

DRAFT

FILL MATERIAL SAMPLING REPORT

12643 BARLOW STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48205



MARCH 20, 2026
REVISED: APRIL 13, 2026

PREPARED FOR:

THE CITY OF DETROIT DEMOLITION DEPARTMENT

1301 THIRD STREET, SUITE 606

DETROIT, MICHIGAN 48226



FILL MATERIAL SAMPLING REPORT

12643 BARLOW STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48205

PREPARED BY: _____

OLIVIA MITCHELL

ENVIRONMENTAL SCIENTIST

REVIEWED BY: _____

MARK SCHULT, PhD, CPG

SENIOR PROJECT MANAGER

REVIEWED AND
APPROVED BY: _____

RYAN MONTRI, CPG

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 12643 Barlow 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 12643 SB01, 12643 SB02, and 12643 SB03 generally consisted of brown to dark brown sand and silty clay to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 12643 SB03.
- Concentrations of arsenic were detected in soil sample 12643 SB02 (3-4')_20260203 in excess of Part 201 groundwater surface water interface protection criteria (GSIPC) and drinking water protection criteria (DWPC).
- Concentrations of barium, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chloride, chromium (Total), copper, fluoranthene, indeno(1,2,3-cd)pyrene, lead, mercury, pyrene, and zinc were detected in soil samples 12643 SB01 (1-2')_20260203, 12643 SB02 (3-4')_20260203, and/or 12643 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.
- Toxicity Characteristic Leaching Procedure (TCLP) laboratory analytical results revealed that concentrations of lead were not in excess of 40 C.F.R. § 261.24 Title 40 - *Protection of Environment, Chapter I - Environmental Protection Agency, Subchapter I - Solid Wastes, Part 261- Identification and Listing of Hazardous Waste, Subpart C - Characteristics of Hazardous Waste*.
- 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

TABLE OF CONTENTS

Executive Summary	ES-1
1.0 Introduction	1
2.0 Purpose and Scope of Work	1
3.0 Site Assessment Methodology.....	1
3.1 Preliminary Site Work Activities	1
3.2 Soil Sample Collection.....	2
3.3 Decontamination.....	2
3.4 Analytical Methods	2
3.5 Quality Assurance/Quality Control.....	3
4.0 Summary of Results	3
4.1 Site Geology and Hydrogeology	3
4.2 Soil Sample Analytical Results	3
4.3 Toxicity Characteristic Leaching Procedure (TCLP) Analytical Results.....	3
4.4 Exposure Evaluation.....	4
5.0 Findings	4
 Figures	
Figure 1	Site Location Map
Figure 2	Site Layout
 Tables	
Table 1	Soil Sample Analytical Detection Summary
Table 2	TCLP Analytical Detection Summary
 Appendices	
Appendix A	Limitations
Appendix B	Daily Field Report
Appendix C	Investigation Photographs
Appendix D	Soil Boring Logs
Appendix E	Laboratory Analytical Reports and Chain of Custody Forms

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 12643 Barlow 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 12643 SB01, 12643 SB02, and 12643 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 12643 SB01 (1-2')_20260203, 12643 SB02 (3-4')_20260203, and 12643 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, and individual TCLP analysis:

- 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 12643 SB01, 12643 SB02, and 12643 SB03 generally consisted of brown to dark brown sand and silty clay to six (6) feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 12643 SB03.

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

4.2 Soil Sample Analytical Results

Three (3) soil samples, designated 12643 SB01 (1-2')_20260203, 12643 SB02 (3-4')_20260203, and 12643 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	12643 SB02 (3-4')_20260203	GSIPC ² / 4,600 DWPC ³ / 4,600	6,910

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

²GSIPC – Groundwater Surface Water Interface Protection Criteria

³DWPC – Drinking Water Protection Criteria

4.3 Toxicity Characteristic Leaching Procedure (TCLP) Analytical Results

Lead was analyzed following leach testing using USEPA method EPA 6020 B. Laboratory results are summarized and compared to 40 C.F.R. § 261.24 Title 40 - Protection of Environment, Chapter I - Environmental Protection Agency, Subchapter I - Solid Wastes, Part 261 - Identification and Listing of Hazardous Waste, Subpart C - Characteristics of Hazardous Waste in Table 2, TCLP Analytical Detection Summary Table. Upon comparison, the laboratory analytical results following TCLP testing were below laboratory method detection limits.

Copies of the laboratory analytical data report and chain of custody forms are included in Appendix E.

4.4 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 12643 SB01, 12643 SB02, and 12643 SB03 generally consisted of brown to dark brown sand and silty clay to six (6) feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, concrete debris was observed in 12643 SB03.
- Concentrations of arsenic were detected in soil sample 12643 SB02 (3-4')_20260203 in excess of Part 201 GSIPC and DWPC.
- Concentrations of barium, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chloride, chromium (Total), copper, fluoranthene, indeno(1,2,3-cd)pyrene, lead, mercury, pyrene, and zinc were detected in soil samples 12643 SB01 (1-2')_20260203, 12643 SB02 (3-4')_20260203, and/or 12643 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.
- TCLP laboratory analytical results revealed that concentrations of lead were not in excess of 40 C.F.R. § 261.24 Title 40 - Protection of Environment, Chapter I - Environmental Protection Agency, Subchapter I - Solid Wastes, Part 261- Identification and Listing of Hazardous Waste, Subpart C - Characteristics of Hazardous Waste.
- 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.

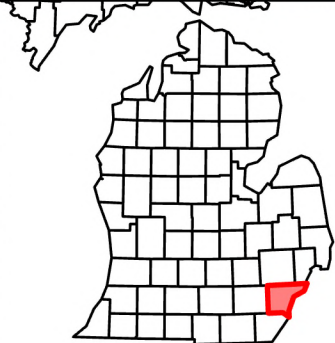
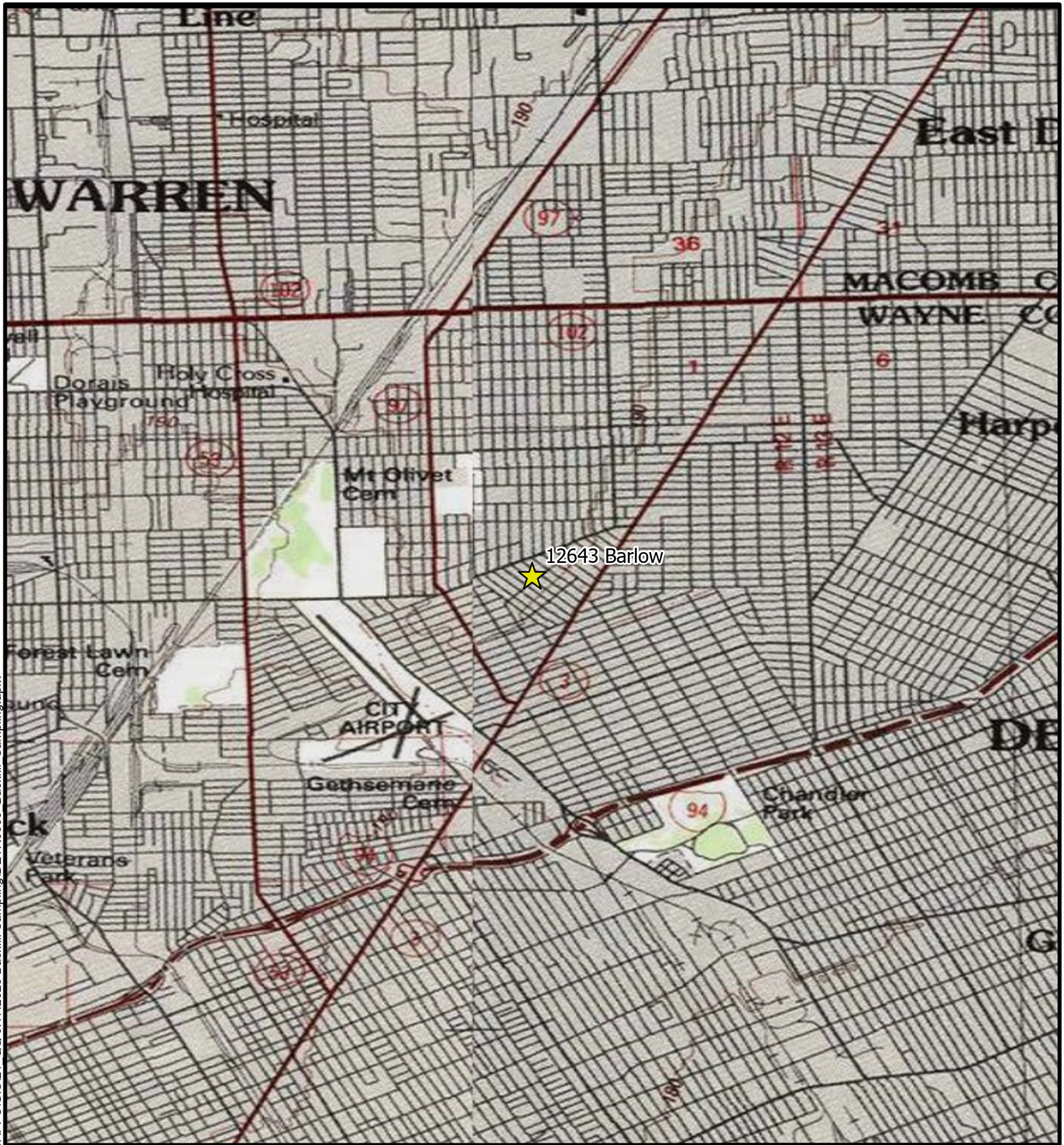
MSG has evaluated the analytical results of the fill material. Based upon the analytical results, we have determined that the material is contaminated above the state's Part 201 GRCC, as applicable.

