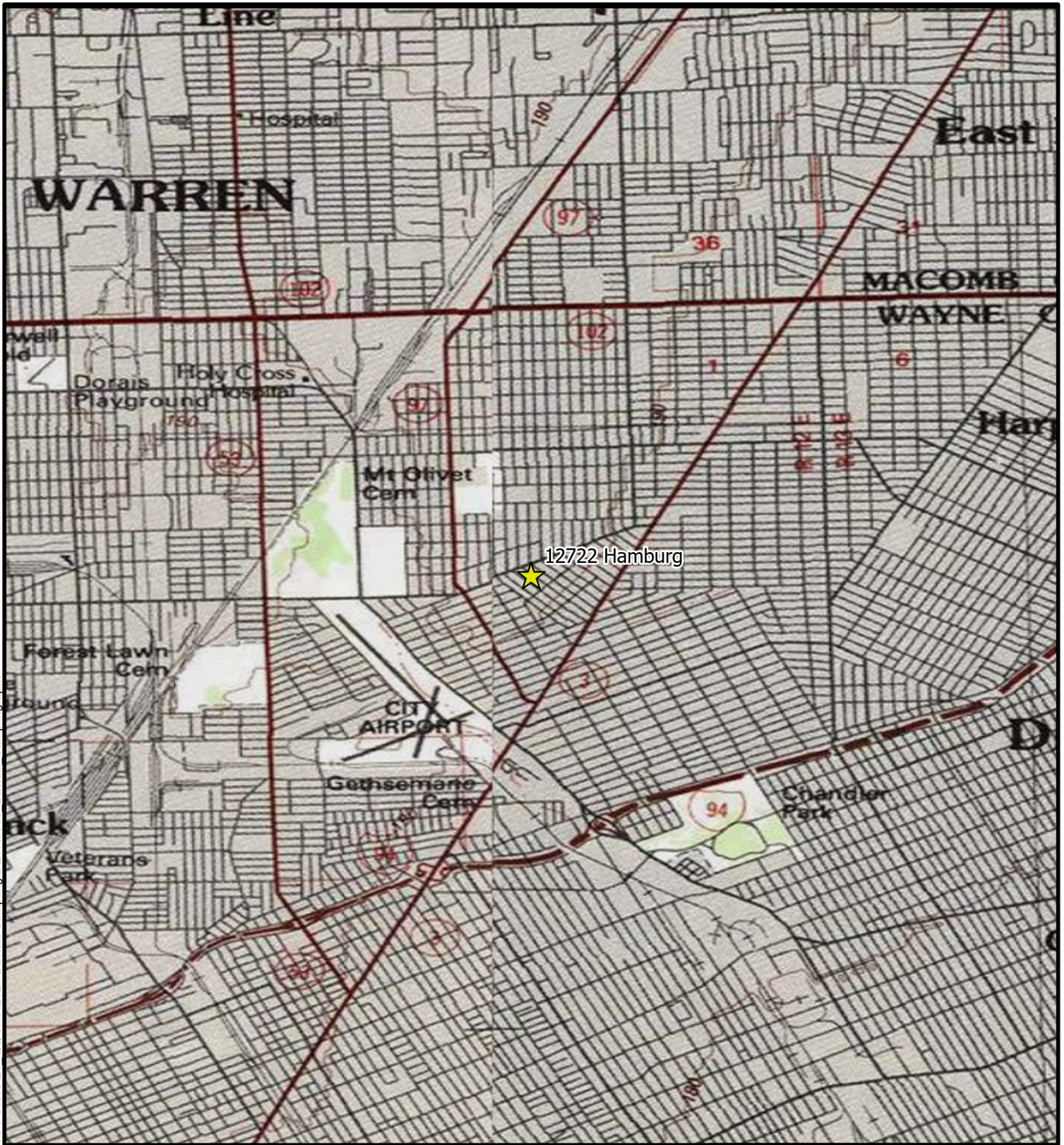
- The stratigraphy encountered during soil boring advancement of 12722 SB01, 12722 SB02, and 12722 SB03 generally consisted of brown silty sand with gravel to six (6) feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities.
- Concentrations of arsenic were detected in soil samples 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and/or 12722 SB03 (5-6')\_20260203 in excess of Part 201 groundwater surface water interface protection criteria (GSIPC) and drinking water protection criteria (DWPC).
- Concentrations of barium, chromium (Total), copper, lead, and zinc were detected in soil samples 12722 SB01 (1-2')\_20260203, 12722 SB02 (3-4')\_20260203, and/or 12722 SB03 (5-6')\_20260203 at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- SVOCs, VOCs, PCBs, chloride, pesticides, and herbicides were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable.

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

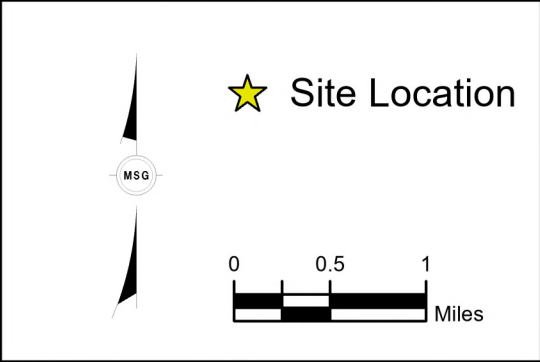
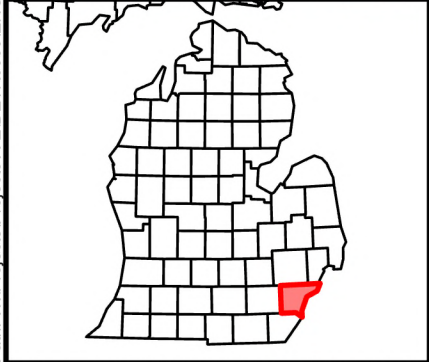
MSG warrants that no substantive information or documentation was deleted, omitted, or changed that would otherwise cause the MSG to reach a different conclusion. Furthermore, MSG understands that the COD and its agencies and authorities may rely upon the overall completeness, accuracy, and conclusions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

## FIGURES





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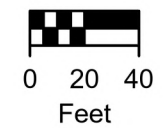
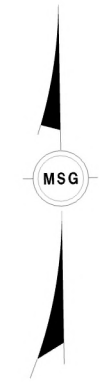


**FIGURE 1**  
SITE LOCATION

12722 Hamburg, Detroit, MI

DATE 1/8/2026	DRAWN BY JWW	DESIGNED BY JWW	PROJECT NO. DETR0060
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Date Saved: 1/6/2026 8:15 PM  
Path: W:\Projects\Projects A-E\DETR0060\ENGAPPS\GIS\21\_QQ 6.17.2025 Backfill Sampling\DETR0060\_Backfill\_Sampling.aprx



- 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

12722 Hamburg, 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  
12722 Hamburg, Detroit, Michigan**

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024			Metals					
			Arsenic (B)	Barium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Zinc (B)
CAS Number			7440-38-2	7440-39-3	7440-47-3	7440-50-8	7439-92-1	7440-66-6
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Statewide Default Background Levels			5,800	75,000	18,000	32,000	21,000	47,000
Drinking Water Protection Criteria (DWPC)			4,600	1.30E+06	30,000	5.80E+06	7.00E+05	2.40E+06
Groundwater Surface Water Interface Protection Criteria (GSIPC)			4,600	4.40E+05 <sup>(G)</sup>	3,300	75,000 <sup>(G)</sup>	6.00E+06 <sup>(G)</sup>	1.60E+05
Soil Volatilization to Indoor Air Inhalation (SVIIC)			NLV	NLV	NC	NLV	NLV	NC
Soil Volatilization to Indoor Air Pathway (SVIAP)			NC	NC	NC	NC	NC	NC
Infinite Source Volatile Soil Inhalation Criteria (VSIC)			NLV	NLV	NC	NLV	NLV	NC
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)			NLV	NLV	NC	NLV	NLV	NC
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)			NLV	NLV	NC	NLV	NLV	NC
Particulate Soil Inhalation Criteria (PSIC)			7.20E+05	3.30E+08	2.60E+05	1.30E+08	1.00E+08	NC
Direct Contact Criteria (DCC)			7,600	3.70E+07	2.50E+06	2.00E+07	4.00E+05	1.70E+08
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NC	NA	NA	NC
Sample ID	Sample Depth (ft)	Sample Date						
12722 SB01	1.0 - 2.0	02/03/2026	<b>6,780</b>	<b>15,600</b>	<b>6,800</b>	<b>10,600</b>	<b>5,610</b>	<b>41,000</b>
12722 SB02	3.0 - 4.0	02/03/2026	<b>7,030</b>	<b>14,800</b>	<b>6,430</b>	<b>10,700</b>	<b>5,870</b>	<b>41,000</b>
12722 SB03	5.0 - 6.0	02/03/2026	<b>7,230</b>	<b>13,200</b>	<b>7,750</b>	<b>11,000</b>	<b>5,830</b>	<b>43,400</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.

# 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>02/3/2026</u>	<b>Day:</b> <u>Tuesday</u>	<b>Temp:</b> <u>29°</u> (AM) <u>29°</u> (PM)
<b>MSG Personnel:</b> <u>JDF, WRD, ZRG</u>	<b>Cloud Cover:</b> <u>100%</u> (AM) <u>100%</u> (PM)	<b>Precip.:</b> <u>Light Flurries</u> (AM) <u>Snow</u> (PM)
<b>Personnel:</b> <u>MSG</u>		
<b>MSG Hours On-Site:</b> <u>~ 0.5 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>1150 – MSG onsite (12722 Hamburg)</li> <li>1152– Unloaded equipment and marked out boring locations</li> <li>1154 – Began drilling SB01</li> <li>1157 – Finished drilling SB01</li> <li>1159 – Began drilling SB02</li> <li>1200 – Finished drilling SB02</li> <li>1200 – Began drilling SB03</li> <li>1203 – Finished drilling SB03</li> <li>1205 – MSG screens soils prior to sampling</li> <li>1209 – Sampled 12722 SB01 (1-2')_20260203</li> <li>1214 – Sampled 12722 SB02 (3-4')_20260203</li> <li>1218 – Sampled 12722 SB03 (5-6')_20260203</li> <li>1222– Packed up equipment</li> <li>1226 – 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 checked="" type="checkbox"/>	No <input type="checkbox"/>

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

**APPENDIX C**  
INVESTIGATION PHOTOGRAPHS





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



Photo 2: View of drilling at 12722 SB01, facing south.



Photo 3: View of drilling 12722 SB02, facing south.



Photo 4: View of drilling at 12722 SB03, facing south.



Photo 5: Viewing 12722 SB01, SB02, and SB03 soil recovery, facing northeast.



Photo 6: View of the Site post-drilling, facing northeast.

**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> <u>City of Detroit</u>	<b>PROJECT NAME</b> <u>Backfill Soil Sampling</u>
<b>PROJECT NUMBER</b> <u>DETR0060_12722 Hamburg</u>	<b>PROJECT LOCATION</b> <u>12722 Hamburg, Detroit, MI</u>
<b>DATE STARTED</b> <u>02-03-2026</u> <b>COMPLETED</b> <u>02-03-2026</u>	<b>POSITION</b> _____
<b>DRILLING CONTRACTOR</b> <u>MSG</u>	<b>SURFACE ELEVATION</b> _____ <b>FINAL DEPTH</b> <u>6.0 ft</u>
<b>DRILLING METHOD</b> <u>Direct Push</u>	<b>LOGGED BY</b> <u>WRD</u> <b>CHECKED BY</b> <u>PDH</u>
<b>EQUIPMENT</b> <u>Geoprobe 7822DT</u> <b>Operator</b> <u>JF</u>	<b>REMARKS</b> _____

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown, Silty SAND, Some Gravel, Some Clay, Moist		
					0	Collected Soil Sample 12722 SB01 (1-2') _20260203 at 1209
					0	
ES		42			0	
					0	
5					0	
					0	
					0	
				6.0		
				Terminated at 6.00 ft.		
10						

**LEGEND:**

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



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 2365 Haggerty Road South, Canton, MI 48188  
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**BOREHOLE NUMBER SB02**

Sheet 1 of 1

**CLIENT** City of Detroit  
**PROJECT NUMBER** DETR0060\_12722 Hamburg  
**DATE STARTED** 02-03-2026 **COMPLETED** 02-03-2026  
**DRILLING CONTRACTOR** MSG  
**DRILLING METHOD** Direct Push  
**EQUIPMENT** Geoprobe 7822DT **Operator** JF

**PROJECT NAME** Backfill Soil Sampling  
**PROJECT LOCATION** 12722 Hamburg, Detroit, MI  
**POSITION** \_\_\_\_\_  
**SURFACE ELEVATION** \_\_\_\_\_ **FINAL DEPTH** 6.0 ft  
**LOGGED BY** WRD **CHECKED BY** PDH  
**REMARKS** \_\_\_\_\_

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown, Silty SAND, Some Gravel, Some Clay, Moist	0	
					0	
ES		39			0	Collected Soil Sample 12722 SB02 (3-4') _20260203 at 1214
					0	
5					0	
					0	
				6.0		
				Terminated at 6.00 ft.		
10						

**LEGEND:**

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



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 2365 Haggerty Road South, Canton, MI 48188  
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 www.manniksmithgroup.com

**BOREHOLE NUMBER SB03**

Sheet 1 of 1

**CLIENT** City of Detroit  
**PROJECT NUMBER** DETR0060\_12722 Hamburg  
**DATE STARTED** 02-03-2026 **COMPLETED** 02-03-2026  
**DRILLING CONTRACTOR** MSG  
**DRILLING METHOD** Direct Push  
**EQUIPMENT** Geoprobe 7822DT **Operator** JF

**PROJECT NAME** Backfill Soil Sampling  
**PROJECT LOCATION** 12722 Hamburg, Detroit, MI  
**POSITION** \_\_\_\_\_  
**SURFACE ELEVATION** \_\_\_\_\_ **FINAL DEPTH** 6.0 ft  
**LOGGED BY** WRD **CHECKED BY** PDH  
**REMARKS** \_\_\_\_\_

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown, Silty SAND, Some Gravel, Some Clay, Moist	0	
					0	
ES		42			0	
					0	
5					0	Collected Soil Sample 12722 SB03 (5-6') _20260203 at 1218
					0	
				Terminated at 6.00 ft.		
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 11, 2026

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

Re: **12722 Hamburg**

Date Received: **02/04/2026**

Work Order: **HN2601576**

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:** 12722 Hamburg

**Work Order:** HN2601576  
**Date Received:** 04-Feb-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 04-Feb-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: HN2601576**

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

#### **Metals**

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

##### **Run ID: 3869270**

Samples HN2601576-001 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.