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

FIGURES





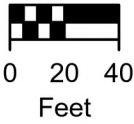
★ Site Location



FIGURE 1
SITE LOCATION

12643 Barlow, Detroit, MI

DATE 1/8/2026	DRAWN BY JWW	DESIGNED BY JWW	PROJECT NO. DETR0060
------------------	-----------------	--------------------	-------------------------



-  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

12643 Barlow, Detroit, MI

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

TABLES



Table 1
Soil Sample Analytical Detection Summary

Detroit Backfill Sampling
12643 Barlow, Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024			Inorganic Anions/Ions	Metals						Semivolatile Organic Compounds (SVOCs)						
			Chloride	Arsenic (B)	Barium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Mercury (B)	Zinc (B)	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Fluoranthene	Indeno(1,2,3-Cd)Pyrene	Pyrene
CAS Number			16887-00-6	7440-38-2	7440-39-3	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-66-6	50-32-8	205-99-2	191-24-2	206-44-0	193-39-5	129-00-0
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Statewide Default Background Levels			NC	5,800	75,000	18,000	32,000	21,000	130	47,000	NC	NC	NC	NC	NC	NC
Drinking Water Protection Criteria (DWPC)			5.00E+06	4,600	1.30E+06	30,000	5.80E+06	7.00E+05	1,700	2.40E+06	NLL	NLL	NLL	7.30E+05	NLL	4.80E+05
Groundwater Surface Water Interface Protection Criteria (GSI PC)			NC	4,600	4.40E+05 ^(G)	3,300	75,000 ^(G)	6.00E+06 ^(G)	50 ^(M,1,2)	1.60E+05	NLL	NLL	NLL	5,500	NLL	ID
Soil Volatilization to Indoor Air Inhalation (SVIIC)			NC	NLV	NLV	NC	NLV	NLV	48,000	NC	NLV	ID	NLV	1.00E+09	NLV	1.00E+09
Soil Volatilization to Indoor Air Pathway (SVIAP)			NC	NC	NC	NC	NC	NC	22 ^(M)	NC	NC	NC	NC	NC	NC	2.50E+07
Infinite Source Volatile Soil Inhalation Criteria (VSIC)			NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV	ID	NLV	7.40E+08	NLV	6.50E+08
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)			NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV	ID	NLV	7.40E+08	NLV	6.50E+08
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)			NC	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV	ID	NLV	7.40E+08	NLV	6.50E+08
Particulate Soil Inhalation Criteria (PSIC)			NC	7.20E+05	3.30E+08	2.60E+05	1.30E+08	1.00E+08	2.00E+07	NC	1.50E+06	ID	8.00E+08	9.30E+09	ID	6.70E+09
Direct Contact Criteria (DCC)			5.00E+05	7,600	3.70E+07	2.50E+06	2.00E+07	4.00E+05	1.60E+05	1.70E+08	2,000	20,000	2.50E+06	4.60E+07	20,000	2.90E+07
Soil Saturation Concentration Screening Levels (Csat)			NC	NA	NA	NC	NA	NA	NA	NC	NA	NA	NA	NA	NA	NA
Sample ID	Sample Depth (ft)	Sample Date														
12643 SB01	1.0 - 2.0	02/03/2026	<3,210	3,390	8,600	4,450	5,560	3,930	<13.6	22,500	<10.3	<12.6	<12.9	<8.09	<11.7	<8.41
12643 SB02	3.0 - 4.0	02/03/2026	<3,320	6,910	39,000	8,900	15,200	101,000	21.6	136,000	7.12	9.96	7.83	8.54	9.96	7.12
12643 SB03	5.0 - 6.0	02/03/2026	12,800	4,710	39,200	10,300	9,200	121,000	26.2	119,000	<11.7	<14.2	<14.6	<9.14	<13.3	<9.5

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

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

Table 2
TCLP Analytical Detection Summary

Detroit Backfill Sampling
12643 Barlow, Detroit, Michigan

40 C.F.R. § 261.24 Code of Federal Regulations Title 40 - Protection of Environment Chapter I - Environmental Protection Agency Subchapter I - Solid Wastes Part 261- Identification and Listing of Hazardous Waste Subpart C - Characteristics of Hazardous Waste <i>Units: mg/L</i>		TCLP Metals
Maximum Concentration of Contaminants for the Toxicity Characteristic		5.00
SAMPLE ID	SAMPLE DATE	
12643 SB03 (5-6')_20260203	2/3/2026	<0.00220

Notes:
Bold indicates concentration above method detection limits.
Exceeds Maximum Concentration of Contaminates for the Toxicity Characteristic

APPENDIX A

LIMITATIONS



LIMITATIONS

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

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

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

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

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

APPENDIX B

DAILY FIELD REPORT



**DAILY FIELD REPORT****Client:** City of Detroit Demolition Department**Project:** Sampling and Analysis of Fill Material**Report No.:** 1**Job No.:** DETR0060

Date: 02/3/2026	Day: Tuesday	Temp: N/A (AM) 30° (PM)
MSG Personnel: JDF, WRD, ZRG	Cloud Cover: 100% (AM) 100% (PM)	Precip.: N/A (AM) N/A (PM)
Personnel: MSG		
MSG Hours On-Site: ~ 0.75 hour		

Contractors Information

Contractor:

MSG

No. Men and Type:

3; Operator/ Geologist /Helper

Equipment Type:

Geoprobe 7822DT

Summary of Work Performed:

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

Field Notes:

- 1230 – MSG onsite (12643 Barlow)
- 1233 – Unloaded equipment and marked out boring locations
- 1238 – Began drilling SB01
- 1241 – Finished drilling SB01
- 1241 – Began drilling SB02
- 1243 – Finished drilling SB02
- 1243 – Began drilling SB03
- 1245 – Finished drilling SB03
- 1249 – MSG screens soils prior to sampling
- 1252 – Sampled 12643 SB01 (1-2')_20260203
- 1257 – Sampled 12643 SB02 (3-4')_20260203
- 1302 – Sampled 12643 SB03 (5-6')_20260203
- 1313– Packed up equipment
- 1318 – MSG off site

Supporting Documentation

Photograph Taken	Yes ☒	No ☐	Samples Collected	Yes ☒	No ☐	Boring/MW Logs	Yes ☒	No ☐
Photo Log Attached	Yes ☒	No ☐	COC Attached	Yes ☒	No ☐	Field Note Book Taken	Yes ☒	No ☐

Problem Identification and Corrective Measures

N/A

Resolved? Yes ☐ No ☐

APPENDIX C

INVESTIGATION PHOTOGRAPHS





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



Photo 2: View of drilling at 12643 SB01, facing north.



Photo 3: View of drilling 12643 SB02, facing north.



Photo 4: View of drilling at 12643 SB03, facing north.



Photo 5: Viewing 12643 SB01, SB02, and SB03 soil recovery, facing southwest.

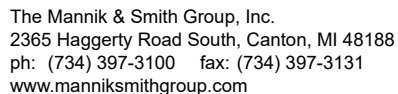


Photo 6: View of the Site post-drilling, facing southwest.

APPENDIX D

SOIL BORING LOGS





Sheet 1 of 1

PROJECT NAME Backfill Soil Sampling

PROJECT LOCATION 12643 Barlow, 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, SAND, Little Gravel, Trace Silt, Trace Clay, Moist		
					0	Collected Soil Sample 12643 SB01 (1-2') _20260203 at 1252
					0	
ES		42			0	
					0	
5				- 1" Seam of Dark Brown, Clayey SILT, Moist at 5' bgs	0	
					0	
				6.0		
				Terminated at 6.00 ft.		
10						

LEGEND:

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



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 SB02

Sheet 1 of 1

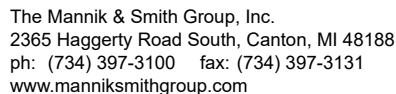
CLIENT City of Detroit
PROJECT NUMBER DETR0060_12643 Barlow
DATE STARTED 02-03-2026 **COMPLETED** 02-03-2026
DRILLING CONTRACTOR MSG
DRILLING METHOD Direct Push
EQUIPMENT Geoprobe 7822DT **Operator** JF

PROJECT NAME Backfill Soil Sampling
PROJECT LOCATION 12643 Barlow, 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, SAND, Little Gravel, Trace Silt, Trace Clay, Moist	0	
					0	
ES		33			0	Collected Soil Sample 12643 SB02 (3-4') _20260203 at 1257
					0	
5					0	
				- 1" Seam of Dark Brown, Clayey SILT, Moist at 5.25' bgs	0	
				6.0		
				Terminated at 6.00 ft.		
10						

LEGEND:

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



Sheet 1 of 1

PROJECT NAME Backfill Soil Sampling

PROJECT LOCATION 12643 Barlow, Detroit, MI

POSITION

SURFACE ELEVATION **FINAL DEPTH** 6.0 ft

LOGGED BY WRD CHECKED BY PDH

REMARKS _____

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 12, 2026

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

Re: **12643 Barlow**

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

Work Order: **HN2601568**

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: 12643 Barlow

Work Order: HN2601568
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: HN2601568

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

Organics

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

Run ID: 3862247

Parent Sample HN2601568-001: QC-2441302-005 and -006: The MS/MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): 1,1,2,2-tetrachloroethane

Parent Sample HN2601568-001: QC-2441302-005 and -006: The MS/MSD recoveries were above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary. see qc report

EPA 8270E-FULL HN-3546-S

Run ID: 3868930

Parent Sample HN2601568-001: The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: 2,4-Dimethylphenol.

Parent Sample HN2601568-001: The MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): 2,4-Dimethylphenol.

Parent Sample HN2601568-001: The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: 2,4-Dimethylphenol.

Run ID: 3874926

Parent Sample HN2601568-002: The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: Benzaldehyde.

Parent Sample HN2601568-002: The MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): Benzaldehyde.

Metals

EPA 6020B-3050B-S

Run ID: 3869256

Samples HN2601568-001 through -003: The reporting limits are elevated for Cd, Se and Ag due to the dilutions needed for high concentrations of non-target analytes.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

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



CLIENT ID: 12643 SB01 (1-2')_20260203	Lab ID: HN2601568-001
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	3.39		3.12	mg/kg	EPA 6020B
Barium	8.60		3.12	mg/kg	EPA 6020B
Chromium	4.45		3.12	mg/kg	EPA 6020B
Copper	5.56		3.12	mg/kg	EPA 6020B
Lead	3.93		3.12	mg/kg	EPA 6020B
Percent Moisture	3.4		0.1	%	EPA 3550C
Zinc	22.5		6.25	mg/kg	EPA 6020B

CLIENT ID: 12643 SB02 (3-4')_20260203	Lab ID: HN2601568-002
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	6.91		2.94	mg/kg	EPA 6020B
Barium	39.0		2.94	mg/kg	EPA 6020B
Benzo(a)pyrene	7.12		7.12	µg/kg	EPA 8270E
Benzo(b)fluoranthene	9.96		7.12	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	7.83		7.12	µg/kg	EPA 8270E
Chromium	8.90		2.94	mg/kg	EPA 6020B
Copper	15.2		2.94	mg/kg	EPA 6020B
Fluoranthene	8.54		7.12	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	9.96		7.12	µg/kg	EPA 8270E
Lead	101	*	2.94	mg/kg	EPA 6020B
Mercury	0.0216		0.0200	mg/kg	EPA 7471B
Percent Moisture	7.7		0.1	%	EPA 3550C
Pyrene	7.12		7.12	µg/kg	EPA 8270E
Zinc	136		5.87	mg/kg	EPA 6020B

CLIENT ID: 12643 SB03 (5-6')_20260203	Lab ID: HN2601568-003
--	------------------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	4.71		2.94	mg/kg	EPA 6020B
Barium	39.2		2.94	mg/kg	EPA 6020B
Chloride	12.8		11.7	mg/kg	EPA 9056A
Chromium	10.3		2.94	mg/kg	EPA 6020B
Copper	9.20		2.94	mg/kg	EPA 6020B
Lead	121	*	2.94	mg/kg	EPA 6020B
Mercury	0.0262		0.0200	mg/kg	EPA 7471B
Percent Moisture	14.2		0.1	%	EPA 3550C
Zinc	119		5.88	mg/kg	EPA 6020B

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Workorder: HN2601568

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2601568-001	12643 SB01 (1-2')_20260203	SOIL/SOLID	02/03/26 12:52	02/04/26 08:21
HN2601568-002	12643 SB02 (3-4')_20260203	SOIL/SOLID	02/03/26 12:57	02/04/26 08:21
HN2601568-003	12643 SB03 (5-6')_20260203	SOIL/SOLID	02/03/26 13:02	02/04/26 08:21

Chain of Custody Form

Page ____ of ____



Telephone : +1 616.399.6070

ALS Project Manager:							Work Order #:											
Project Information							Parameter/Method Request for Analysis											
Project Name		12643 Barlow					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)											
Send Report To		Ryan Montri and Olivia Mitchell					D Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)											
Address		2365 South Haggerty Road					E Chlorides (U.S. EPA Method 9056A)											
							F Pesticides (U.S. EPA Method 8081B (or Method 8081))											
City/State/Zip		Canton, Mi 48188					G Herbicides (U.S. EPA Method 8151A (or Method 8151))											
Phone		734-397-3100					H											
Fax							I											
e-Mail Address		rmontri@manniksmithgroup.com					J											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	
1	12643 SB01 (1-2')_20260203	2/3/26	1252	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
2	12643 SB02 (3-4')_20260203	I	1257	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
3	12643 SB03 (5-6')_20260203	I	1302	Soil	7	3	✓	✓	✓	✓	✓	✓	✓					
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:				Results Due Date:	
WILEY DAVENPORT				☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour					
Relinquished by:		Date:	Time:	Received by:		Notes:			
Wiley Davenport		2/3/26	1554	Coleman		Rec'd 2/4/26 0600 Q 201			
Relinquished by:		Date:	Time:	Received by (Laboratory):		Cooler Temp.			
Coleman		2/3/26	1700	QS		126 3.1°C			
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):		QC Package: (Check Box Below)			
DFS		2/4/26	0815			☐ Level II: Standard QC ☐ TRRP-Checklist			
						☐ Level III: Std QC + Raw Data ☐ TRRP Level IV			
						☐ Level IV: SW846 CLP-Like			
						Other:			