<b>CLIENT ID: 12722 SB01 (1-2')_20260203</b>	<b>Lab ID: HN2601576-001</b>
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	6.78		3.23	mg/kg	EPA 6020B
Barium	15.6		3.23	mg/kg	EPA 6020B
Chromium	6.80		3.23	mg/kg	EPA 6020B
Copper	10.6		3.23	mg/kg	EPA 6020B
Lead	5.61		3.23	mg/kg	EPA 6020B
Percent Moisture	6.4		0.1	%	EPA 3550C
Zinc	41.0		6.45	mg/kg	EPA 6020B

<b>CLIENT ID: 12722 SB02 (3-4')_20260203</b>	<b>Lab ID: HN2601576-002</b>
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	7.03		3.20	mg/kg	EPA 6020B
Barium	14.8		3.20	mg/kg	EPA 6020B
Chromium	6.43		3.20	mg/kg	EPA 6020B
Copper	10.7		3.20	mg/kg	EPA 6020B
Lead	5.87		3.20	mg/kg	EPA 6020B
Percent Moisture	6.6		0.1	%	EPA 3550C
Zinc	41.0		6.40	mg/kg	EPA 6020B

<b>CLIENT ID: 12722 SB03 (5-6')_20260203</b>	<b>Lab ID: HN2601576-003</b>
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	7.23		3.17	mg/kg	EPA 6020B
Barium	13.2		3.17	mg/kg	EPA 6020B
Chromium	7.75		3.17	mg/kg	EPA 6020B
Copper	11.0		3.17	mg/kg	EPA 6020B
Lead	5.83		3.17	mg/kg	EPA 6020B
Percent Moisture	6.2		0.1	%	EPA 3550C
Zinc	43.4		6.35	mg/kg	EPA 6020B

# SAMPLE SUMMARY



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Workorder:** HN2601576

<b>Laboratory Sample ID</b>	<b>Client Sample ID</b>	<b>Sample Matrix</b>	<b>Collection Date</b>	<b>Date Received</b>
HN2601576-001	12722 SB01 (1-2')_20260203	SOIL/SOLID	02/03/26 12:09	02/04/26 06:00
HN2601576-002	12722 SB02 (3-4')_20260203	SOIL/SOLID	02/03/26 12:14	02/04/26 06:00
HN2601576-003	12722 SB03 (5-6')_20260203	SOIL/SOLID	02/03/26 12:18	02/04/26 06:00

Environmental

# Chain of Custody Form

Laboratory location:  
 \_\_\_\_\_  
 \_\_\_\_\_

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



Telephone : +1 616 399 6070

ALS Project Manager:		Work Order #:	
Project Information		Parameter/Method Request for Analysis	
Project Name	12722 Hamburg	A	VOCs (U.S. EPA Method 8260C (or Method 8260))
Project Number	DETR0060	B	SVOCs (U.S. EPA Method 8270D (or Method 8270))
Bill To Company	Mannik Smith Group	C	PCBs (U.S. EPA Method 8082)
Invoice Attn:		D	Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)
Address	2365 South Haggerty Road	E	Chlorides (U.S. EPA Method 9056A)
City/State/Zip	Canton, Mi 48188	F	Pesticides (U.S. EPA Method 8081B (or Method 8081))
Phone	734-397-3100	G	Herbicides (U.S. EPA Method 8151A (or Method 8151))
Fax		H	
e-Mail Address	rmontri@manniksmithgroup.com	I	
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	12722 SB01 ( 1-2 )_2026 02 03	2/3/26	1209	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
2	12722 SB02 ( 3-4 )_2026 02 03	1	1214	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
3	12722 SB03 ( 5-6 )_2026 02 03	1	1218	Soil	7	3	✓	✓	✓	✓	✓	✓	✓				
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign <b>WILEY DAVENPORT</b>		Shipment Method:		Required Turnaround Time: <input type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:	
Relinquished by:	Date: 2/3/26	Time: 1554	Received by:	Notes: Rec'd 2/4/26 0600 QZLL					
Relinquished by:	Date: 2/3/26	Time: 1700	Received by (Laboratory): QS	Cooler Temp.	QC Package: (Check Box Below)				
Logged by (Laboratory): DCS	Date: 2/4/26	Time: 0830	Checked by (Laboratory):	12.6 3.1°C	Level II: Standard QC		TRRP-Checklist		
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035				Level III: Std QC + Raw Data		TRRP Level IV			
				Level IV: SW846 CLP-Like					
				Other:					

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.  
 Signature denotes acceptance of ALS Group USA, Corp. Terms and Conditions - Please click the link below for detailed Terms & Conditions:  
<https://www.alsglobal.com/ALSGroupUSACorpTC>  
 ALS copyright © 2024. All rights reserved.



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

ALS Holland Sample Receiving Checklist

Received by: Diane F. Shaw

Date/Time: 2/4/26 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): 3.1 / 3.1 °c

Thermometer(s): IR6

Sample(s) received on ice? (Yes) / No

Matrix/Matrices: Solid

Cooler(s)/Kit(s): 1

Date/Time sample(s) sent to storage: 2/4/26 0900

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:** 12722 Hamburg

**Work Order:** HN2601576

**Sample Name:** 12722 SB01 (1-2')\_20260203  
**Laboratory Code:** HN2601576-001  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 02/03/26  
**Date Received:** 02/04/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		001-AC	2443180		3863426	Nicole Maleski
EPA 6020B	EPA 3050B	001-AC	2444363	Weston Kotecki	3869270	Hunter Johnson
EPA 7471B	Method	001-AC	2442349	Maxx Richey	3864619	Maxx Richey
EPA 8081B	EPA 3546	001-AC	2440525	Rachel Plantinga	3861732	Nathaniel Dietlin
EPA 8082A	EPA 3546	001-AC	2440516	Rachel Plantinga	3862270	Sam Bruzan
EPA 8151A	Method	001-AC	2441148	Rachel Plantinga	3865925	Kathy Malmyga
EPA 8260D	EPA 5035A	001-AA	2441302	Jonathan Vazquez	3862247	John Garvale
EPA 8270E	EPA 3546	001-AC	2442280	Benjamin Farmer	3868930	Sam Marcotte
EPA 9056A	EPA 9056A	001-AC	2440581	Sage Hansen	3861166	Jessica Bacon

**Sample Name:** 12722 SB02 (3-4')\_20260203  
**Laboratory Code:** HN2601576-002  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 02/03/26  
**Date Received:** 02/04/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		002-AC	2440539		3859151	Nicole Maleski
EPA 6020B	EPA 3050B	002-AC	2444363	Weston Kotecki	3869270	Hunter Johnson
EPA 7471B	Method	002-AC	2442349	Maxx Richey	3864619	Maxx Richey
EPA 8081B	EPA 3546	002-AC	2440525	Rachel Plantinga	3861732	Nathaniel Dietlin
EPA 8082A	EPA 3546	002-AC	2440516	Rachel Plantinga	3862270	Madison VandenBer
EPA 8151A	Method	002-AC	2441148	Rachel Plantinga	3865925	Kathy Malmyga
EPA 8260D	EPA 5035A	002-AA	2441302	Jonathan Vazquez	3862247	John Garvale
EPA 8270E	EPA 3546	002-AC	2442280	Benjamin Farmer	3868930	Sam Marcotte
EPA 9056A	EPA 9056A	002-AC	2440581	Sage Hansen	3861166	Sage Hansen

**Sample Name:** 12722 SB03 (5-6')\_20260203  
**Laboratory Code:** HN2601576-003  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 02/03/26  
**Date Received:** 02/04/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		003-AC	2440539		3859151	Nicole Maleski

# ANALYST SUMMARY



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg

**Work Order:** HN2601576

---

**Sample Name:** 12722 SB03 (5-6')\_20260203  
**Laboratory Code:** HN2601576-003  
**Sample Matrix:** SOIL/SOLID

**Date Collected:** 02/03/26  
**Date Received:** 02/04/26

---

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	EPA 3050B	003-AC	2444363	Weston Kotecki	3869270	Hunter Johnson
EPA 7471B	Method	003-AC	2442349	Maxx Richey	3864619	Maxx Richey
EPA 8081B	EPA 3546	003-AC	2440525	Rachel Plantinga	3861732	Nathaniel Dietlin
EPA 8082A	EPA 3546	003-AC	2440516	Rachel Plantinga	3862270	Madison VandenBer
EPA 8151A	Method	003-AC	2441148	Rachel Plantinga	3865925	Kathy Malmyga
EPA 8260D	EPA 5035A	003-AA	2441302	Jonathan Vazquez	3862247	John Garvale
EPA 8270E	EPA 3546	003-AC	2442280	Benjamin Farmer	3868930	Sam Marcotte
EPA 9056A	EPA 9056A	003-AC	2440581	Sage Hansen	3861166	Sage Hansen

---

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

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	<2.45	U	µg/kg	13.3	1	02/07/26 20:06	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<4.37	U	µg/kg	13.3	1	02/07/26 20:06	02/04/26 16:31
2,4-D	EPA 8151A	<7.11	U	µg/kg	26.6	1	02/07/26 20:06	02/04/26 16:31
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>100</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>02/07/26 20:06</i>	<i>02/04/26 16:31</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>6.4</b>		%	0.1	1	02/05/26 17:29	NA
Chloride	EPA 9056A	<3.29	U	mg/kg	10.6	1	02/05/26 07:23	02/04/26 17:04
<b>Metals</b>								
Arsenic	EPA 6020B	<b>6.78</b>		mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Barium	EPA 6020B	<b>15.6</b>		mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Cadmium	EPA 6020B	<0.194	U	mg/kg	1.29	10	02/09/26 21:13	02/06/26 15:02
Chromium	EPA 6020B	<b>6.80</b>		mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Copper	EPA 6020B	<b>10.6</b>		mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Lead	EPA 6020B	<b>5.61</b>		mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Selenium	EPA 6020B	<2.97	U	mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Silver	EPA 6020B	<0.426	U	mg/kg	3.23	10	02/09/26 21:13	02/06/26 15:02
Zinc	EPA 6020B	<b>41.0</b>		mg/kg	6.45	10	02/09/26 21:13	02/06/26 15:02
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	02/06/26 11:05	02/05/26 13:31
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<6.82	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
4,4'-DDE	EPA 8081B	<7.03	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
4,4'-DDT	EPA 8081B	<7.09	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Aldrin	EPA 8081B	<6.93	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
alpha-BHC	EPA 8081B	<7.02	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
beta-BHC	EPA 8081B	<7.00	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<10.6	U	µg/kg	26.7	1	02/10/26 23:24	02/04/26 09:53
cis-Chlordane	EPA 8081B	<7.13	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
delta-BHC	EPA 8081B	<6.98	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Dieldrin	EPA 8081B	<7.46	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<7.17	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Endosulfan II	EPA 8081B	<7.06	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<6.56	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Endrin	EPA 8081B	<8.63	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<6.76	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Endrin ketone	EPA 8081B	<6.49	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<7.00	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Heptachlor	EPA 8081B	<6.88	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<7.05	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Methoxychlor	EPA 8081B	<7.13	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
Toxaphene	EPA 8081B	<11.5	U	µg/kg	64.0	1	02/10/26 23:24	02/04/26 09:53
trans-Chlordane	EPA 8081B	<7.08	U	µg/kg	10.7	1	02/10/26 23:24	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>77.4</b>		<i>%REC</i>	<i>53-151</i>	<i>1</i>	<i>02/10/26 23:24</i>	<i>02/04/26 09:53</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>90.4</b>		<i>%REC</i>	<i>67-127</i>	<i>1</i>	<i>02/10/26 23:24</i>	<i>02/04/26 09:53</i>

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

Aroclor 1016	EPA 8082A	<24.4	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1221	EPA 8082A	<24.4	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1232	EPA 8082A	<24.4	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1242	EPA 8082A	<24.4	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1248	EPA 8082A	<24.4	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1254	EPA 8082A	<19.9	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1260	EPA 8082A	<19.9	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1262	EPA 8082A	<19.9	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Aroclor 1268	EPA 8082A	<19.9	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
Total PCB	EPA 8082A	<19.9	U	µg/kg	71.1	1	02/04/26 21:12	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>104</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>02/04/26 21:12</i>	<i>02/04/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>84.2</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>02/04/26 21:12</i>	<i>02/04/26 13:25</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<9.45	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<13.4	U	µg/kg	581	1	02/07/26 18:48	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<41.7	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
1-Methylnaphthalene	EPA 8270E	<8.38	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<13.6	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,3,4,6-Tetrachlorophenol	EPA 8270E	<42.6	U	µg/kg	116	1	02/07/26 18:48	02/05/26 09:09
2,4,5-Trichlorophenol	EPA 8270E	<34.5	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,4,6-Trichlorophenol	EPA 8270E	<15.5	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,4-Dichlorophenol	EPA 8270E	<31.3	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,4-Dimethylphenol	EPA 8270E	<29.9	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,4-Dinitrophenol	EPA 8270E	<425	U	µg/kg	581	1	02/07/26 18:48	02/05/26 09:09
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<37.8	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<14.9	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2-Chloronaphthalene	EPA 8270E	<8.14	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
2-Chlorophenol	EPA 8270E	<38.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<48.6	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2-Methylnaphthalene	EPA 8270E	<5.92	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
2-Methylphenol (o-Cresol)	EPA 8270E	<15.7	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2-Nitroaniline	EPA 8270E	<32.3	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
2-Nitrophenol	EPA 8270E	<16.6	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
3&4-Methylphenol	EPA 8270E	<31.7	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
3,3'-Dichlorobenzidine	EPA 8270E	<27.2	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
3-Nitroaniline	EPA 8270E	<33.8	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<31.9	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
4-Chloro-3-methylphenol	EPA 8270E	<16.6	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
4-Chloroaniline	EPA 8270E	<29.6	U	µg/kg	116	1	02/07/26 18:48	02/05/26 09:09
4-Chlorophenyl phenylether	EPA 8270E	<16.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
4-Nitroaniline	EPA 8270E	<90.3	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
4-Nitrophenol	EPA 8270E	<136	U	µg/kg	581	1	02/07/26 18:48	02/05/26 09:09
Acenaphthene	EPA 8270E	<8.42	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution	Date	Date
						Factor	Analyzed	Extracted
Acenaphthylene	EPA 8270E	<10.1	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Acetophenone	EPA 8270E	<9.11	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Anthracene	EPA 8270E	<8.21	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Atrazine	EPA 8270E	<34.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Benzaldehyde	EPA 8270E	<89.4	U	µg/kg	116	1	02/07/26 18:48	02/05/26 09:09
Benzo(a)anthracene	EPA 8270E	<10.1	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Benzo(a)pyrene	EPA 8270E	<7.14	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Benzo(b)fluoranthene	EPA 8270E	<8.68	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Benzo(g,h,i)perylene	EPA 8270E	<8.92	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Benzo(k)fluoranthene	EPA 8270E	<8.82	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
bis(2-Chloroethoxy) methane	EPA 8270E	<36.9	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
bis(2-Chloroethyl) ether	EPA 8270E	<16.5	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Butyl benzyl phthalate	EPA 8270E	<72.9	U	µg/kg	116	1	02/07/26 18:48	02/05/26 09:09
Caprolactam	EPA 8270E	<52.5	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Carbazole	EPA 8270E	<17.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Chrysene	EPA 8270E	<9.41	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<48.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Dibenz(a,h) anthracene	EPA 8270E	<6.29	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Dibenzofuran	EPA 8270E	<8.55	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Diethyl phthalate	EPA 8270E	<19.8	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Dimethyl phthalate	EPA 8270E	<11.3	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Fluoranthene	EPA 8270E	<5.59	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Fluorene	EPA 8270E	<8.45	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Hexachlorobenzene	EPA 8270E	<16.9	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Hexachlorobutadiene	EPA 8270E	<13.7	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Hexachlorocyclopentadiene	EPA 8270E	<55.2	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Hexachloroethane	EPA 8270E	<24.1	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Indeno(1,2,3-cd) pyrene	EPA 8270E	<8.10	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Isophorone	EPA 8270E	<11.4	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
Methylphenol, Total	EPA 8270E	<15.7	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<7.44	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Nitrobenzene	EPA 8270E	<19.6	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
n-Nitrosodi-n-propylamine	EPA 8270E	<9.60	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
N-Nitrosodiphenylamine	EPA 8270E	<33.7	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Pentachlorophenol	EPA 8270E	<46.2	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Phenanthrene	EPA 8270E	<5.41	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Phenol	EPA 8270E	<29.2	U	µg/kg	57.6	1	02/07/26 18:48	02/05/26 09:09
Pyrene	EPA 8270E	<5.81	U	µg/kg	11.6	1	02/07/26 18:48	02/05/26 09:09
Pyridine	EPA 8270E	<115	U	µg/kg	291	1	02/07/26 18:48	02/05/26 09:09
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>75.2</b>		<i>%REC</i>	<i>48-94</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>84.0</b>		<i>%REC</i>	<i>50-103</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>80.6</b>		<i>%REC</i>	<i>43-105</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>77.6</b>		<i>%REC</i>	<i>55-111</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>88.5</b>		<i>%REC</i>	<i>47-100</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>81.1</b>		<i>%REC</i>	<i>49-110</i>	<i>1</i>	<i>02/07/26 18:48</i>	<i>02/05/26 09:09</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<26.8	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<26.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<37.4	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<25.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<21.5	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<19.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<70.9	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<24.7	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<67.0	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<43.3	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<54.4	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<34.7	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<22.4	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<34.7	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<43.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<41.7	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<40.8	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<33.0	U	µg/kg	118	1	02/04/26 21:55	02/04/26 14:39
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<48.0	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<141	U	µg/kg	394	1	02/04/26 21:55	02/04/26 14:39
2-Hexanone	EPA 8260D	<29.3	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<55.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Acetone	EPA 8260D	<175	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
Benzene	EPA 8260D	<28.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Bromochloromethane	EPA 8260D	<30.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<33.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Bromoform	EPA 8260D	<24.9	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Carbon disulfide	EPA 8260D	<30.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<23.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Chlorobenzene	EPA 8260D	<19.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<33.2	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<165	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
Chloroform	EPA 8260D	<21.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<38.0	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<44.5	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Cyclohexane	EPA 8260D	<45.2	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<71.5	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
Ethylbenzene	EPA 8260D	<41.9	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<37.3	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
m+p-Xylene	EPA 8260D	<78.8	U	µg/kg	118	1	02/04/26 21:55	02/04/26 14:39
Methyl acetate	EPA 8260D	<70.8	U	µg/kg	492	1	02/04/26 21:55	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<113	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB01 (1-2')\_20260203