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

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 128th 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):

1R6

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 CERTIFICATIONS¹

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

1 – Scope available upon request

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow

Work Order: HN2601568

Sample Name: 12643 SB01 (1-2')_20260203
Laboratory Code: HN2601568-001
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	2440539		3859151	Nicole Maleski
EPA 6020B	EPA 3050B	001-AC	2444361	Weston Kotecki	3869256	Stephanie Pierson
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	Madison VandenBer
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	Sage Hansen

Sample Name: 12643 SB02 (3-4')_20260203
Laboratory Code: HN2601568-002
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	2444361	Weston Kotecki	3869256	Stephanie Pierson
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	2448090	Rachel Plantinga	3874926	Sam Marcotte
EPA 9056A	EPA 9056A	002-AC	2440581	Sage Hansen	3861166	Sage Hansen

Sample Name: 12643 SB03 (5-6')_20260203
Laboratory Code: HN2601568-003
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: 12643 Barlow

Work Order: HN2601568

Sample Name: 12643 SB03 (5-6')_20260203
Laboratory Code: HN2601568-003
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	2444361	Weston Kotecki	3869256	Stephanie Pierson
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: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<1.54	U	µg/kg	8.37	1	02/07/26 17:54	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<2.75	U	µg/kg	8.37	1	02/07/26 17:54	02/04/26 16:31
2,4-D	EPA 8151A	<4.47	U	µg/kg	16.7	1	02/07/26 17:54	02/04/26 16:31
Surr: DCAA	EPA 8151A	96.0		%REC	10-116	1	02/07/26 17:54	02/04/26 16:31
General Chemistry Parameters								
Percent Moisture	EPA 3550C	3.4		%	0.1	1	02/04/26 10:35	NA
Chloride	EPA 9056A	<3.21	U	mg/kg	10.3	1	02/05/26 05:38	02/04/26 17:04
Metals								
Arsenic	EPA 6020B	3.39		mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Barium	EPA 6020B	8.60		mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Cadmium	EPA 6020B	<0.187	U	mg/kg	1.25	10	02/09/26 20:38	02/06/26 14:05
Chromium	EPA 6020B	4.45		mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Copper	EPA 6020B	5.56		mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Lead	EPA 6020B	3.93		mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Selenium	EPA 6020B	<2.87	U	mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Silver	EPA 6020B	<0.412	U	mg/kg	3.12	10	02/09/26 20:38	02/06/26 14:05
Zinc	EPA 6020B	22.5		mg/kg	6.25	10	02/09/26 20:38	02/06/26 14:05
Mercury	EPA 7471B	<0.0136	U	mg/kg	0.0200	1	02/06/26 10:49	02/05/26 13:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<6.61	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
4,4'-DDE	EPA 8081B	<6.82	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
4,4'-DDT	EPA 8081B	<6.88	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Aldrin	EPA 8081B	<6.72	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
alpha-BHC	EPA 8081B	<6.81	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
beta-BHC	EPA 8081B	<6.79	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<10.3	U	µg/kg	25.9	1	02/10/26 19:56	02/04/26 09:53
cis-Chlordane	EPA 8081B	<6.91	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
delta-BHC	EPA 8081B	<6.77	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Dieldrin	EPA 8081B	<7.24	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<6.95	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Endosulfan II	EPA 8081B	<6.85	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<6.36	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Endrin	EPA 8081B	<8.37	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<6.56	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Endrin ketone	EPA 8081B	<6.30	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<6.79	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Heptachlor	EPA 8081B	<6.68	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<6.84	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Methoxychlor	EPA 8081B	<6.92	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
Toxaphene	EPA 8081B	<11.2	U	µg/kg	62.1	1	02/10/26 19:56	02/04/26 09:53
trans-Chlordane	EPA 8081B	<6.87	U	µg/kg	10.3	1	02/10/26 19:56	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	90.6		%REC	53-151	1	02/10/26 19:56	02/04/26 09:53
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	98.6		%REC	67-127	1	02/10/26 19:56	02/04/26 09:53

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<23.7	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1221	EPA 8082A	<23.7	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1232	EPA 8082A	<23.7	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1242	EPA 8082A	<23.7	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1248	EPA 8082A	<23.7	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1254	EPA 8082A	<19.3	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1260	EPA 8082A	<19.3	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1262	EPA 8082A	<19.3	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Aroclor 1268	EPA 8082A	<19.3	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
Total PCB	EPA 8082A	<19.3	U	µg/kg	69.0	1	02/04/26 17:40	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	99.6		%REC	54-146	1	02/04/26 17:40	02/04/26 13:25
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	86.4		%REC	58-140	1	02/04/26 17:40	02/04/26 13:25

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<13.7	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<19.4	U	µg/kg	842	1	02/07/26 15:11	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<60.4	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
1-Methylnaphthalene	EPA 8270E	<12.1	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<19.7	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,3,4,6-Tetrachlorophenol	EPA 8270E	<61.7	U	µg/kg	169	1	02/07/26 15:11	02/05/26 09:09
2,4,5-Trichlorophenol	EPA 8270E	<49.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,4,6-Trichlorophenol	EPA 8270E	<22.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,4-Dichlorophenol	EPA 8270E	<45.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,4-Dimethylphenol	EPA 8270E	<43.3	SU	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,4-Dinitrophenol	EPA 8270E	<616	U	µg/kg	842	1	02/07/26 15:11	02/05/26 09:09
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<54.7	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<21.5	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2-Chloronaphthalene	EPA 8270E	<11.8	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
2-Chlorophenol	EPA 8270E	<55.1	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<70.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2-Methylnaphthalene	EPA 8270E	<8.57	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
2-Methylphenol (o-Cresol)	EPA 8270E	<22.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2-Nitroaniline	EPA 8270E	<46.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
2-Nitrophenol	EPA 8270E	<24.0	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
3&4-Methylphenol	EPA 8270E	<45.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
3,3'-Dichlorobenzidine	EPA 8270E	<39.3	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
3-Nitroaniline	EPA 8270E	<48.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<46.2	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
4-Chloro-3-methylphenol	EPA 8270E	<24.0	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
4-Chloroaniline	EPA 8270E	<42.8	U	µg/kg	169	1	02/07/26 15:11	02/05/26 09:09
4-Chlorophenyl phenylether	EPA 8270E	<23.3	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
4-Nitroaniline	EPA 8270E	<131	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
4-Nitrophenol	EPA 8270E	<197	U	µg/kg	842	1	02/07/26 15:11	02/05/26 09:09
Acenaphthene	EPA 8270E	<12.2	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<14.6	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Acetophenone	EPA 8270E	<13.2	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Anthracene	EPA 8270E	<11.9	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Atrazine	EPA 8270E	<49.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Benzaldehyde	EPA 8270E	<129	U	µg/kg	169	1	02/07/26 15:11	02/05/26 09:09
Benzo(a)anthracene	EPA 8270E	<14.6	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Benzo(a)pyrene	EPA 8270E	<10.3	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Benzo(b)fluoranthene	EPA 8270E	<12.6	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Benzo(g,h,i)perylene	EPA 8270E	<12.9	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Benzo(k)fluoranthene	EPA 8270E	<12.8	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
bis(2-Chloroethoxy) methane	EPA 8270E	<53.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
bis(2-Chloroethyl) ether	EPA 8270E	<23.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Butyl benzyl phthalate	EPA 8270E	<105	U	µg/kg	169	1	02/07/26 15:11	02/05/26 09:09
Caprolactam	EPA 8270E	<76.0	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Carbazole	EPA 8270E	<24.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Chrysene	EPA 8270E	<13.6	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<69.7	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Dibenz(a,h) anthracene	EPA 8270E	<9.10	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Dibenzofuran	EPA 8270E	<12.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Diethyl phthalate	EPA 8270E	<28.7	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Dimethyl phthalate	EPA 8270E	<16.4	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Fluoranthene	EPA 8270E	<8.09	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Fluorene	EPA 8270E	<12.2	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Hexachlorobenzene	EPA 8270E	<24.5	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Hexachlorobutadiene	EPA 8270E	<19.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Hexachlorocyclopentadiene	EPA 8270E	<79.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Hexachloroethane	EPA 8270E	<34.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Indeno(1,2,3-cd) pyrene	EPA 8270E	<11.7	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Isophorone	EPA 8270E	<16.5	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
Methylphenol, Total	EPA 8270E	<22.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<10.8	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Nitrobenzene	EPA 8270E	<28.3	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
n-Nitrosodi-n-propylamine	EPA 8270E	<13.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
N-Nitrosodiphenylamine	EPA 8270E	<48.8	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Pentachlorophenol	EPA 8270E	<66.9	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Phenanthrene	EPA 8270E	<7.84	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Phenol	EPA 8270E	<42.3	U	µg/kg	83.4	1	02/07/26 15:11	02/05/26 09:09
Pyrene	EPA 8270E	<8.41	U	µg/kg	16.9	1	02/07/26 15:11	02/05/26 09:09
Pyridine	EPA 8270E	<166	U	µg/kg	421	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	82.3		%REC	48-94	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	90.5		%REC	50-103	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	89.4		%REC	43-105	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	84.7		%REC	55-111	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	95.5		%REC	47-100	1	02/07/26 15:11	02/05/26 09:09
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	90.5		%REC	49-110	1	02/07/26 15:11	02/05/26 09:09