**Lab ID:** HN2601576-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<162	U	µg/kg	197	1	02/04/26 21:55	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<43.1	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<22.5	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<157	U	µg/kg	492	1	02/04/26 21:55	02/04/26 14:39
o-Xylene	EPA 8260D	<22.8	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Styrene	EPA 8260D	<23.4	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<35.6	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Toluene	EPA 8260D	<48.7	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Total Xylene	EPA 8260D	<22.8	U	µg/kg	177	1	02/04/26 21:55	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<48.8	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<33.0	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<26.5	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<30.2	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<39.3	U	µg/kg	59.1	1	02/04/26 21:55	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>104</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 21:55</i>	<i>02/04/26 14:39</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>100.0</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 21:55</i>	<i>02/04/26 14:39</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>98.0</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>02/04/26 21:55</i>	<i>02/04/26 14:39</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>99.2</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 21:55</i>	<i>02/04/26 14:39</i>

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

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	<2.34	U	µg/kg	12.7	1	02/07/26 20:19	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<4.17	U	µg/kg	12.7	1	02/07/26 20:19	02/04/26 16:31
2,4-D	EPA 8151A	<6.78	U	µg/kg	25.4	1	02/07/26 20:19	02/04/26 16:31
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>104</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>02/07/26 20:19</i>	<i>02/04/26 16:31</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>6.6</b>		%	0.1	1	02/04/26 10:35	NA
Chloride	EPA 9056A	<3.28	U	mg/kg	10.6	1	02/05/26 07:31	02/04/26 17:04
<b>Metals</b>								
Arsenic	EPA 6020B	<b>7.03</b>		mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Barium	EPA 6020B	<b>14.8</b>		mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Cadmium	EPA 6020B	<0.192	U	mg/kg	1.28	10	02/09/26 21:15	02/06/26 15:02
Chromium	EPA 6020B	<b>6.43</b>		mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Copper	EPA 6020B	<b>10.7</b>		mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Lead	EPA 6020B	<b>5.87</b>		mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Selenium	EPA 6020B	<2.95	U	mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Silver	EPA 6020B	<0.423	U	mg/kg	3.20	10	02/09/26 21:15	02/06/26 15:02
Zinc	EPA 6020B	<b>41.0</b>		mg/kg	6.40	10	02/09/26 21:15	02/06/26 15:02
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	02/06/26 11:12	02/05/26 13:31
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<6.65	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
4,4'-DDE	EPA 8081B	<6.86	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
4,4'-DDT	EPA 8081B	<6.92	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Aldrin	EPA 8081B	<6.77	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
alpha-BHC	EPA 8081B	<6.85	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
beta-BHC	EPA 8081B	<6.83	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<10.3	U	µg/kg	26.0	1	02/11/26 00:10	02/04/26 09:53
cis-Chlordane	EPA 8081B	<6.96	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
delta-BHC	EPA 8081B	<6.82	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Dieldrin	EPA 8081B	<7.28	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<7.00	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Endosulfan II	EPA 8081B	<6.89	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<6.40	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Endrin	EPA 8081B	<8.42	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<6.60	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Endrin ketone	EPA 8081B	<6.33	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<6.83	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Heptachlor	EPA 8081B	<6.72	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<6.89	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Methoxychlor	EPA 8081B	<6.96	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
Toxaphene	EPA 8081B	<11.2	U	µg/kg	62.5	1	02/11/26 00:10	02/04/26 09:53
trans-Chlordane	EPA 8081B	<6.91	U	µg/kg	10.4	1	02/11/26 00:10	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>88.3</b>		<i>%REC</i>	<i>53-151</i>	<i>1</i>	<i>02/11/26 00:10</i>	<i>02/04/26 09:53</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>102</b>		<i>%REC</i>	<i>67-127</i>	<i>1</i>	<i>02/11/26 00:10</i>	<i>02/04/26 09:53</i>

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

Aroclor 1016	EPA 8082A	<23.8	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1221	EPA 8082A	<23.8	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1232	EPA 8082A	<23.8	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1242	EPA 8082A	<23.8	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1248	EPA 8082A	<23.8	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1254	EPA 8082A	<19.4	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1260	EPA 8082A	<19.4	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1262	EPA 8082A	<19.4	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Aroclor 1268	EPA 8082A	<19.4	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
Total PCB	EPA 8082A	<19.4	U	µg/kg	69.4	1	02/04/26 21:24	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>117</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>02/04/26 21:24</i>	<i>02/04/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>92.5</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>02/04/26 21:24</i>	<i>02/04/26 13:25</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<9.46	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<13.4	U	µg/kg	582	1	02/07/26 19:15	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<41.8	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
1-Methylnaphthalene	EPA 8270E	<8.39	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<13.6	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,3,4,6-Tetrachlorophenol	EPA 8270E	<42.7	U	µg/kg	117	1	02/07/26 19:15	02/05/26 09:09
2,4,5-Trichlorophenol	EPA 8270E	<34.5	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,4,6-Trichlorophenol	EPA 8270E	<15.5	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,4-Dichlorophenol	EPA 8270E	<31.4	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,4-Dimethylphenol	EPA 8270E	<30.0	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,4-Dinitrophenol	EPA 8270E	<426	U	µg/kg	582	1	02/07/26 19:15	02/05/26 09:09
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<37.8	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<14.9	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2-Chloronaphthalene	EPA 8270E	<8.14	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
2-Chlorophenol	EPA 8270E	<38.1	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<48.7	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2-Methylnaphthalene	EPA 8270E	<5.92	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
2-Methylphenol (o-Cresol)	EPA 8270E	<15.7	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2-Nitroaniline	EPA 8270E	<32.4	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
2-Nitrophenol	EPA 8270E	<16.6	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
3&4-Methylphenol	EPA 8270E	<31.8	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
3,3'-Dichlorobenzidine	EPA 8270E	<27.2	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
3-Nitroaniline	EPA 8270E	<33.8	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<31.9	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
4-Chloro-3-methylphenol	EPA 8270E	<16.6	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
4-Chloroaniline	EPA 8270E	<29.6	U	µg/kg	117	1	02/07/26 19:15	02/05/26 09:09
4-Chlorophenyl phenylether	EPA 8270E	<16.1	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
4-Nitroaniline	EPA 8270E	<90.4	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
4-Nitrophenol	EPA 8270E	<136	U	µg/kg	582	1	02/07/26 19:15	02/05/26 09:09
Acenaphthene	EPA 8270E	<8.42	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<10.1	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Acetophenone	EPA 8270E	<9.12	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Anthracene	EPA 8270E	<8.21	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Atrazine	EPA 8270E	<34.1	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Benzaldehyde	EPA 8270E	<89.5	U	µg/kg	117	1	02/07/26 19:15	02/05/26 09:09
Benzo(a)anthracene	EPA 8270E	<10.1	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Benzo(a)pyrene	EPA 8270E	<7.15	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Benzo(b)fluoranthene	EPA 8270E	<8.69	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Benzo(g,h,i)perylene	EPA 8270E	<8.93	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Benzo(k)fluoranthene	EPA 8270E	<8.83	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
bis(2-Chloroethoxy) methane	EPA 8270E	<36.9	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
bis(2-Chloroethyl) ether	EPA 8270E	<16.5	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Butyl benzyl phthalate	EPA 8270E	<72.9	U	µg/kg	117	1	02/07/26 19:15	02/05/26 09:09
Caprolactam	EPA 8270E	<52.6	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Carbazole	EPA 8270E	<17.2	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Chrysene	EPA 8270E	<9.42	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<48.2	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Dibenz(a,h) anthracene	EPA 8270E	<6.29	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Dibenzofuran	EPA 8270E	<8.56	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Diethyl phthalate	EPA 8270E	<19.8	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Dimethyl phthalate	EPA 8270E	<11.4	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Fluoranthene	EPA 8270E	<5.59	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Fluorene	EPA 8270E	<8.46	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Hexachlorobenzene	EPA 8270E	<17.0	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Hexachlorobutadiene	EPA 8270E	<13.7	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Hexachlorocyclopentadiene	EPA 8270E	<55.2	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Hexachloroethane	EPA 8270E	<24.1	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Indeno(1,2,3-cd) pyrene	EPA 8270E	<8.11	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Isophorone	EPA 8270E	<11.4	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
Methylphenol, Total	EPA 8270E	<15.7	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<7.45	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Nitrobenzene	EPA 8270E	<19.6	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
n-Nitrosodi-n-propylamine	EPA 8270E	<9.61	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
N-Nitrosodiphenylamine	EPA 8270E	<33.7	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Pentachlorophenol	EPA 8270E	<46.3	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Phenanthrene	EPA 8270E	<5.42	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Phenol	EPA 8270E	<29.3	U	µg/kg	57.7	1	02/07/26 19:15	02/05/26 09:09
Pyrene	EPA 8270E	<5.81	U	µg/kg	11.7	1	02/07/26 19:15	02/05/26 09:09
Pyridine	EPA 8270E	<115	U	µg/kg	291	1	02/07/26 19:15	02/05/26 09:09
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>77.8</b>		<i>%REC</i>	<i>48-94</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>84.3</b>		<i>%REC</i>	<i>50-103</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>84.2</b>		<i>%REC</i>	<i>43-105</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>80.6</b>		<i>%REC</i>	<i>55-111</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>88.8</b>		<i>%REC</i>	<i>47-100</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>85.1</b>		<i>%REC</i>	<i>49-110</i>	<i>1</i>	<i>02/07/26 19:15</i>	<i>02/05/26 09:09</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<25.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<25.0	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<35.8	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<24.0	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<20.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<18.3	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<67.9	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<23.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<64.1	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<41.5	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<52.1	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<33.3	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<21.5	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<33.3	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<41.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<40.0	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<39.1	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<31.6	U	µg/kg	113	1	02/04/26 22:15	02/04/26 14:39
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<46.0	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<135	U	µg/kg	377	1	02/04/26 22:15	02/04/26 14:39
2-Hexanone	EPA 8260D	<28.1	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<52.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Acetone	EPA 8260D	<168	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
Benzene	EPA 8260D	<27.4	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Bromochloromethane	EPA 8260D	<28.8	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<31.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Bromoform	EPA 8260D	<23.8	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Carbon disulfide	EPA 8260D	<29.3	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<22.1	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Chlorobenzene	EPA 8260D	<18.8	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<31.8	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<158	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
Chloroform	EPA 8260D	<20.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<36.4	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<42.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Cyclohexane	EPA 8260D	<43.3	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<68.5	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
Ethylbenzene	EPA 8260D	<40.1	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<35.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
m+p-Xylene	EPA 8260D	<75.4	U	µg/kg	113	1	02/04/26 22:15	02/04/26 14:39
Methyl acetate	EPA 8260D	<67.7	U	µg/kg	471	1	02/04/26 22:15	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<108	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:14  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB02 (3-4')\_20260203

**Lab ID:** HN2601576-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<155	U	µg/kg	189	1	02/04/26 22:15	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<41.3	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<21.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<150	U	µg/kg	471	1	02/04/26 22:15	02/04/26 14:39
o-Xylene	EPA 8260D	<21.9	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Styrene	EPA 8260D	<22.4	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<34.1	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Toluene	EPA 8260D	<46.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Total Xylene	EPA 8260D	<21.9	U	µg/kg	170	1	02/04/26 22:15	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<46.7	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<31.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<25.4	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<28.9	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<37.6	U	µg/kg	56.6	1	02/04/26 22:15	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>101</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:15</i>	<i>02/04/26 14:39</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>101</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:15</i>	<i>02/04/26 14:39</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>98.4</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>02/04/26 22:15</i>	<i>02/04/26 14:39</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>99.8</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:15</i>	<i>02/04/26 14:39</i>

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

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	<2.40	U	µg/kg	13.0	1	02/07/26 20:32	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<4.27	U	µg/kg	13.0	1	02/07/26 20:32	02/04/26 16:31
2,4-D	EPA 8151A	<6.95	U	µg/kg	26.0	1	02/07/26 20:32	02/04/26 16:31
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	<b>108</b>		<i>%REC</i>	<i>10-116</i>	<i>1</i>	<i>02/07/26 20:32</i>	<i>02/04/26 16:31</i>
<b>General Chemistry Parameters</b>								
Percent Moisture	EPA 3550C	<b>6.2</b>		%	0.1	1	02/04/26 10:35	NA
Chloride	EPA 9056A	<3.29	U	mg/kg	10.6	1	02/05/26 07:40	02/04/26 17:04
<b>Metals</b>								
Arsenic	EPA 6020B	<b>7.23</b>		mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Barium	EPA 6020B	<b>13.2</b>		mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Cadmium	EPA 6020B	<0.190	U	mg/kg	1.27	10	02/09/26 21:16	02/06/26 15:02
Chromium	EPA 6020B	<b>7.75</b>		mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Copper	EPA 6020B	<b>11.0</b>		mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Lead	EPA 6020B	<b>5.83</b>		mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Selenium	EPA 6020B	<2.92	U	mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Silver	EPA 6020B	<0.419	U	mg/kg	3.17	10	02/09/26 21:16	02/06/26 15:02
Zinc	EPA 6020B	<b>43.4</b>		mg/kg	6.35	10	02/09/26 21:16	02/06/26 15:02
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	02/06/26 11:14	02/05/26 13:31
<b>Organochlorine Pesticides by GC/ECD</b>								
4,4'-DDD	EPA 8081B	<6.75	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
4,4'-DDE	EPA 8081B	<6.95	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
4,4'-DDT	EPA 8081B	<7.02	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Aldrin	EPA 8081B	<6.86	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
alpha-BHC	EPA 8081B	<6.95	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
beta-BHC	EPA 8081B	<6.93	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<10.5	U	µg/kg	26.4	1	02/11/26 00:22	02/04/26 09:53
cis-Chlordane	EPA 8081B	<7.05	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
delta-BHC	EPA 8081B	<6.91	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Dieldrin	EPA 8081B	<7.38	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<7.09	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Endosulfan II	EPA 8081B	<6.99	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<6.49	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Endrin	EPA 8081B	<8.54	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<6.69	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Endrin ketone	EPA 8081B	<6.42	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<6.93	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Heptachlor	EPA 8081B	<6.81	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<6.98	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Methoxychlor	EPA 8081B	<7.06	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
Toxaphene	EPA 8081B	<11.4	U	µg/kg	63.3	1	02/11/26 00:22	02/04/26 09:53
trans-Chlordane	EPA 8081B	<7.01	U	µg/kg	10.6	1	02/11/26 00:22	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	<b>89.0</b>		<i>%REC</i>	<i>53-151</i>	<i>1</i>	<i>02/11/26 00:22</i>	<i>02/04/26 09:53</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	<b>102</b>		<i>%REC</i>	<i>67-127</i>	<i>1</i>	<i>02/11/26 00:22</i>	<i>02/04/26 09:53</i>

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

Aroclor 1016	EPA 8082A	<24.1	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1221	EPA 8082A	<24.1	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1232	EPA 8082A	<24.1	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1242	EPA 8082A	<24.1	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1248	EPA 8082A	<24.1	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1254	EPA 8082A	<19.7	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1260	EPA 8082A	<19.7	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1262	EPA 8082A	<19.7	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Aroclor 1268	EPA 8082A	<19.7	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
Total PCB	EPA 8082A	<19.7	U	µg/kg	70.4	1	02/04/26 21:36	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	<b>118</b>		<i>%REC</i>	<i>54-146</i>	<i>1</i>	<i>02/04/26 21:36</i>	<i>02/04/26 13:25</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	<b>89.9</b>		<i>%REC</i>	<i>58-140</i>	<i>1</i>	<i>02/04/26 21:36</i>	<i>02/04/26 13:25</i>

### Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<9.14	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<13.0	U	µg/kg	563	1	02/07/26 19:42	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<40.4	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
1-Methylnaphthalene	EPA 8270E	<8.11	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<13.2	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,3,4,6-Tetrachlorophenol	EPA 8270E	<41.2	U	µg/kg	113	1	02/07/26 19:42	02/05/26 09:09
2,4,5-Trichlorophenol	EPA 8270E	<33.4	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,4,6-Trichlorophenol	EPA 8270E	<15.0	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,4-Dichlorophenol	EPA 8270E	<30.3	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,4-Dimethylphenol	EPA 8270E	<29.0	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,4-Dinitrophenol	EPA 8270E	<412	U	µg/kg	563	1	02/07/26 19:42	02/05/26 09:09
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<36.6	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<14.4	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2-Chloronaphthalene	EPA 8270E	<7.87	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
2-Chlorophenol	EPA 8270E	<36.8	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<47.0	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2-Methylnaphthalene	EPA 8270E	<5.73	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
2-Methylphenol (o-Cresol)	EPA 8270E	<15.2	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2-Nitroaniline	EPA 8270E	<31.3	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
2-Nitrophenol	EPA 8270E	<16.1	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
3&4-Methylphenol	EPA 8270E	<30.7	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
3,3'-Dichlorobenzidine	EPA 8270E	<26.3	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
3-Nitroaniline	EPA 8270E	<32.7	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<30.9	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
4-Chloro-3-methylphenol	EPA 8270E	<16.1	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
4-Chloroaniline	EPA 8270E	<28.6	U	µg/kg	113	1	02/07/26 19:42	02/05/26 09:09
4-Chlorophenyl phenylether	EPA 8270E	<15.6	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
4-Nitroaniline	EPA 8270E	<87.3	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
4-Nitrophenol	EPA 8270E	<132	U	µg/kg	563	1	02/07/26 19:42	02/05/26 09:09
Acenaphthene	EPA 8270E	<8.14	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<9.77	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Acetophenone	EPA 8270E	<8.82	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Anthracene	EPA 8270E	<7.94	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Atrazine	EPA 8270E	<33.0	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Benzaldehyde	EPA 8270E	<86.5	U	µg/kg	113	1	02/07/26 19:42	02/05/26 09:09
Benzo(a)anthracene	EPA 8270E	<9.73	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Benzo(a)pyrene	EPA 8270E	<6.91	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Benzo(b)fluoranthene	EPA 8270E	<8.40	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Benzo(g,h,i)perylene	EPA 8270E	<8.63	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Benzo(k)fluoranthene	EPA 8270E	<8.53	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
bis(2-Chloroethoxy) methane	EPA 8270E	<35.7	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
bis(2-Chloroethyl) ether	EPA 8270E	<15.9	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Butyl benzyl phthalate	EPA 8270E	<70.5	U	µg/kg	113	1	02/07/26 19:42	02/05/26 09:09
Caprolactam	EPA 8270E	<50.8	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Carbazole	EPA 8270E	<16.6	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Chrysene	EPA 8270E	<9.11	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<46.6	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Dibenz(a,h) anthracene	EPA 8270E	<6.08	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Dibenzofuran	EPA 8270E	<8.28	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Diethyl phthalate	EPA 8270E	<19.2	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Dimethyl phthalate	EPA 8270E	<11.0	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Fluoranthene	EPA 8270E	<5.41	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Fluorene	EPA 8270E	<8.18	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Hexachlorobenzene	EPA 8270E	<16.4	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Hexachlorobutadiene	EPA 8270E	<13.3	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Hexachlorocyclopentadiene	EPA 8270E	<53.4	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Hexachloroethane	EPA 8270E	<23.3	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Indeno(1,2,3-cd) pyrene	EPA 8270E	<7.84	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Isophorone	EPA 8270E	<11.0	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
Methylphenol, Total	EPA 8270E	<15.2	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<7.20	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Nitrobenzene	EPA 8270E	<18.9	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
n-Nitrosodi-n-propylamine	EPA 8270E	<9.29	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
N-Nitrosodiphenylamine	EPA 8270E	<32.6	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Pentachlorophenol	EPA 8270E	<44.7	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Phenanthrene	EPA 8270E	<5.24	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Phenol	EPA 8270E	<28.3	U	µg/kg	55.8	1	02/07/26 19:42	02/05/26 09:09
Pyrene	EPA 8270E	<5.62	U	µg/kg	11.3	1	02/07/26 19:42	02/05/26 09:09
Pyridine	EPA 8270E	<111	U	µg/kg	282	1	02/07/26 19:42	02/05/26 09:09
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	<b>75.8</b>		<i>%REC</i>	<i>48-94</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	<b>84.6</b>		<i>%REC</i>	<i>50-103</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	<b>82.3</b>		<i>%REC</i>	<i>43-105</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	<b>82.8</b>		<i>%REC</i>	<i>55-111</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	<b>90.0</b>		<i>%REC</i>	<i>47-100</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	<b>83.9</b>		<i>%REC</i>	<i>49-110</i>	<i>1</i>	<i>02/07/26 19:42</i>	<i>02/05/26 09:09</i>

### Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<26.5	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<25.8	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<37.0	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<24.8	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<21.3	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<18.9	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<70.1	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<24.5	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<66.2	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<42.9	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<53.8	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<34.4	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<22.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<34.4	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<43.1	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<41.3	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<40.4	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<32.6	U	µg/kg	117	1	02/04/26 22:34	02/04/26 14:39
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<47.5	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<139	U	µg/kg	390	1	02/04/26 22:34	02/04/26 14:39
2-Hexanone	EPA 8260D	<29.0	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<54.5	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Acetone	EPA 8260D	<173	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
Benzene	EPA 8260D	<28.3	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Bromochloromethane	EPA 8260D	<29.7	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<32.7	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Bromoform	EPA 8260D	<24.6	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Carbon disulfide	EPA 8260D	<30.3	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<22.9	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Chlorobenzene	EPA 8260D	<19.4	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<32.8	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<164	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
Chloroform	EPA 8260D	<21.4	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<37.6	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<44.0	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Cyclohexane	EPA 8260D	<44.7	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<70.7	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
Ethylbenzene	EPA 8260D	<41.5	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<36.9	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
m+p-Xylene	EPA 8260D	<77.9	U	µg/kg	117	1	02/04/26 22:34	02/04/26 14:39
Methyl acetate	EPA 8260D	<70.0	U	µg/kg	487	1	02/04/26 22:34	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<112	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39

# Analytical Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:18  
**Date Received:** 02/04/26 06:00

**CLIENT ID:** 12722 SB03 (5-6')\_20260203

**Lab ID:** HN2601576-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<160	U	µg/kg	195	1	02/04/26 22:34	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<42.6	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<22.3	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<155	U	µg/kg	487	1	02/04/26 22:34	02/04/26 14:39
o-Xylene	EPA 8260D	<22.6	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Styrene	EPA 8260D	<23.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<35.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Toluene	EPA 8260D	<48.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Total Xylene	EPA 8260D	<22.6	U	µg/kg	175	1	02/04/26 22:34	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<48.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<32.6	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<26.2	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<29.9	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<38.8	U	µg/kg	58.4	1	02/04/26 22:34	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	<b>101</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:34</i>	<i>02/04/26 14:39</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	<b>102</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:34</i>	<i>02/04/26 14:39</i>
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	<b>97.5</b>		<i>%REC</i>	<i>72-120</i>	<i>1</i>	<i>02/04/26 22:34</i>	<i>02/04/26 14:39</i>
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	<b>100</b>		<i>%REC</i>	<i>80-120</i>	<i>1</i>	<i>02/04/26 22:34</i>	<i>02/04/26 14:39</i>



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441148

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3865925

**Chlorinated Herbicides by GC/ECD**

**MB** CLIENT ID: Method Blank Lab ID: QC-2441148-001

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 02/07/26 17:02  
**Prep Date:** 02/04/26 16:32

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>48.0</b>	µg/kg		50		96.0	10-116			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2441148-002

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 02/07/26 17:15  
**Prep Date:** 02/04/26 16:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	32.0	µg/kg	5.00	50		64.0	10-119			
2,4,5-TP (Silvex)	31.0	µg/kg	5.00	50		62.0	10-101			
2,4-D	34.0	µg/kg	10.0	50		68.0	10-128			
Surr: DCAA	<b>49.0</b>	µg/kg		50		98.0	10-116			

**MS** CLIENT ID: Batch QC Lab ID: QC-2441148-005

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 02/07/26 17:28  
**Prep Date:** 02/04/26 16:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	52.7	µg/kg	8.52	82.372	<1.52	64.0	10-119			
2,4,5-TP (Silvex)	47.8	µg/kg	8.52	82.372	<2.70	58.0	10-101			
2,4-D	54.4	µg/kg	17.0	82.372	<4.40	66.0	10-128			
Surr: DCAA	<b>72.5</b>	µg/kg		82.372		88.0	10-116			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2441148-006

**Method:** EPA 8151A **Dilution:** 1 **Analysis Date:** 02/07/26 17:41  
**Prep Date:** 02/04/26 16:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	49.4	µg/kg	8.52	82.372	<1.52	60.0	10-119	6.45	30	
2,4,5-TP (Silvex)	46.1	µg/kg	8.52	82.372	<2.70	56.0	10-101	3.51	30	
2,4-D	47.8	µg/kg	17.0	82.372	<4.40	58.0	10-128	12.9	30	
Surr: DCAA	<b>72.5</b>	µg/kg		82.372		88.0	10-116	0.00	30	

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440539

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3859151

**General Chemistry Parameters**

**MB** CLIENT ID: Method Blank Lab ID: QC-2440539-001

**Method:** EPA 3550C **Dilution:** 1 **Analysis Date:** 02/04/26 10:35  
**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-2440539-002

**Method:** EPA 3550C **Dilution:** 1 **Analysis Date:** 02/04/26 10:35  
**Prep Date:** NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	99.9	%	0.1	100		99.9	98-102			

**DUP** CLIENT ID: Batch QC Lab ID: QC-2440539-004

**Method:** EPA 3550C **Dilution:** 1 **Analysis Date:** 02/04/26 10:35  
**Prep Date:** NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	86.0	%	0.1		86.2			0.267	10	

The following samples were analyzed in this batch: HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440539

**Work Order:** HN2601576  
**Date Collected:** 02/03/26 12:09  
**Date Received:** 02/04/26 06:00  
**Run ID:** 3863426

**General Chemistry Parameters**

**DUP** CLIENT ID: 12722 SB01 (1-2')\_20260203 Lab ID: QC-2440539-015

**Method:** EPA 3550C **Dilution:** 1 **Analysis Date:** 02/05/26 17:29  
**Prep Date:** NA

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	6.7	%	0.1		6.4			4.13	10	

**The following samples were analyzed in this batch:** HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440581

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3861166

**General Chemistry Parameters**

**MB** CLIENT ID: Method Blank Lab ID: QC-2440581-001

**Method:** EPA 9056A **Dilution:** 1 **Analysis Date:** 02/05/26 05:22  
**Prep Date:** 02/04/26 17:05

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-2440581-002

**Method:** EPA 9056A **Dilution:** 1 **Analysis Date:** 02/04/26 18:22  
**Prep Date:** 02/04/26 17:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	93.4	mg/kg	10.0	100		93.4	87-110			