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<30.2	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<29.4	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<42.2	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<28.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<24.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<21.6	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<80.0	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<27.9	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<75.6	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<48.9	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<61.4	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<39.2	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<25.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<39.2	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<49.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<47.1	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<46.0	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<37.2	U	µg/kg	133	1	02/04/26 18:58	02/04/26 14:39
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<54.2	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<159	SU	µg/kg	444	1	02/04/26 18:58	02/04/26 14:39
2-Hexanone	EPA 8260D	<33.1	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<62.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Acetone	EPA 8260D	<198	SU	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
Benzene	EPA 8260D	<32.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Bromochloromethane	EPA 8260D	<33.9	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<37.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Bromoform	EPA 8260D	<28.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Carbon disulfide	EPA 8260D	<34.5	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<26.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Chlorobenzene	EPA 8260D	<22.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<37.4	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<187	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
Chloroform	EPA 8260D	<24.4	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<42.9	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<50.2	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Cyclohexane	EPA 8260D	<51.0	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<80.7	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
Ethylbenzene	EPA 8260D	<47.3	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<42.1	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
m+p-Xylene	EPA 8260D	<88.9	U	µg/kg	133	1	02/04/26 18:58	02/04/26 14:39
Methyl acetate	EPA 8260D	<79.8	SU	µg/kg	556	1	02/04/26 18:58	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<128	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:52
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB01 (1-2')_20260203

Lab ID: HN2601568-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<182	U	µg/kg	222	1	02/04/26 18:58	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<48.6	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<25.4	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<177	U	µg/kg	556	1	02/04/26 18:58	02/04/26 14:39
o-Xylene	EPA 8260D	<25.8	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Styrene	EPA 8260D	<26.4	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<40.2	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Toluene	EPA 8260D	<55.0	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Total Xylene	EPA 8260D	<25.8	U	µg/kg	200	1	02/04/26 18:58	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<55.0	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<37.2	U	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<29.9	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<34.1	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<44.3	SU	µg/kg	66.7	1	02/04/26 18:58	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	02/04/26 18:58	02/04/26 14:39
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	100		%REC	80-120	1	02/04/26 18:58	02/04/26 14:39
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	98.8		%REC	72-120	1	02/04/26 18:58	02/04/26 14:39
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	02/04/26 18:58	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.40	U	µg/kg	13.1	1	02/07/26 18:08	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<4.28	U	µg/kg	13.1	1	02/07/26 18:08	02/04/26 16:31
2,4-D	EPA 8151A	<6.97	U	µg/kg	26.1	1	02/07/26 18:08	02/04/26 16:31
Surr: DCAA	EPA 8151A	106		%REC	10-116	1	02/07/26 18:08	02/04/26 16:31
General Chemistry Parameters								
Percent Moisture	EPA 3550C	7.7		%	0.1	1	02/04/26 10:35	NA
Chloride	EPA 9056A	<3.32	U	mg/kg	10.7	1	02/05/26 06:02	02/04/26 17:04
Metals								
Arsenic	EPA 6020B	6.91		mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Barium	EPA 6020B	39.0		mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Cadmium	EPA 6020B	<0.176	U	mg/kg	1.17	10	02/09/26 20:43	02/06/26 14:05
Chromium	EPA 6020B	8.90		mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Copper	EPA 6020B	15.2		mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Lead	EPA 6020B	101	*	mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Selenium	EPA 6020B	<2.70	U	mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Silver	EPA 6020B	<0.387	U	mg/kg	2.94	10	02/09/26 20:43	02/06/26 14:05
Zinc	EPA 6020B	136		mg/kg	5.87	10	02/09/26 20:43	02/06/26 14:05
Mercury	EPA 7471B	0.0216		mg/kg	0.0200	1	02/06/26 10:50	02/05/26 13:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<16.5	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
4,4'-DDE	EPA 8081B	<17.0	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
4,4'-DDT	EPA 8081B	<17.1	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Aldrin	EPA 8081B	<16.7	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
alpha-BHC	EPA 8081B	<17.0	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
beta-BHC	EPA 8081B	<16.9	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<25.5	U	µg/kg	64.4	1	02/10/26 21:52	02/04/26 09:53
cis-Chlordane	EPA 8081B	<17.2	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
delta-BHC	EPA 8081B	<16.9	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Dieldrin	EPA 8081B	<18.0	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<17.3	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Endosulfan II	EPA 8081B	<17.1	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<15.8	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Endrin	EPA 8081B	<20.8	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<16.3	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Endrin ketone	EPA 8081B	<15.7	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<16.9	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Heptachlor	EPA 8081B	<16.6	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<17.0	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Methoxychlor	EPA 8081B	<17.2	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
Toxaphene	EPA 8081B	<27.8	U	µg/kg	155	1	02/10/26 21:52	02/04/26 09:53
trans-Chlordane	EPA 8081B	<17.1	U	µg/kg	25.8	1	02/10/26 21:52	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	91.3		%REC	53-151	1	02/10/26 21:52	02/04/26 09:53
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	103		%REC	67-127	1	02/10/26 21:52	02/04/26 09:53

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<58.9	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1221	EPA 8082A	<58.9	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1232	EPA 8082A	<58.9	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1242	EPA 8082A	<58.9	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1248	EPA 8082A	<58.9	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1254	EPA 8082A	<48.0	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1260	EPA 8082A	<48.0	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1262	EPA 8082A	<48.0	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Aroclor 1268	EPA 8082A	<48.0	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
Total PCB	EPA 8082A	<48.0	U	µg/kg	172	1	02/04/26 19:14	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	120		%REC	54-146	1	02/04/26 19:14	02/04/26 13:25
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	93.6		%REC	58-140	1	02/04/26 19:14	02/04/26 13:25

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<5.77	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<8.20	U	µg/kg	355	1	02/11/26 13:42	02/10/26 10:18

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<25.5	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
1-Methylnaphthalene	EPA 8270E	<5.12	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<8.34	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,3,4,6-Tetrachlorophenol	EPA 8270E	<26.1	U	µg/kg	71.2	1	02/11/26 13:42	02/10/26 10:18
2,4,5-Trichlorophenol	EPA 8270E	<21.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,4,6-Trichlorophenol	EPA 8270E	<9.47	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,4-Dichlorophenol	EPA 8270E	<19.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,4-Dimethylphenol	EPA 8270E	<18.3	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,4-Dinitrophenol	EPA 8270E	<260	U	µg/kg	355	1	02/11/26 13:42	02/10/26 10:18
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<23.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<9.08	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2-Chloronaphthalene	EPA 8270E	<4.97	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
2-Chlorophenol	EPA 8270E	<23.3	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<29.7	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2-Methylnaphthalene	EPA 8270E	<3.62	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
2-Methylphenol (o-Cresol)	EPA 8270E	<9.62	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2-Nitroaniline	EPA 8270E	<19.8	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
2-Nitrophenol	EPA 8270E	<10.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
3&4-Methylphenol	EPA 8270E	<19.4	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
3,3'-Dichlorobenzidine	EPA 8270E	<16.6	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
3-Nitroaniline	EPA 8270E	<20.7	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<19.5	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
4-Chloro-3-methylphenol	EPA 8270E	<10.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
4-Chloroaniline	EPA 8270E	<18.1	U	µg/kg	71.2	1	02/11/26 13:42	02/10/26 10:18
4-Chlorophenyl phenylether	EPA 8270E	<9.83	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
4-Nitroaniline	EPA 8270E	<55.2	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
4-Nitrophenol	EPA 8270E	<83.3	U	µg/kg	355	1	02/11/26 13:42	02/10/26 10:18
Acenaphthene	EPA 8270E	<5.14	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<6.17	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Acetophenone	EPA 8270E	<5.57	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Anthracene	EPA 8270E	<5.02	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Atrazine	EPA 8270E	<20.8	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Benzaldehyde	EPA 8270E	<54.6	SU	µg/kg	71.2	1	02/11/26 13:42	02/10/26 10:18
Benzo(a)anthracene	EPA 8270E	<6.15	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Benzo(a)pyrene	EPA 8270E	7.12		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Benzo(b)fluoranthene	EPA 8270E	9.96		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Benzo(g,h,i)perylene	EPA 8270E	7.83		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Benzo(k)fluoranthene	EPA 8270E	<5.39	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
bis(2-Chloroethoxy) methane	EPA 8270E	<22.5	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
bis(2-Chloroethyl) ether	EPA 8270E	<10.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Butyl benzyl phthalate	EPA 8270E	<44.5	U	µg/kg	71.2	1	02/11/26 13:42	02/10/26 10:18
Caprolactam	EPA 8270E	<32.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Carbazole	EPA 8270E	<10.5	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Chrysene	EPA 8270E	<5.75	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<29.4	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Dibenz(a,h) anthracene	EPA 8270E	<3.84	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Dibenzofuran	EPA 8270E	<5.23	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Diethyl phthalate	EPA 8270E	<12.1	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Dimethyl phthalate	EPA 8270E	<6.94	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Fluoranthene	EPA 8270E	8.54		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Fluorene	EPA 8270E	<5.17	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Hexachlorobenzene	EPA 8270E	<10.4	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Hexachlorobutadiene	EPA 8270E	<8.38	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Hexachlorocyclopentadiene	EPA 8270E	<33.7	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Hexachloroethane	EPA 8270E	<14.7	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Indeno(1,2,3-cd) pyrene	EPA 8270E	9.96		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Isophorone	EPA 8270E	<6.95	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
Methylphenol, Total	EPA 8270E	<9.62	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<4.55	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Nitrobenzene	EPA 8270E	<12.0	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
n-Nitrosodi-n-propylamine	EPA 8270E	<5.87	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
N-Nitrosodiphenylamine	EPA 8270E	<20.6	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Pentachlorophenol	EPA 8270E	<28.3	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Phenanthrene	EPA 8270E	<3.31	U	µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Phenol	EPA 8270E	<17.9	U	µg/kg	35.2	1	02/11/26 13:42	02/10/26 10:18
Pyrene	EPA 8270E	7.12		µg/kg	7.12	1	02/11/26 13:42	02/10/26 10:18
Pyridine	EPA 8270E	<70.0	U	µg/kg	178	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	68.1		%REC	48-94	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	62.1		%REC	50-103	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	64.3		%REC	43-105	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	65.5		%REC	55-111	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	67.4		%REC	47-100	1	02/11/26 13:42	02/10/26 10:18
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	61.9		%REC	49-110	1	02/11/26 13:42	02/10/26 10:18

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<87.9	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<85.5	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<123	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<82.3	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<70.7	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<62.8	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<232	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<81.1	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<220	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<142	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<178	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<114	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<73.5	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<114	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<143	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<137	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<134	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<108	U	µg/kg	387	1	02/04/26 19:18	02/04/26 14:39
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<157	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<461	U	µg/kg	1290	1	02/04/26 19:18	02/04/26 14:39
2-Hexanone	EPA 8260D	<96.1	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<181	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Acetone	EPA 8260D	<575	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
Benzene	EPA 8260D	<93.8	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Bromochloromethane	EPA 8260D	<98.6	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<108	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Bromoform	EPA 8260D	<81.6	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Carbon disulfide	EPA 8260D	<100	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<75.8	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Chlorobenzene	EPA 8260D	<64.3	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<109	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<543	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
Chloroform	EPA 8260D	<71.0	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<125	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<146	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Cyclohexane	EPA 8260D	<148	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<234	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
Ethylbenzene	EPA 8260D	<137	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<122	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
m+p-Xylene	EPA 8260D	<258	U	µg/kg	387	1	02/04/26 19:18	02/04/26 14:39
Methyl acetate	EPA 8260D	<232	U	µg/kg	1610	1	02/04/26 19:18	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<371	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 12:57
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB02 (3-4')_20260203