**MS** CLIENT ID: Batch QC Lab ID: QC-2440581-004

**Method:** EPA 9056A **Dilution:** 1 **Analysis Date:** 02/05/26 05:46  
**Prep Date:** 02/04/26 17:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	94.4	mg/kg	10.3	99.856	<3.10	91.9	87-110			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2440581-005

**Method:** EPA 9056A **Dilution:** 1 **Analysis Date:** 02/05/26 05:54  
**Prep Date:** 02/04/26 17:05

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	94.9	mg/kg	10.3	99.745	<3.10	92.5	87-110	0.584	15	

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2443180

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3863426

**General Chemistry Parameters**

<b>MB</b>	<b>CLIENT ID: Method Blank</b>	<b>Lab ID: QC-2443180-001</b>
<b>Method:</b> EPA 3550C	<b>Dilution:</b> 1	<b>Analysis Date:</b> 02/05/26 17:29
		<b>Prep Date:</b> NA

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

<b>LCS</b>	<b>CLIENT ID: Laboratory Control Sample</b>	<b>Lab ID: QC-2443180-002</b>
<b>Method:</b> EPA 3550C	<b>Dilution:</b> 1	<b>Analysis Date:</b> 02/05/26 17:29
		<b>Prep Date:</b> NA

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>Spike Amount</b>	<b>Spike Ref. Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	<b>Qual</b>
Percent Moisture	100	%	0.1	100		100.0	98-102			

<b>DUP</b>	<b>CLIENT ID: Batch QC</b>	<b>Lab ID: QC-2443180-004</b>
<b>Method:</b> EPA 3550C	<b>Dilution:</b> 1	<b>Analysis Date:</b> 02/05/26 17:29
		<b>Prep Date:</b> NA

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>Spike Amount</b>	<b>Spike Ref. Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	<b>Qual</b>
Percent Moisture	8.3	%	0.1		8.1			2.43	10	

<b>DUP</b>	<b>CLIENT ID: Batch QC</b>	<b>Lab ID: QC-2443180-015</b>
<b>Method:</b> EPA 3550C	<b>Dilution:</b> 1	<b>Analysis Date:</b> 02/05/26 17:29
		<b>Prep Date:</b> NA

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>Spike Amount</b>	<b>Spike Ref. Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	<b>Qual</b>
Percent Moisture	8.5	%	0.1		8.7			2.32	10	

The following samples were analyzed in this batch: HN2601576-001

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442349

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3864619

**Metals**

**MB CLIENT ID: Method Blank Lab ID: QC-2442349-001**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/06/26 10:25  
**Prep Date:** 02/05/26 13:32

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

**LCS CLIENT ID: Laboratory Control Sample Lab ID: QC-2442349-002**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/06/26 10:27  
**Prep Date:** 02/05/26 13:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.156	mg/kg	0.0200	0.1665		93.6	80-120			

**MS CLIENT ID: Batch QC Lab ID: QC-2442349-004**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/06/26 10:31  
**Prep Date:** 02/05/26 13:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.176	mg/kg	0.0200	0.14932	<0.0136	111	75-125			

**MSD CLIENT ID: Batch QC Lab ID: QC-2442349-005**

**Method:** EPA 7471B **Dilution:** 1 **Analysis Date:** 02/06/26 10:33  
**Prep Date:** 02/05/26 13:32

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.166	mg/kg	0.0208	0.16243	<0.0136	95.2	75-125	6.15	35	

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2444363

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3869270

**Metals**

**MB** CLIENT ID: Method Blank Lab ID: QC-2444363-001

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:57  
**Prep Date:** 02/06/26 15:03

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-2444363-002

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:58  
**Prep Date:** 02/06/26 15:03

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.76	mg/kg	0.250	5		95.2	80-120			
Barium	4.53	mg/kg	0.250	5		90.7	80-120			
Cadmium	4.69	mg/kg	0.100	5		93.8	80-120			
Chromium	4.85	mg/kg	0.250	5		97.0	80-120			
Copper	4.41	mg/kg	0.250	5		88.1	80-120			
Lead	4.82	mg/kg	0.250	5		96.4	80-120			
Selenium	4.72	mg/kg	0.250	5		94.3	80-120			
Silver	4.74	mg/kg	0.250	5		94.8	80-120			
Zinc	4.62	mg/kg	0.500	5		92.4	80-120			

**MS** CLIENT ID: Batch QC Lab ID: QC-2444363-004

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/09/26 21:05  
**Prep Date:** 02/06/26 15:03

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	10.9	mg/kg	3.42	6.1652	6.91	75.9	75-125			
Barium	18.4	mg/kg	3.42	6.1652	14.8	81.9	75-125			
Cadmium	5.76	mg/kg	1.37	6.1652	<0.185	91.1	75-125			
Chromium	11.8	mg/kg	3.42	6.1652	6.95	89.7	75-125			
Copper	12.8	mg/kg	3.42	6.1652	11.3	42.3	75-125			S
Lead	10.4	mg/kg	3.42	6.1652	6.01	80.9	75-125			
Selenium	6.14	mg/kg	3.42	6.1652	<2.84	92.6	75-125			
Silver	5.25	mg/kg	3.42	6.1652	<0.407	85.0	75-125			
Zinc	37.8	mg/kg	6.83	5	42.0	NC	75-125			O

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2444363

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3869270

**MSD** CLIENT ID: Batch QC Lab ID: QC-2444363-005

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/09/26 21:06  
**Prep Date:** 02/06/26 15:03

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	11.9	mg/kg	3.40	6.1425	6.91	92.8	75-125	8.93	20	
Barium	20.1	mg/kg	3.40	6.1425	14.8	110	75-125	9.00	20	
Cadmium	5.85	mg/kg	1.36	6.1425	<0.184	92.9	75-125	1.55	20	
Chromium	12.3	mg/kg	3.40	6.1425	6.95	97.4	75-125	3.78	20	
Copper	15.2	mg/kg	3.40	6.1425	11.3	81.7	75-125	17.2	20	
Lead	11.8	mg/kg	3.40	6.1425	6.01	104	75-125	12.5	20	
Selenium	6.36	mg/kg	3.40	6.1425	<2.83	96.5	75-125	3.49	20	
Silver	5.39	mg/kg	3.40	6.1425	<0.405	87.7	75-125	2.78	20	
Zinc	43.0	mg/kg	6.81	5	42.0	NC	75-125	12.6	20	O

**PDS** CLIENT ID: Batch QC Lab ID: QC-2444363-007

**Method:** EPA 6020B **Dilution:** 10 **Analysis Date:** 02/09/26 21:10  
**Prep Date:** 02/06/26 15:03

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	65.6	mg/kg	3.36	60.68	6.91	97.9	75-125			
Barium	69.4	mg/kg	3.36	60.68	14.8	92.4	75-125			
Cadmium	57.2	mg/kg	1.34	60.68	<0.182	94.0	75-125			
Chromium	65.5	mg/kg	3.36	60.68	6.95	97.5	75-125			
Copper	68.8	mg/kg	3.36	60.68	11.3	96.6	75-125			
Lead	65.1	mg/kg	3.36	60.68	6.01	98.4	75-125			
Selenium	57.7	mg/kg	3.36	60.68	<2.79	94.3	75-125			
Silver	46.5	mg/kg	3.36	60.68	<0.400	76.5	75-125			
Zinc	92.9	mg/kg	6.72	60.68	42.0	90.6	75-125			

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440525

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3861732

**Organochlorine Pesticides by GC/ECD**

**MB** CLIENT ID: Method Blank Lab ID: QC-2440525-001

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 02/10/26 18:36  
**Prep Date:** 02/04/26 09:54

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
<i>Surr: Decachlorobiphenyl</i>	<b>30.3</b>	<i>µg/kg</i>		33.33		90.9	53-151			
<i>Surr: Tetrachloro-m-xylene</i>	<b>35.2</b>	<i>µg/kg</i>		33.33		106	67-127			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2440525-002

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 02/10/26 18:47  
**Prep Date:** 02/04/26 09:54

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	36.2	µg/kg	10.0	33.33		109	55-141			
4,4'-DDE	36.2	µg/kg	10.0	33.33		109	55-143			
4,4'-DDT	37.0	µg/kg	10.0	33.33		111	50-144			
Aldrin	35.9	µg/kg	10.0	33.33		108	57-141			
alpha-BHC	34.9	µg/kg	10.0	33.33		105	58-144			
beta-BHC	35.3	µg/kg	10.0	33.33		106	55-147			
cis-Chlordane	36.0	µg/kg	10.0	33.33		108	58-142			
delta-BHC	30.1	µg/kg	10.0	33.33		90.3	59-142			
Dieldrin	36.3	µg/kg	10.0	33.33		109	59-142			
Endosulfan I	35.4	µg/kg	10.0	33.33		106	57-145			
Endosulfan II	36.0	µg/kg	10.0	33.33		108	58-138			
Endosulfan sulfate	34.4	µg/kg	10.0	33.33		103	54-136			
Endrin	40.9	µg/kg	10.0	33.33		123	45-150			

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440525

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3861732

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2440525-002

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 02/10/26 18:47  
**Prep Date:** 02/04/26 09:54

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin aldehyde	34.3	µg/kg	10.0	33.33		103	41-147			
Endrin ketone	32.8	µg/kg	10.0	33.33		98.6	54-146			
gamma-BHC (Lindane)	35.4	µg/kg	10.0	33.33		106	58-145			
Heptachlor	37.7	µg/kg	10.0	33.33		113	51-145			
Heptachlor epoxide	36.2	µg/kg	10.0	33.33		109	59-143			
Methoxychlor	35.5	µg/kg	10.0	33.33		106	43-144			
trans-Chlordane	36.2	µg/kg	10.0	33.33		109	56-145			
Surr: Decachlorobiphenyl	30.9	µg/kg		33.33		92.7	51-151			
Surr: Tetrachloro-m-xylene	34.7	µg/kg		33.33		104	67-127			

**MS** CLIENT ID: Batch QC Lab ID: QC-2440525-005

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 02/10/26 19:33  
**Prep Date:** 02/04/26 09:54

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	37.4	µg/kg	10.3	33.263	<6.38	112	55-141			
4,4'-DDE	36.8	µg/kg	10.3	33.263	<6.57	111	55-143			
4,4'-DDT	40.8	µg/kg	10.3	33.263	<6.64	123	50-144			
Aldrin	36.3	µg/kg	10.3	33.263	<6.49	109	57-141			
alpha-BHC	35.5	µg/kg	10.3	33.263	<6.57	107	58-144			
beta-BHC	35.3	µg/kg	10.3	33.263	<6.55	106	55-147			
cis-Chlordane	36.6	µg/kg	10.3	33.263	<6.67	110	58-142			
delta-BHC	29.8	µg/kg	10.3	33.263	<6.53	89.7	59-142			
Dieldrin	36.9	µg/kg	10.3	33.263	<6.98	111	59-142			
Endosulfan I	35.6	µg/kg	10.3	33.263	<6.71	107	57-145			
Endosulfan II	36.3	µg/kg	10.3	33.263	<6.61	109	58-138			
Endosulfan sulfate	35.0	µg/kg	10.3	33.263	<6.14	105	54-135			
Endrin	41.6	µg/kg	10.3	33.263	<8.07	125	45-150			
Endrin aldehyde	37.8	µg/kg	10.3	33.263	<6.33	114	41-147			
Endrin ketone	34.2	µg/kg	10.3	33.263	<6.07	103	54-146			
gamma-BHC (Lindane)	36.0	µg/kg	10.3	33.263	<6.55	108	58-145			
Heptachlor	38.4	µg/kg	10.3	33.263	<6.44	115	51-145			
Heptachlor epoxide	36.7	µg/kg	10.3	33.263	<6.60	110	59-143			
Methoxychlor	39.7	µg/kg	10.3	33.263	<6.67	119	43-144			
trans-Chlordane	36.9	µg/kg	10.3	33.263	<6.63	111	56-145			
Surr: Decachlorobiphenyl	32.8	µg/kg		33.263		98.7	53-151			
Surr: Tetrachloro-m-xylene	34.1	µg/kg		33.263		103	67-127			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2440525-006

**Method:** EPA 8081B **Dilution:** 1 **Analysis Date:** 02/10/26 19:45  
**Prep Date:** 02/04/26 09:54

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	35.9	µg/kg	10.3	33.175	<6.39	108	55-141	4.17	20	



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440525

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3861732

<b>MSD</b>	<b>CLIENT ID: Batch QC</b>	<b>Lab ID: QC-2440525-006</b>
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**Method:** EPA 8081B

**Dilution:** 1

**Analysis Date:** 02/10/26 19:45

**Prep Date:** 02/04/26 09:54

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	Limit	Qual
4,4'-DDE	36.0	µg/kg	10.3	33.175	<6.59	109	55-143	2.00	20	
4,4'-DDT	38.8	µg/kg	10.3	33.175	<6.65	117	50-144	5.23	20	
Aldrin	35.4	µg/kg	10.3	33.175	<6.50	107	57-141	2.40	20	
alpha-BHC	34.7	µg/kg	10.3	33.175	<6.58	105	58-144	2.16	20	
beta-BHC	33.4	µg/kg	10.3	33.175	<6.57	101	55-147	5.39	20	
cis-Chlordane	35.9	µg/kg	10.3	33.175	<6.68	108	58-142	2.01	20	
delta-BHC	29.4	µg/kg	10.3	33.175	<6.55	88.6	59-142	1.44	20	
Dieldrin	36.1	µg/kg	10.3	33.175	<6.99	109	59-142	2.31	20	
Endosulfan I	34.3	µg/kg	10.3	33.175	<6.72	103	57-145	3.83	20	
Endosulfan II	35.6	µg/kg	10.3	33.175	<6.62	107	58-138	2.07	20	
Endosulfan sulfate	35.3	µg/kg	10.3	33.175	<6.15	107	54-135	0.867	20	
Endrin	39.7	µg/kg	10.3	33.175	<8.09	120	45-150	4.80	20	
Endrin aldehyde	39.1	µg/kg	10.3	33.175	<6.34	118	41-147	3.45	20	
Endrin ketone	33.6	µg/kg	10.3	33.175	<6.08	101	54-146	1.64	20	
gamma-BHC (Lindane)	35.1	µg/kg	10.3	33.175	<6.56	106	58-145	2.41	20	
Heptachlor	36.5	µg/kg	10.3	33.175	<6.45	110	51-145	4.97	20	
Heptachlor epoxide	35.4	µg/kg	10.3	33.175	<6.62	107	59-143	3.59	20	
Methoxychlor	38.7	µg/kg	10.3	33.175	<6.69	117	43-144	2.64	20	
trans-Chlordane	35.1	µg/kg	10.3	33.175	<6.64	106	56-145	4.93	20	
<i>Surr: Decachlorobiphenyl</i>	<b>32.2</b>	µg/kg		33.175		97.2	53-151	1.80	30	
<i>Surr: Tetrachloro-m-xylene</i>	<b>34.1</b>	µg/kg		33.175		103	67-127	0.0224	30	