Lab ID: HN2601568-002

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<530	U	µg/kg	646	1	02/04/26 19:18	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<141	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<73.9	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<514	U	µg/kg	1610	1	02/04/26 19:18	02/04/26 14:39
o-Xylene	EPA 8260D	<74.9	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Styrene	EPA 8260D	<76.8	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<117	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Toluene	EPA 8260D	<160	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Total Xylene	EPA 8260D	<74.9	U	µg/kg	581	1	02/04/26 19:18	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<160	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<108	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<86.9	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<99.1	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<129	U	µg/kg	194	1	02/04/26 19:18	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	100.0		%REC	80-120	1	02/04/26 19:18	02/04/26 14:39
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	02/04/26 19:18	02/04/26 14:39
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	96.6		%REC	72-120	1	02/04/26 19:18	02/04/26 14:39
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	99.3		%REC	80-120	1	02/04/26 19:18	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD								
2,4,5-T	EPA 8151A	<2.67	U	µg/kg	14.5	1	02/07/26 18:21	02/04/26 16:31
2,4,5-TP (Silvex)	EPA 8151A	<4.76	U	µg/kg	14.5	1	02/07/26 18:21	02/04/26 16:31
2,4-D	EPA 8151A	<7.74	U	µg/kg	29.0	1	02/07/26 18:21	02/04/26 16:31
Surr: DCAA	EPA 8151A	98.0		%REC	10-116	1	02/07/26 18:21	02/04/26 16:31
General Chemistry Parameters								
Percent Moisture	EPA 3550C	14.2		%	0.1	1	02/04/26 10:35	NA
Chloride	EPA 9056A	12.8		mg/kg	11.7	1	02/05/26 06:11	02/04/26 17:04
Metals								
Arsenic	EPA 6020B	4.71		mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Barium	EPA 6020B	39.2		mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Cadmium	EPA 6020B	<0.176	U	mg/kg	1.18	10	02/09/26 20:45	02/06/26 14:05
Chromium	EPA 6020B	10.3		mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Copper	EPA 6020B	9.20		mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Lead	EPA 6020B	121	*	mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Selenium	EPA 6020B	<2.70	U	mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Silver	EPA 6020B	<0.388	U	mg/kg	2.94	10	02/09/26 20:45	02/06/26 14:05
Zinc	EPA 6020B	119		mg/kg	5.88	10	02/09/26 20:45	02/06/26 14:05
Mercury	EPA 7471B	0.0262		mg/kg	0.0200	1	02/06/26 10:52	02/05/26 13:31
Organochlorine Pesticides by GC/ECD								
4,4'-DDD	EPA 8081B	<17.9	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
4,4'-DDE	EPA 8081B	<18.4	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
4,4'-DDT	EPA 8081B	<18.6	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Aldrin	EPA 8081B	<18.2	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
alpha-BHC	EPA 8081B	<18.4	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
beta-BHC	EPA 8081B	<18.3	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Chlordane, Technical	EPA 8081B	<27.7	U	µg/kg	69.8	1	02/10/26 22:03	02/04/26 09:53
cis-Chlordane	EPA 8081B	<18.7	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
delta-BHC	EPA 8081B	<18.3	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Dieldrin	EPA 8081B	<19.5	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<18.8	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Endosulfan II	EPA 8081B	<18.5	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Endosulfan sulfate	EPA 8081B	<17.2	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Endrin	EPA 8081B	<22.6	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Endrin aldehyde	EPA 8081B	<17.7	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Endrin ketone	EPA 8081B	<17.0	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
gamma-BHC (Lindane)	EPA 8081B	<18.3	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Heptachlor	EPA 8081B	<18.0	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Heptachlor epoxide	EPA 8081B	<18.5	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Methoxychlor	EPA 8081B	<18.7	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
Toxaphene	EPA 8081B	<30.2	U	µg/kg	168	1	02/10/26 22:03	02/04/26 09:53
trans-Chlordane	EPA 8081B	<18.6	U	µg/kg	27.9	1	02/10/26 22:03	02/04/26 09:53
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	96.7		%REC	53-151	1	02/10/26 22:03	02/04/26 09:53
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	101		%REC	67-127	1	02/10/26 22:03	02/04/26 09:53

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<63.8	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1221	EPA 8082A	<63.8	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1232	EPA 8082A	<63.8	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1242	EPA 8082A	<63.8	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1248	EPA 8082A	<63.8	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1254	EPA 8082A	<52.0	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1260	EPA 8082A	<52.0	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1262	EPA 8082A	<52.0	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Aroclor 1268	EPA 8082A	<52.0	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
Total PCB	EPA 8082A	<52.0	U	µg/kg	186	1	02/04/26 19:26	02/04/26 13:25
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	120		%REC	54-146	1	02/04/26 19:26	02/04/26 13:25
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	94.7		%REC	58-140	1	02/04/26 19:26	02/04/26 13:25

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<15.5	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<22.0	U	µg/kg	951	1	02/07/26 15:38	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<68.3	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
1-Methylnaphthalene	EPA 8270E	<13.7	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	EPA 8270E	<22.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,3,4,6-Tetrachlorophenol	EPA 8270E	<69.7	U	µg/kg	190	1	02/07/26 15:38	02/05/26 09:09
2,4,5-Trichlorophenol	EPA 8270E	<56.4	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,4,6-Trichlorophenol	EPA 8270E	<25.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,4-Dichlorophenol	EPA 8270E	<51.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,4-Dimethylphenol	EPA 8270E	<49.0	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,4-Dinitrophenol	EPA 8270E	<696	U	µg/kg	951	1	02/07/26 15:38	02/05/26 09:09
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<61.9	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<24.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2-Chloronaphthalene	EPA 8270E	<13.3	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
2-Chlorophenol	EPA 8270E	<62.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<79.5	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2-Methylnaphthalene	EPA 8270E	<9.69	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
2-Methylphenol (o-Cresol)	EPA 8270E	<25.7	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2-Nitroaniline	EPA 8270E	<52.9	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
2-Nitrophenol	EPA 8270E	<27.1	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
3&4-Methylphenol	EPA 8270E	<51.9	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
3,3'-Dichlorobenzidine	EPA 8270E	<44.5	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
3-Nitroaniline	EPA 8270E	<55.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<52.2	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
4-Chloro-3-methylphenol	EPA 8270E	<27.1	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
4-Chloroaniline	EPA 8270E	<48.4	U	µg/kg	190	1	02/07/26 15:38	02/05/26 09:09
4-Chlorophenyl phenylether	EPA 8270E	<26.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
4-Nitroaniline	EPA 8270E	<148	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
4-Nitrophenol	EPA 8270E	<223	U	µg/kg	951	1	02/07/26 15:38	02/05/26 09:09
Acenaphthene	EPA 8270E	<13.8	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthylene	EPA 8270E	<16.5	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Acetophenone	EPA 8270E	<14.9	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Anthracene	EPA 8270E	<13.4	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Atrazine	EPA 8270E	<55.8	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Benzaldehyde	EPA 8270E	<146	U	µg/kg	190	1	02/07/26 15:38	02/05/26 09:09
Benzo(a)anthracene	EPA 8270E	<16.5	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Benzo(a)pyrene	EPA 8270E	<11.7	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Benzo(b)fluoranthene	EPA 8270E	<14.2	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Benzo(g,h,i)perylene	EPA 8270E	<14.6	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Benzo(k)fluoranthene	EPA 8270E	<14.4	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
bis(2-Chloroethoxy) methane	EPA 8270E	<60.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
bis(2-Chloroethyl) ether	EPA 8270E	<27.0	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Butyl benzyl phthalate	EPA 8270E	<119	U	µg/kg	190	1	02/07/26 15:38	02/05/26 09:09
Caprolactam	EPA 8270E	<85.9	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Carbazole	EPA 8270E	<28.1	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Chrysene	EPA 8270E	<15.4	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	<78.8	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Dibenz(a,h) anthracene	EPA 8270E	<10.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Dibenzofuran	EPA 8270E	<14.0	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Diethyl phthalate	EPA 8270E	<32.4	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Dimethyl phthalate	EPA 8270E	<18.6	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Fluoranthene	EPA 8270E	<9.14	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Fluorene	EPA 8270E	<13.8	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Hexachlorobenzene	EPA 8270E	<27.7	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Hexachlorobutadiene	EPA 8270E	<22.4	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Hexachlorocyclopentadiene	EPA 8270E	<90.3	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Hexachloroethane	EPA 8270E	<39.4	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Indeno(1,2,3-cd) pyrene	EPA 8270E	<13.3	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Isophorone	EPA 8270E	<18.6	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
Methylphenol, Total	EPA 8270E	<25.7	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Naphthalene	EPA 8270E	<12.2	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Nitrobenzene	EPA 8270E	<32.0	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
n-Nitrosodi-n-propylamine	EPA 8270E	<15.7	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
N-Nitrosodiphenylamine	EPA 8270E	<55.1	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Pentachlorophenol	EPA 8270E	<75.7	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Phenanthrene	EPA 8270E	<8.86	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Phenol	EPA 8270E	<47.8	U	µg/kg	94.3	1	02/07/26 15:38	02/05/26 09:09
Pyrene	EPA 8270E	<9.50	U	µg/kg	19.0	1	02/07/26 15:38	02/05/26 09:09
Pyridine	EPA 8270E	<187	U	µg/kg	476	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: 2,4,6-Tribromophenol</i>	<i>EPA 8270E</i>	78.0		%REC	48-94	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: 2-Fluorobiphenyl</i>	<i>EPA 8270E</i>	82.7		%REC	50-103	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: 2-Fluorophenol</i>	<i>EPA 8270E</i>	89.1		%REC	43-105	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: 4-Terphenyl-d14</i>	<i>EPA 8270E</i>	76.5		%REC	55-111	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: Nitrobenzene-d5</i>	<i>EPA 8270E</i>	86.7		%REC	47-100	1	02/07/26 15:38	02/05/26 09:09
<i>Surr: Phenol-d6</i>	<i>EPA 8270E</i>	87.8		%REC	49-110	1	02/07/26 15:38	02/05/26 09:09