**The following samples were analyzed in this batch:** HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440516

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862270

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

**MB** CLIENT ID: Method Blank Lab ID: QC-2440516-001

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 02/04/26 16:53  
**Prep Date:** 02/04/26 13:26

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	36.1	µg/kg		33.3		108	54-146			
Surr: Tetrachloro-m-xylene	31.4	µg/kg		33.3		94.3	58-140			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2440516-002

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 02/04/26 17:05  
**Prep Date:** 02/04/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	728	µg/kg	66.7	833		87.4	71-135			
Aroclor 1260	694	µg/kg	66.7	833		83.4	67-135			
Surr: Decachlorobiphenyl	36.1	µg/kg		33.3		108	54-146			
Surr: Tetrachloro-m-xylene	28.1	µg/kg		33.3		84.4	58-140			

**MS** CLIENT ID: Batch QC Lab ID: QC-2440516-005

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 02/04/26 17:17  
**Prep Date:** 02/04/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	770	µg/kg	67.7	817.74	<22.4	94.2	71-135			
Aroclor 1260	723	µg/kg	67.7	817.74	<18.3	88.4	67-135			
Surr: Decachlorobiphenyl	37.2	µg/kg		32.69		114	54-146			
Surr: Tetrachloro-m-xylene	28.6	µg/kg		32.69		87.4	58-140			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2440516-006

**Method:** EPA 8082A **Dilution:** 1 **Analysis Date:** 02/04/26 17:29  
**Prep Date:** 02/04/26 13:26

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	735	µg/kg	68.0	820.96	<22.9	89.5	71-135	4.75	20	
Aroclor 1260	701	µg/kg	68.0	820.96	<18.6	85.4	67-135	3.11	20	
Surr: Decachlorobiphenyl	36.0	µg/kg		32.819		110	54-146	3.24	30	
Surr: Tetrachloro-m-xylene	27.1	µg/kg		32.819		82.6	58-140	5.26	30	

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2440516

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862270

**The following samples were analyzed in this batch:** HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

Semivolatile Organic Compounds by GC-MS

**MB** CLIENT ID: Method Blank Lab ID: QC-2442280-001

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 13:23  
**Prep Date:** 02/05/26 09:10

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:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**MB** CLIENT ID: Method Blank Lab ID: QC-2442280-001

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 13:23  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Butyl benzyl phthalate	<41.7	µg/kg	67.0							U
Caprolactam	<30.1	µg/kg	33.0							U
Carbazole	<9.82	µg/kg	33.0							U
Chrysene	<5.39	µg/kg	6.67							U
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	<27.6	µg/kg	33.0							U
Dibenz(a,h) anthracene	<3.60	µg/kg	33.0							U
Dibenzofuran	<4.90	µg/kg	33.0							U
Diethyl phthalate	<11.3	µg/kg	33.0							U
Dimethyl phthalate	<6.50	µg/kg	33.0							U
Fluoranthene	<3.20	µg/kg	6.67							U
Fluorene	<4.84	µg/kg	6.67							U
Hexachlorobenzene	<9.70	µg/kg	33.0							U
Hexachlorobutadiene	<7.85	µg/kg	33.0							U
Hexachlorocyclopentadiene	<31.6	µg/kg	33.0							U
Hexachloroethane	<13.8	µg/kg	33.0							U
Indeno(1,2,3-cd) pyrene	<4.64	µg/kg	6.67							U
Isophorone	<6.51	µg/kg	167							U
Methylphenol, Total	<9.01	µg/kg	67.0							U
Naphthalene	<4.26	µg/kg	6.67							U
Nitrobenzene	<11.2	µg/kg	167							U
n-Nitrosodi-n-propylamine	<5.50	µg/kg	33.0							U
N-Nitrosodiphenylamine	<19.3	µg/kg	33.0							U
Pentachlorophenol	<26.5	µg/kg	33.0							U
Phenanthrene	<3.10	µg/kg	6.67							U
Phenol	<16.7	µg/kg	33.0							U
Pyrene	<3.33	µg/kg	6.67							U
Pyridine	<65.6	µg/kg	167							U
Surr: 2,4,6-Tribromophenol	<b>2620</b>	µg/kg		3333		78.6	48-94			
Surr: 2-Fluorobiphenyl	<b>2870</b>	µg/kg		3333		86.1	50-103			
Surr: 2-Fluorophenol	<b>2880</b>	µg/kg		3333		86.4	43-105			
Surr: 4-Terphenyl-d14	<b>3080</b>	µg/kg		3333		92.3	55-111			
Surr: Nitrobenzene-d5	<b>3110</b>	µg/kg		3333		93.3	47-100			
Surr: Phenol-d6	<b>2930</b>	µg/kg		3333		87.8	49-110			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2442280-002

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 13:50  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1140	µg/kg	33.0	1333		85.7	57-101			
1,2,4,5-Tetrachlorobenzene	1180	µg/kg	333	1333		88.6	54-98			
1-Methylnaphthalene	1160	µg/kg	6.67	1333		86.8	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	1110	µg/kg	33.0	1333		83.2	50-101			
2,3,4,6-Tetrachlorophenol	977	µg/kg	67.0	1333		73.3	48-103			





**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2442280-002

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 13:50  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Dimethyl phthalate	1140	µg/kg	33.0	1333		85.8	64-104			
Fluoranthene	1080	µg/kg	6.67	1333		81.4	66-105			
Fluorene	1160	µg/kg	6.67	1333		87.2	62-101			
Hexachlorobenzene	1140	µg/kg	33.0	1333		85.7	61-104			
Hexachlorobutadiene	1230	µg/kg	33.0	1333		92.6	52-99			
Hexachlorocyclopentadiene	1210	µg/kg	33.0	1333		90.5	39-106			
Hexachloroethane	1100	µg/kg	33.0	1333		82.8	59-99			
Indeno(1,2,3-cd) pyrene	1380	µg/kg	6.67	1333		104	57-114			
Isophorone	1160	µg/kg	167	1333		87.0	55-101			
Methylphenol, Total	2020	µg/kg	67.0	2667		75.8	54-103			
Naphthalene	1210	µg/kg	6.67	1333		90.7	54-99			
Nitrobenzene	1210	µg/kg	167	1333		90.6	53-100			
n-Nitrosodi-n-propylamine	1020	µg/kg	33.0	1333		76.6	52-104			
N-Nitrosodiphenylamine	1160	µg/kg	33.0	1333		87.1	61-104			
Pentachlorophenol	931	µg/kg	33.0	1333		69.9	35-100			
Phenanthrene	1180	µg/kg	6.67	1333		88.8	64-101			
Phenol	1070	µg/kg	33.0	1333		80.1	51-107			
Pyrene	1160	µg/kg	6.67	1333		87.2	62-114			
Pyridine	820	µg/kg	167	1333		61.5	40-84			
Surr: 2,4,6-Tribromophenol	2800	µg/kg		3333		84.1	48-94			
Surr: 2-Fluorobiphenyl	2920	µg/kg		3333		87.7	50-103			
Surr: 2-Fluorophenol	2850	µg/kg		3333		85.5	43-105			
Surr: 4-Terphenyl-d14	2820	µg/kg		3333		84.6	55-111			
Surr: Nitrobenzene-d5	3140	µg/kg		3333		94.3	47-100			
Surr: Phenol-d6	2840	µg/kg		3333		85.3	49-110			

**MS** CLIENT ID: Batch QC Lab ID: QC-2442280-005

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 14:17  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2860	µg/kg	80.9	3158.8	<12.8	90.7	57-101			
1,2,4,5-Tetrachlorobenzene	2840	µg/kg	817	3158.8	<18.2	90.0	54-98			
1-Methylnaphthalene	2820	µg/kg	16.3	3158.8	<11.4	89.1	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2720	µg/kg	80.9	3158.8	<18.5	86.1	50-101			
2,3,4,6-Tetrachlorophenol	2700	µg/kg	163	3158.8	<57.8	85.5	48-103			
2,4,5-Trichlorophenol	2700	µg/kg	80.9	3158.8	<46.8	85.5	54-98			
2,4,6-Trichlorophenol	2780	µg/kg	80.9	3158.8	<21.0	88.0	56-97			
2,4-Dichlorophenol	2740	µg/kg	80.9	3158.8	<42.5	86.8	54-99			
2,4-Dimethylphenol	910	µg/kg	80.9	3158.8	<40.6	28.8	47-102			S
2,4-Dinitrophenol	1540	µg/kg	817	3158.8	<577	48.8	10-100			
2,4-Dinitrotoluene (2,4-DNT)	2730	µg/kg	80.9	3158.8	<51.3	86.5	62-105			
2,6-Dinitrotoluene (2,6-DNT)	2840	µg/kg	80.9	3158.8	<20.2	89.9	62-103			
2-Chloronaphthalene	2570	µg/kg	16.3	3158.8	<11.0	81.5	57-101			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**MS** CLIENT ID: Batch QC Lab ID: QC-2442280-005

**Method:** EPA 8270E

**Dilution:** 1

**Analysis Date:** 02/07/26 14:17

**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike	Spike Ref.	% Rec	% Rec	RPD	
				Amount	Amount	% Rec	Limits	RPD	Limit Qual
2-Chlorophenol	2570	µg/kg	80.9	3158.8	<51.7	81.4	52-102		
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	2480	µg/kg	80.9	3158.8	<66.0	78.4	42-104		
2-Methylnaphthalene	2790	µg/kg	16.3	3158.8	<8.03	88.3	55-102		
2-Methylphenol (o-Cresol)	2280	µg/kg	80.9	3158.8	<21.4	72.3	54-103		
2-Nitroaniline	2770	µg/kg	80.9	3158.8	<43.9	87.6	57-103		
2-Nitrophenol	2740	µg/kg	80.9	3158.8	<22.5	86.7	52-102		
3&4-Methylphenol	2340	µg/kg	80.9	3158.8	<43.1	74.1	56-103		
3,3'-Dichlorobenzidine	1560	µg/kg	409	3158.8	<36.9	49.4	41-91		
3-Nitroaniline	1430	µg/kg	80.9	3158.8	<45.9	45.4	35-107		
4-Bromophenyl phenyl ether (BDE-3)	2780	µg/kg	80.9	3158.8	<43.3	87.9	63-104		
4-Chloro-3-methylphenol	2680	µg/kg	80.9	3158.8	<22.5	84.8	57-103		
4-Chloroaniline	2640	µg/kg	163	3158.8	<40.1	83.5	32-99		
4-Chlorophenyl phenylether	2870	µg/kg	80.9	3158.8	<21.8	91.0	62-100		
4-Nitroaniline	657	µg/kg	409	3158.8	<123	20.8	19-124		
4-Nitrophenol	2580	µg/kg	817	3158.8	<185	81.8	44-106		
Acenaphthene	2740	µg/kg	16.3	3158.8	<11.4	86.8	60-101		
Acenaphthylene	2790	µg/kg	16.3	3158.8	<13.7	88.5	59-101		
Acetophenone	2660	µg/kg	80.9	3158.8	<12.4	84.1	54-102		
Anthracene	2730	µg/kg	16.3	3158.8	<11.1	86.5	63-96		
Atrazine	2950	µg/kg	80.9	3158.8	<46.3	93.4	60-110		
Benzaldehyde	531	µg/kg	163	3158.8	<121	16.8	10-143		
Benzo(a)anthracene	2800	µg/kg	16.3	3158.8	<13.6	88.7	66-102		
Benzo(a)pyrene	2820	µg/kg	16.3	3158.8	<9.69	89.2	66-105		
Benzo(b)fluoranthene	2660	µg/kg	16.3	3158.8	<11.8	84.1	67-105		
Benzo(g,h,i)perylene	3100	µg/kg	16.3	3158.8	<12.1	98.1	59-110		
Benzo(k)fluoranthene	2820	µg/kg	16.3	3158.8	<12.0	89.3	68-106		
bis(2-Chloroethoxy)methane	2720	µg/kg	80.9	3158.8	<50.0	86.1	54-102		
bis(2-Chloroethyl) ether	2640	µg/kg	80.9	3158.8	<22.4	83.4	51-101		
Butyl benzyl phthalate	3060	µg/kg	163	3158.8	<98.9	96.8	59-107		
Caprolactam	2380	µg/kg	80.9	3158.8	<71.3	75.3	49-103		
Carbazole	2610	µg/kg	80.9	3158.8	<23.3	82.6	63-103		
Chrysene	2830	µg/kg	16.3	3158.8	<13.5	89.6	66-105		
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	2960	µg/kg	80.9	3158.8	<65.3	93.7	63-101		
Dibenz(a,h) anthracene	2970	µg/kg	80.9	3158.8	<8.53	94.0	61-109		
Dibenzofuran	2780	µg/kg	80.9	3158.8	<11.6	87.9	61-101		
Diethyl phthalate	2800	µg/kg	80.9	3158.8	<26.9	88.6	63-105		
Dimethyl phthalate	2790	µg/kg	80.9	3158.8	<15.4	88.5	64-104		
Fluoranthene	2610	µg/kg	16.3	3158.8	<7.58	82.6	66-105		
Fluorene	2890	µg/kg	16.3	3158.8	<11.5	91.5	62-101		
Hexachlorobenzene	2730	µg/kg	80.9	3158.8	<23.0	86.5	61-104		
Hexachlorobutadiene	2850	µg/kg	80.9	3158.8	<18.6	90.3	52-99		
Hexachlorocyclopentadiene	2740	µg/kg	80.9	3158.8	<77.3	86.6	39-106		
Hexachloroethane	2570	µg/kg	80.9	3158.8	<32.7	81.2	59-99		
Indeno(1,2,3-cd) pyrene	3060	µg/kg	16.3	3158.8	<11.0	96.8	57-114		



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**MS** CLIENT ID: Batch QC Lab ID: QC-2442280-005

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 14:17  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isophorone	2820	µg/kg	409	3158.8	<15.4	89.2	55-101			
Methylphenol, Total	4620	µg/kg	80.9	6319.9	<21.4	73.1	54-103			
Naphthalene	2870	µg/kg	16.3	3158.8	<10.1	91.0	54-99			
Nitrobenzene	2840	µg/kg	409	3158.8	<26.5	89.8	53-100			
n-Nitrosodi-n-propylamine	2640	µg/kg	80.9	3158.8	<13.0	83.5	52-104			
N-Nitrosodiphenylamine	2790	µg/kg	80.9	3158.8	<45.7	88.3	61-104			
Pentachlorophenol	2480	µg/kg	80.9	3158.8	<62.7	78.4	35-100			
Phenanthrene	2800	µg/kg	16.3	3158.8	<7.35	88.6	64-101			
Phenol	2580	µg/kg	80.9	3158.8	<39.7	81.6	51-107			
Pyrene	3070	µg/kg	16.3	3158.8	<7.88	97.3	52-114			
Pyridine	2520	µg/kg	409	3158.8	<155	79.6	40-84			
Surr: 2,4,6-Tribromophenol	6760	µg/kg		7898.1		85.5	48-94			
Surr: 2-Fluorobiphenyl	6860	µg/kg		7898.1		86.9	50-103			
Surr: 2-Fluorophenol	6470	µg/kg		7898.1		81.9	43-105			
Surr: 4-Terphenyl-d14	7460	µg/kg		7898.1		94.4	55-111			
Surr: Nitrobenzene-d5	7340	µg/kg		7898.1		92.9	47-100			
Surr: Phenol-d6	6770	µg/kg		7898.1		85.7	49-110			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2442280-006

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 14:44  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2830	µg/kg	81.8	3194.1	<13.0	88.5	57-101	1.29	30	
1,2,4,5-Tetrachlorobenzene	2850	µg/kg	826	3194.1	<18.4	89.4	54-98	0.443	30	
1-Methylnaphthalene	2820	µg/kg	16.5	3194.1	<11.5	88.3	56-100	0.153	30	
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2730	µg/kg	81.8	3194.1	<18.7	85.3	50-101	0.179	30	
2,3,4,6-Tetrachlorophenol	2620	µg/kg	165	3194.1	<58.5	81.9	48-103	3.19	30	
2,4,5-Trichlorophenol	2740	µg/kg	81.8	3194.1	<47.3	85.8	54-98	1.46	30	
2,4,6-Trichlorophenol	2760	µg/kg	81.8	3194.1	<21.3	86.4	56-97	0.723	30	
2,4-Dichlorophenol	2750	µg/kg	81.8	3194.1	<43.0	86.0	54-99	0.128	30	
2,4-Dimethylphenol	1430	µg/kg	81.8	3194.1	<41.1	44.7	47-102	44.3	30	RS
2,4-Dinitrophenol	1630	µg/kg	826	3194.1	<584	51.2	10-100	5.81	30	
2,4-Dinitrotoluene (2,4-DNT)	2670	µg/kg	81.8	3194.1	<51.9	83.5	62-105	2.48	30	
2,6-Dinitrotoluene (2,6-DNT)	2720	µg/kg	81.8	3194.1	<20.4	85.1	62-103	4.37	30	
2-Chloronaphthalene	2560	µg/kg	16.5	3194.1	<11.2	80.1	57-101	0.622	30	
2-Chlorophenol	2610	µg/kg	81.8	3194.1	<52.3	81.7	52-102	1.48	30	
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	2540	µg/kg	81.8	3194.1	<66.7	79.7	42-104	2.69	30	
2-Methylnaphthalene	2800	µg/kg	16.5	3194.1	<8.12	87.6	55-102	0.316	30	
2-Methylphenol (o-Cresol)	2490	µg/kg	81.8	3194.1	<21.6	77.9	54-103	8.57	30	
2-Nitroaniline	2690	µg/kg	81.8	3194.1	<44.4	84.1	57-103	3.02	30	
2-Nitrophenol	2770	µg/kg	81.8	3194.1	<22.8	86.7	52-102	1.11	30	
3&4-Methylphenol	2460	µg/kg	81.8	3194.1	<43.5	77.0	56-103	4.95	30	
3,3'-Dichlorobenzidine	1760	µg/kg	413	3194.1	<37.3	55.1	41-91	12.1	30	



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**MSD** CLIENT ID: Batch QC Lab ID: QC-2442280-006

**Method:** EPA 8270E

**Dilution:** 1

**Analysis Date:** 02/07/26 14:44

**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
3-Nitroaniline	1590	µg/kg	81.8	3194.1	<46.4	49.9	35-107	10.5	30	
4-Bromophenyl phenyl ether (BDE-3)	2860	µg/kg	81.8	3194.1	<43.8	89.4	63-104	2.80	30	
4-Chloro-3-methylphenol	2740	µg/kg	81.8	3194.1	<22.8	85.9	57-103	2.40	30	
4-Chloroaniline	2630	µg/kg	165	3194.1	<40.6	82.5	32-99	0.153	30	
4-Chlorophenyl phenylether	2840	µg/kg	81.8	3194.1	<22.1	88.8	62-100	1.34	30	
4-Nitroaniline	799	µg/kg	413	3194.1	<124	25.0	19-124	19.4	30	
4-Nitrophenol	2520	µg/kg	826	3194.1	<187	78.8	44-106	2.63	30	
Acenaphthene	2730	µg/kg	16.5	3194.1	<11.5	85.6	60-101	0.339	30	
Acenaphthylene	2780	µg/kg	16.5	3194.1	<13.8	87.2	59-101	0.369	30	
Acetophenone	2630	µg/kg	81.8	3194.1	<12.5	82.5	54-102	0.810	30	
Anthracene	2760	µg/kg	16.5	3194.1	<11.3	86.3	63-96	0.881	30	
Atrazine	2850	µg/kg	81.8	3194.1	<46.8	89.1	60-110	3.55	30	
Benzaldehyde	535	µg/kg	165	3194.1	<123	16.8	10-143	0.814	30	
Benzo(a)anthracene	2790	µg/kg	16.5	3194.1	<13.8	87.3	66-102	0.479	30	
Benzo(a)pyrene	2840	µg/kg	16.5	3194.1	<9.80	88.9	66-105	0.775	30	
Benzo(b)fluoranthene	2590	µg/kg	16.5	3194.1	<11.9	81.2	67-105	2.46	30	
Benzo(g,h,i)perylene	3260	µg/kg	16.5	3194.1	<12.2	102	59-110	4.91	30	
Benzo(k)fluoranthene	2840	µg/kg	16.5	3194.1	<12.1	88.9	68-106	0.607	30	
bis(2-Chloroethoxy)methane	2730	µg/kg	81.8	3194.1	<50.6	85.3	54-102	0.179	30	
bis(2-Chloroethyl) ether	2630	µg/kg	81.8	3194.1	<22.6	82.4	51-101	0.155	30	
Butyl benzyl phthalate	2940	µg/kg	165	3194.1	<100.0	92.1	59-107	3.87	30	
Caprolactam	2360	µg/kg	81.8	3194.1	<72.1	73.8	49-103	0.968	30	
Carbazole	2620	µg/kg	81.8	3194.1	<23.5	82.1	63-103	0.565	30	
Chrysene	2840	µg/kg	16.5	3194.1	<13.6	88.9	66-105	0.328	30	
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	2920	µg/kg	81.8	3194.1	<66.1	91.4	63-101	1.37	30	
Dibenz(a,h) anthracene	3210	µg/kg	81.8	3194.1	<8.63	101	61-109	7.84	30	
Dibenzofuran	2720	µg/kg	81.8	3194.1	<11.7	85.3	61-101	1.95	30	
Diethyl phthalate	2750	µg/kg	81.8	3194.1	<27.2	86.0	63-105	1.92	30	
Dimethyl phthalate	2740	µg/kg	81.8	3194.1	<15.6	85.9	64-104	1.87	30	
Fluoranthene	2550	µg/kg	16.5	3194.1	<7.67	79.9	66-105	2.27	30	
Fluorene	2790	µg/kg	16.5	3194.1	<11.6	87.2	62-101	3.65	30	
Hexachlorobenzene	2800	µg/kg	81.8	3194.1	<23.2	87.8	61-104	2.55	30	
Hexachlorobutadiene	2880	µg/kg	81.8	3194.1	<18.8	90.0	52-99	0.779	30	
Hexachlorocyclopentadiene	2800	µg/kg	81.8	3194.1	<78.1	87.5	39-106	2.15	30	
Hexachloroethane	2610	µg/kg	81.8	3194.1	<33.1	81.6	59-99	1.60	30	
Indeno(1,2,3-cd) pyrene	3230	µg/kg	16.5	3194.1	<11.1	101	57-114	5.36	30	
Isophorone	2810	µg/kg	413	3194.1	<15.6	88.0	55-101	0.186	30	
Methylphenol, Total	4950	µg/kg	81.8	6390.6	<21.6	77.4	54-103	6.76	30	
Naphthalene	2850	µg/kg	16.5	3194.1	<10.2	89.1	54-99	0.943	30	
Nitrobenzene	2830	µg/kg	413	3194.1	<26.8	88.5	53-100	0.291	30	
n-Nitrosodi-n-propylamine	2640	µg/kg	81.8	3194.1	<13.2	82.7	52-104	0.149	30	
N-Nitrosodiphenylamine	2880	µg/kg	81.8	3194.1	<46.2	90.2	61-104	3.19	30	
Pentachlorophenol	2490	µg/kg	81.8	3194.1	<63.5	77.8	35-100	0.408	30	
Phenanthrene	2830	µg/kg	16.5	3194.1	<7.43	88.6	64-101	1.17	30	
Phenol	2560	µg/kg	81.8	3194.1	<40.1	80.2	51-107	0.619	30	

QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2442280

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3868930

**MSD** CLIENT ID: Batch QC Lab ID: QC-2442280-006

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 02/07/26 14:44  
**Prep Date:** 02/05/26 09:10

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Pyrene	3080	µg/kg	16.5	3194.1	<7.97	96.4	52-114	0.182	30	
Pyridine	2480	µg/kg	413	3194.1	<157	77.6	40-84	1.43	30	
Surr: 2,4,6-Tribromophenol	<b>6960</b>	µg/kg		7986.4		87.2	48-94	3.01	30	
Surr: 2-Fluorobiphenyl	<b>6740</b>	µg/kg		7986.4		84.4	50-103	1.83	30	
Surr: 2-Fluorophenol	<b>6540</b>	µg/kg		7986.4		81.8	43-105	1.09	30	
Surr: 4-Terphenyl-d14	<b>7230</b>	µg/kg		7986.4		90.5	55-111	3.15	30	
Surr: Nitrobenzene-d5	<b>7300</b>	µg/kg		7986.4		91.4	47-100	0.516	30	
Surr: Phenol-d6	<b>6780</b>	µg/kg		7986.4		84.9	49-110	0.244	30	

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**Volatile Organic Compounds by GC-MS**

**MB** CLIENT ID: Method Blank Lab ID: QC-2441302-001

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/04/26 18:38

**Prep Date:** 02/04/26 14:40

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:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**MB** CLIENT ID: Method Blank Lab ID: QC-2441302-001

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/04/26 18:38  
**Prep Date:** 02/04/26 14:40

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	<15.3	µg/kg	30.0							U
(Fluorotrichloromethane, Freon 11)										
Vinyl chloride (Chloroethene)	<19.9	µg/kg	30.0							U
Surr: 1,2-Dichloroethane-d4	1000	µg/kg		1000		100	80-120			
Surr: 4-Bromofluorobenzene	997	µg/kg		1000		99.7	80-120			
Surr: Dibromofluoromethane	981	µg/kg		1000		98.1	72-120			
Surr: Toluene-d8	1000	µg/kg		1000		100	80-120			

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2441302-002

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/04/26 17:40  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1010	µg/kg	30.0	1000		101	75-121			
1,1,2,2-Tetrachloroethane	1020	µg/kg	30.0	1000		102	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1170	µg/kg	30.0	1000		117	62-129			
1,1,2-Trichloroethane	934	µg/kg	30.0	1000		93.4	80-123			
1,1-Dichloroethane	970	µg/kg	30.0	1000		97.0	74-124			
1,1-Dichloroethylene	1040	µg/kg	30.0	1000		104	68-131			
1,2,3-Trichlorobenzene	906	µg/kg	100	1000		90.6	60-135			
1,2,3-Trichloropropane	954	µg/kg	30.0	1000		95.4	77-121			
1,2,4-Trichlorobenzene	904	µg/kg	100	1000		90.4	63-130			
1,2,4-Trimethylbenzene	934	µg/kg	30.0	1000		93.4	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	882	µg/kg	100	1000		88.2	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	885	µg/kg	30.0	1000		88.5	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	893	µg/kg	30.0	1000		89.3	77-122			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2441302-002

Method: EPA 8260D

Dilution: 1

Analysis Date: 02/04/26 17:40

Prep Date: 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichloroethane (Ethylene dichloride)	945	µg/kg	100	1000		94.5	70-130			
1,2-Dichloropropane	900	µg/kg	30.0	1000		90.0	71-130			
1,3,5-Trimethylbenzene	960	µg/kg	100	1000		96.0	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	898	µg/kg	30.0	1000		89.8	78-121			
1,3-Dichloropropene	1850	µg/kg	60.0	2000		92.4	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	904	µg/kg	30.0	1000		90.4	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	1100	µg/kg	200	1000		110	47-164			
2-Hexanone	1220	µg/kg	30.0	1000		122	70-137			
4-Methyl-2-pentanone (MIBK)	1650	µg/kg	30.0	1000		165	57-200			
Acetone	1120	µg/kg	100	1000		112	52-190			
Benzene	984	µg/kg	30.0	1000		98.4	78-122			
Bromochloromethane	938	µg/kg	30.0	1000		93.8	68-130			
Bromodichloromethane	940	µg/kg	30.0	1000		94.0	75-125			
Bromoform	918	µg/kg	30.0	1000		91.8	59-120			
Carbon disulfide	1190	µg/kg	30.0	1000		119	60-163			
Carbon tetrachloride	982	µg/kg	30.0	1000		98.2	69-123			
Chlorobenzene	967	µg/kg	30.0	1000		96.7	79-120			
Chlorodibromomethane	962	µg/kg	30.0	1000		96.2	57-123			
Chloroethane (Ethyl chloride)	1100	µg/kg	100	1000		110	38-132			
Chloroform	914	µg/kg	30.0	1000		91.4	72-122			
cis-1,2-Dichloroethylene	974	µg/kg	30.0	1000		97.4	74-125			
cis-1,3-Dichloropropene	918	µg/kg	30.0	1000		91.8	62-124			
Dichlorodifluoromethane (Freon-12)	1020	µg/kg	100	1000		102	28-137			
Ethylbenzene	984	µg/kg	30.0	1000		98.4	75-121			
Isopropylbenzene	981	µg/kg	30.0	1000		98.1	74-121			
m+p-Xylene	1980	µg/kg	60.0	2000		98.8	67-129			
Methyl acetate	980	µg/kg	250	1000		98.0	61-125			
Methyl bromide (Bromomethane)	870	µg/kg	100	1000		87.0	31-169			
Methyl chloride (Chloromethane)	808	µg/kg	100	1000		80.8	24-119			
Methyl tert-butyl ether (MTBE)	1060	µg/kg	30.0	1000		106	79-139			
Methylene chloride (Dichloromethane)	1010	µg/kg	250	1000		101	62-135			
o-Xylene	1010	µg/kg	30.0	1000		101	75-120			
Styrene	968	µg/kg	30.0	1000		96.8	74-126			
Tetrachloroethylene (Perchloroethylene)	1260	µg/kg	30.0	1000		126	76-128			
Toluene	1000	µg/kg	30.0	1000		100	76-120			
Total Xylene	2990	µg/kg	90.0	3000		99.5	67-129			
trans-1,2-Dichloroethylene	960	µg/kg	30.0	1000		96.0	72-127			
trans-1,3-Dichloropropylene	930	µg/kg	30.0	1000		93.0	66-120			
Trichloroethene (Trichloroethylene)	914	µg/kg	30.0	1000		91.4	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1060	µg/kg	30.0	1000		106	51-115			
Vinyl chloride (Chloroethene)	1080	µg/kg	30.0	1000		108	43-128			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**LCS** CLIENT ID: Laboratory Control Sample Lab ID: QC-2441302-002

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/04/26 17:40  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 1,2-Dichloroethane-d4	1010	µg/kg		1000		101	80-120			
Surr: 4-Bromofluorobenzene	1040	µg/kg		1000		104	80-120			
Surr: Dibromofluoromethane	1010	µg/kg		1000		101	72-120			
Surr: Toluene-d8	999	µg/kg		1000		99.9	80-120			

**MS** CLIENT ID: Batch QC Lab ID: QC-2441302-005

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/05/26 01:30  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2340	µg/kg	66.7	2114.2	<28.8	111	75-121			
1,1,2,2-Tetrachloroethane	1200	µg/kg	66.7	2114.2	<28.0	56.6	79-125			S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2950	µg/kg	66.7	2114.2	<40.2	139	62-129			S
1,1,2-Trichloroethane	2110	µg/kg	66.7	2114.2	<27.0	99.6	80-123			
1,1-Dichloroethane	2350	µg/kg	66.7	2114.2	<23.1	111	74-124			
1,1-Dichloroethylene	2690	µg/kg	66.7	2114.2	<20.5	127	68-131			
1,2,3-Trichlorobenzene	1980	µg/kg	222	2114.2	<76.1	93.8	60-135			
1,2,3-Trichloropropane	2050	µg/kg	66.7	2114.2	<26.6	97.0	77-121			
1,2,4-Trichlorobenzene	1990	µg/kg	222	2114.2	<71.9	94.2	63-130			
1,2,4-Trimethylbenzene	2110	µg/kg	66.7	2114.2	<46.5	100.0	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	1850	µg/kg	222	2114.2	<58.4	87.3	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	1980	µg/kg	66.7	2114.2	<37.3	93.8	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	2130	µg/kg	66.7	2114.2	<24.1	101	77-122			
1,2-Dichloroethane (Ethylene dichloride)	2160	µg/kg	222	2114.2	<55.6	102	70-130			
1,2-Dichloropropane	2040	µg/kg	66.7	2114.2	<46.7	96.4	71-130			
1,3,5-Trimethylbenzene	2150	µg/kg	222	2114.2	<44.8	102	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	2140	µg/kg	66.7	2114.2	<43.8	101	78-121			
1,3-Dichloropropene	3860	µg/kg	133	4228.3	<35.4	91.2	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	2140	µg/kg	66.7	2114.2	<51.5	101	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	3530	µg/kg	444	2114.2	<151	167	47-164			S
2-Hexanone	3350	µg/kg	66.7	2114.2	<31.5	159	70-137			S
4-Methyl-2-pentanone (MIBK)	2900	µg/kg	66.7	2114.2	<59.1	137	57-200			
Acetone	5370	µg/kg	222	2114.2	<188	254	52-190			S
Benzene	2260	µg/kg	66.7	2114.2	<30.7	107	78-122			
Bromochloromethane	2250	µg/kg	66.7	2114.2	<32.3	106	68-130			
Bromodichloromethane	2060	µg/kg	66.7	2114.2	<35.5	97.4	75-125			
Bromoform	1920	µg/kg	66.7	2114.2	<26.7	90.6	59-120			
Carbon disulfide	2920	µg/kg	66.7	2114.2	<32.8	138	60-163			
Carbon tetrachloride	2310	µg/kg	66.7	2114.2	<24.8	109	69-123			
Chlorobenzene	2100	µg/kg	66.7	2114.2	<21.1	99.4	79-120			



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**MS** CLIENT ID: Batch QC Lab ID: QC-2441302-005

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/05/26 01:30  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chlorodibromomethane	2050	µg/kg	66.7	2114.2	<35.6	96.8	57-123			
Chloroethane (Ethyl chloride)	1430	µg/kg	222	2114.2	<178	67.8	38-132			
Chloroform	2250	µg/kg	66.7	2114.2	<23.2	106	72-122			
cis-1,2-Dichloroethylene	2280	µg/kg	66.7	2114.2	<40.8	108	74-125			
cis-1,3-Dichloropropene	1890	µg/kg	66.7	2114.2	<47.8	89.6	62-124			
Dichlorodifluoromethane (Freon-12)	2810	µg/kg	222	2114.2	<76.8	133	28-137			
Ethylbenzene	2250	µg/kg	66.7	2114.2	<45.0	106	75-121			
Isopropylbenzene	2220	µg/kg	66.7	2114.2	<40.1	105	74-121			
m+p-Xylene	4520	µg/kg	133	4228.3	<84.6	107	67-129			
Methyl acetate	2710	µg/kg	556	2114.2	<75.9	128	61-125			S
Methyl bromide (Bromomethane)	999	µg/kg	222	2114.2	<121	47.2	31-169			
Methyl chloride (Chloromethane)	1800	µg/kg	222	2114.2	<173	85.0	24-119			
Methyl tert-butyl ether (MTBE)	2520	µg/kg	66.7	2114.2	<46.3	119	79-139			
Methylene chloride (Dichloromethane)	2300	µg/kg	556	2114.2	<168	109	62-135			
o-Xylene	2250	µg/kg	66.7	2114.2	<24.5	106	75-120			
Styrene	2180	µg/kg	66.7	2114.2	<25.1	103	74-126			
Tetrachloroethylene (Perchloroethylene)	4060	µg/kg	66.7	2114.2	<38.2	192	76-128			S
Toluene	2240	µg/kg	66.7	2114.2	<52.3	106	76-120			
Total Xylene	6770	µg/kg	200	6342.5	<24.5	107	67-129			
trans-1,2-Dichloroethylene	2350	µg/kg	66.7	2114.2	<52.3	111	72-127			
trans-1,3-Dichloropropylene	1960	µg/kg	66.7	2114.2	<35.4	92.8	66-120			
Trichloroethene (Trichloroethylene)	2810	µg/kg	66.7	2114.2	<28.4	133	75-122			S
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	3300	µg/kg	66.7	2114.2	<32.4	156	51-115			S
Vinyl chloride (Chloroethene)	2630	µg/kg	66.7	2114.2	<42.2	124	43-128			
Surr: 1,2-Dichloroethane-d4	2230	µg/kg		2114.2		105	80-120			
Surr: 4-Bromofluorobenzene	2140	µg/kg		2114.2		101	80-120			
Surr: Dibromofluoromethane	2130	µg/kg		2114.2		101	72-120			
Surr: Toluene-d8	2070	µg/kg		2114.2		97.7	80-120			

**MSD** CLIENT ID: Batch QC Lab ID: QC-2441302-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/05/26 01:49  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2400	µg/kg	66.7	2114.2	<28.8	114	75-121	2.63	30	
1,1,2,2-Tetrachloroethane	1210	µg/kg	66.7	2114.2	<28.0	57.2	79-125	1.05	30	S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2960	µg/kg	66.7	2114.2	<40.2	140	62-129	0.572	30	S
1,1,2-Trichloroethane	2210	µg/kg	66.7	2114.2	<27.0	104	80-123	4.70	30	
1,1-Dichloroethane	2460	µg/kg	66.7	2114.2	<23.1	116	74-124	4.26	30	
1,1-Dichloroethylene	2790	µg/kg	66.7	2114.2	<20.5	132	68-131	3.74	30	S
1,2,3-Trichlorobenzene	2050	µg/kg	222	2114.2	<76.1	97.0	60-135	3.35	30	
1,2,3-Trichloropropane	2240	µg/kg	66.7	2114.2	<26.6	106	77-121	8.92	30	
1,2,4-Trichlorobenzene	2010	µg/kg	222	2114.2	<71.9	95.2	63-130	1.11	30	

# QA/QC Report



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**MSD** CLIENT ID: Batch QC Lab ID: QC-2441302-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/05/26 01:49  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	2270	µg/kg	66.7	2114.2	<46.5	107	64-126	7.19	30	
1,2-Dibromo-3-chloropropane (DBCP)	1880	µg/kg	222	2114.2	<58.4	88.9	55-135	1.82	30	
1,2-Dibromoethane (EDB, Ethylene dibromide)	2090	µg/kg	66.7	2114.2	<37.3	98.8	63-155	5.25	30	
1,2-Dichlorobenzene (o-Dichlorobenzene)	2090	µg/kg	66.7	2114.2	<24.1	99.0	77-122	1.65	30	
1,2-Dichloroethane (Ethylene dichloride)	2220	µg/kg	222	2114.2	<55.6	105	70-130	3.09	30	
1,2-Dichloropropane	2090	µg/kg	66.7	2114.2	<46.7	98.7	71-130	2.41	30	
1,3,5-Trimethylbenzene	2300	µg/kg	222	2114.2	<44.8	109	66-130	6.51	30	
1,3-Dichlorobenzene (m-Dichlorobenzene)	2150	µg/kg	66.7	2114.2	<43.8	102	78-121	0.345	30	
1,3-Dichloropropene	4080	µg/kg	133	4228.3	<35.4	96.6	62-124	5.72	30	
1,4-Dichlorobenzene (p-Dichlorobenzene)	2140	µg/kg	66.7	2114.2	<51.5	101	78-122	0.0987	30	
2-Butanone (Methyl ethyl ketone, MEK)	3750	µg/kg	444	2114.2	<151	177	47-164	6.07	30	S
2-Hexanone	3590	µg/kg	66.7	2114.2	<31.5	170	70-137	6.79	30	S
4-Methyl-2-pentanone (MIBK)	2950	µg/kg	66.7	2114.2	<59.1	139	57-200	1.63	30	
Acetone	5630	µg/kg	222	2114.2	<188	266	52-190	4.73	30	S
Benzene	2340	µg/kg	66.7	2114.2	<30.7	111	78-122	3.26	30	
Bromochloromethane	2330	µg/kg	66.7	2114.2	<32.3	110	68-130	3.69	30	
Bromodichloromethane	2150	µg/kg	66.7	2114.2	<35.5	102	75-125	4.27	30	
Bromoform	2040	µg/kg	66.7	2114.2	<26.7	96.5	59-120	6.31	30	
Carbon disulfide	3000	µg/kg	66.7	2114.2	<32.8	142	60-163	2.93	30	
Carbon tetrachloride	2400	µg/kg	66.7	2114.2	<24.8	114	69-123	4.04	30	
Chlorobenzene	2290	µg/kg	66.7	2114.2	<21.1	108	79-120	8.57	30	
Chlorodibromomethane	2150	µg/kg	66.7	2114.2	<35.6	102	57-123	4.89	30	
Chloroethane (Ethyl chloride)	1580	µg/kg	222	2114.2	<178	74.7	38-132	9.76	30	
Chloroform	2350	µg/kg	66.7	2114.2	<23.2	111	72-122	4.33	30	
cis-1,2-Dichloroethylene	2330	µg/kg	66.7	2114.2	<40.8	110	74-125	2.48	30	
cis-1,3-Dichloropropene	1980	µg/kg	66.7	2114.2	<47.8	93.5	62-124	4.26	30	
Dichlorodifluoromethane (Freon-12)	2820	µg/kg	222	2114.2	<76.8	133	28-137	0.0376	30	
Ethylbenzene	2370	µg/kg	66.7	2114.2	<45.0	112	75-121	5.31	30	
Isopropylbenzene	2380	µg/kg	66.7	2114.2	<40.1	112	74-121	6.95	30	
m+p-Xylene	4850	µg/kg	133	4228.3	<84.6	115	67-129	7.04	30	
Methyl acetate	2850	µg/kg	556	2114.2	<75.9	135	61-125	4.97	30	S
Methyl bromide (Bromomethane)	858	µg/kg	222	2114.2	<121	40.6	31-169	15.1	30	
Methyl chloride (Chloromethane)	1870	µg/kg	222	2114.2	<173	88.4	24-119	3.86	30	
Methyl tert-butyl ether (MTBE)	2600	µg/kg	66.7	2114.2	<46.3	123	79-139	2.81	30	
Methylene chloride (Dichloromethane)	1910	µg/kg	556	2114.2	<168	90.4	62-135	18.4	30	
o-Xylene	2390	µg/kg	66.7	2114.2	<24.5	113	75-120	6.25	30	
Styrene	2350	µg/kg	66.7	2114.2	<25.1	111	74-126	7.46	30	
Tetrachloroethylene (Perchloroethylene)	4340	µg/kg	66.7	2114.2	<38.2	205	76-128	6.55	30	S
Toluene	2430	µg/kg	66.7	2114.2	<52.3	115	76-120	8.05	30	
Total Xylene	7240	µg/kg	200	6342.5	<24.5	114	67-129	6.78	30	



**Client:** The Mannik & Smith Group, Inc.  
**Project:** 12722 Hamburg  
**Matrix:** SOIL/SOLID  
**QC Lot:** 2441302

**Work Order:** HN2601576  
**Date Collected:** NA  
**Date Received:** NA  
**Run ID:** 3862247

**MSD** CLIENT ID: Batch QC Lab ID: QC-2441302-006

**Method:** EPA 8260D **Dilution:** 1 **Analysis Date:** 02/05/26 01:49  
**Prep Date:** 02/04/26 14:40

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
trans-1,2-Dichloroethylene	2470	µg/kg	66.7	2114.2	<52.3	117	72-127	4.92	30	
trans-1,3-Dichloropropylene	2110	µg/kg	66.7	2114.2	<35.4	99.7	66-120	7.12	30	
Trichloroethene (Trichloroethylene)	3000	µg/kg	66.7	2114.2	<28.4	142	75-122	6.63	30	S
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	3340	µg/kg	66.7	2114.2	<32.4	158	51-115	0.987	30	S
Vinyl chloride (Chloroethene)	2740	µg/kg	66.7	2114.2	<42.2	130	43-128	4.14	30	S
Surr: 1,2-Dichloroethane-d4	<b>2210</b>	µg/kg		2114.2		104	80-120	0.907	30	
Surr: 4-Bromofluorobenzene	<b>2190</b>	µg/kg		2114.2		103	80-120	2.40	30	
Surr: Dibromofluoromethane	<b>2140</b>	µg/kg		2114.2		101	72-120	0.644	30	
Surr: Toluene-d8	<b>2120</b>	µg/kg		2114.2		100	80-120	2.48	30	

The following samples were analyzed in this batch: HN2601576-001, HN2601576-002, HN2601576-003