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<28.5	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,1,2,2-Tetrachloroethane	EPA 8260D	<27.7	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<39.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,1,2-Trichloroethane	EPA 8260D	<26.7	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,1-Dichloroethane	EPA 8260D	<22.9	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,1-Dichloroethylene	EPA 8260D	<20.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,2,3-Trichlorobenzene	EPA 8260D	<75.3	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
1,2,3-Trichloropropane	EPA 8260D	<26.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,2,4-Trichlorobenzene	EPA 8260D	<71.1	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
1,2,4-Trimethylbenzene	EPA 8260D	<46.0	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<57.8	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<36.9	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<23.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<36.9	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
1,2-Dichloropropane	EPA 8260D	<46.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,3,5-Trimethylbenzene	EPA 8260D	<44.3	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
1,3-Dichlorobenzene (m- Dichlorobenzene)	EPA 8260D	<43.4	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
1,3-Dichloropropene	EPA 8260D	<35.0	U	µg/kg	126	1	02/04/26 19:37	02/04/26 14:39
1,4-Dichlorobenzene (p- Dichlorobenzene)	EPA 8260D	<51.0	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<149	U	µg/kg	418	1	02/04/26 19:37	02/04/26 14:39
2-Hexanone	EPA 8260D	<31.1	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<58.5	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Acetone	EPA 8260D	<186	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
Benzene	EPA 8260D	<30.4	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Bromochloromethane	EPA 8260D	<31.9	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Bromodichloromethane	EPA 8260D	<35.2	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Bromoform	EPA 8260D	<26.4	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Carbon disulfide	EPA 8260D	<32.5	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Carbon tetrachloride	EPA 8260D	<24.6	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Chlorobenzene	EPA 8260D	<20.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Chlorodibromomethane	EPA 8260D	<35.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Chloroethane (Ethyl chloride)	EPA 8260D	<176	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
Chloroform	EPA 8260D	<23.0	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
cis-1,2-Dichloroethylene	EPA 8260D	<40.4	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
cis-1,3-Dichloropropene	EPA 8260D	<47.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Cyclohexane	EPA 8260D	<48.1	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<76.0	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
Ethylbenzene	EPA 8260D	<44.5	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Isopropylbenzene	EPA 8260D	<39.6	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
m+p-Xylene	EPA 8260D	<83.7	U	µg/kg	126	1	02/04/26 19:37	02/04/26 14:39
Methyl acetate	EPA 8260D	<75.2	U	µg/kg	523	1	02/04/26 19:37	02/04/26 14:39
Methyl bromide (Bromomethane)	EPA 8260D	<120	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID

Work Order: HN2601568
Date Collected: 02/03/26 13:02
Date Received: 02/04/26 08:21

CLIENT ID: 12643 SB03 (5-6')_20260203

Lab ID: HN2601568-003

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methyl chloride (Chloromethane)	EPA 8260D	<172	U	µg/kg	209	1	02/04/26 19:37	02/04/26 14:39
Methyl tert-butyl ether (MTBE)	EPA 8260D	<45.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Methylcyclohexane	EPA 8260D	<23.9	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Methylene chloride (Dichloromethane)	EPA 8260D	<167	U	µg/kg	523	1	02/04/26 19:37	02/04/26 14:39
o-Xylene	EPA 8260D	<24.3	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Styrene	EPA 8260D	<24.9	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<37.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Toluene	EPA 8260D	<51.7	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Total Xylene	EPA 8260D	<24.3	U	µg/kg	188	1	02/04/26 19:37	02/04/26 14:39
trans-1,2-Dichloroethylene	EPA 8260D	<51.8	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
trans-1,3-Dichloropropylene	EPA 8260D	<35.0	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Trichloroethene (Trichloroethylene)	EPA 8260D	<28.1	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<32.1	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
Vinyl chloride (Chloroethene)	EPA 8260D	<41.7	U	µg/kg	62.8	1	02/04/26 19:37	02/04/26 14:39
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	02/04/26 19:37	02/04/26 14:39
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	102		%REC	80-120	1	02/04/26 19:37	02/04/26 14:39
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	99.2		%REC	72-120	1	02/04/26 19:37	02/04/26 14:39
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	02/04/26 19:37	02/04/26 14:39



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441148

Work Order: HN2601568
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	48.0	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	49.0	µg/kg		50		98.0	10-116			

MS	CLIENT ID: 12643 SB01 (1-2')_20260203	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	72.5	µg/kg		82.372		88.0	10-116			

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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	72.5	µg/kg		82.372		88.0	10-116	0.00	30	

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440539

Work Order: HN2601568
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: HN2601568-001, HN2601568-002, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440539

Work Order: HN2601568
Date Collected: 02/03/26 12:09
Date Received: 02/04/26 06:00
Run ID: 3863426

General Chemistry Parameters

DUP	CLIENT ID: Batch QC	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		<0.1			4.13	10	

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440581

Work Order: HN2601568
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: 12643 SB01 (1-2')_20260203	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: 12643 SB01 (1-2')_20260203	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: HN2601568-001, HN2601568-002, HN2601568-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442349

Work Order: HN2601568
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: HN2601568-001, HN2601568-002, HN2601568-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2444361

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3869256

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2444361-001
-----------	--------------------------------	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:03
Prep Date: 02/06/26 14:06

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-2444361-002
------------	---	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:05
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.87	mg/kg	0.250	5		97.4	80-120			
Barium	4.63	mg/kg	0.250	5		92.6	80-120			
Cadmium	4.88	mg/kg	0.100	5		97.6	80-120			
Chromium	5.13	mg/kg	0.250	5		103	80-120			
Copper	4.55	mg/kg	0.250	5		91.1	80-120			
Lead	4.93	mg/kg	0.250	5		98.7	80-120			
Selenium	4.89	mg/kg	0.250	5		97.8	80-120			
Silver	4.96	mg/kg	0.250	5		99.2	80-120			
Zinc	4.89	mg/kg	0.500	5		97.8	80-120			

MS	CLIENT ID: Batch QC	Lab ID: QC-2444361-004
-----------	----------------------------	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:08
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Cadmium	4.90	mg/kg	0.129	6.0459	<0.0181	81.1	75-125			
Copper	10.1	mg/kg	0.322	6.0459	5.59	79.7	75-125			
Selenium	5.10	mg/kg	0.322	6.0459	<0.278	82.7	75-125			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2444361-005
------------	----------------------------	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 02/09/26 20:10
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Cadmium	5.05	mg/kg	0.128	6.0241	<0.0181	83.7	75-125	2.85	20	
Copper	11.5	mg/kg	0.321	6.0241	5.59	104	75-125	13.3	20	
Selenium	5.22	mg/kg	0.321	6.0241	<0.277	84.9	75-125	2.28	20	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2444361

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3869256

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2444361

Work Order: HN2601568
Date Collected: 01/26/26 14:20
Date Received: 01/28/26 11:30
Run ID: 3871051

Metals

MS	CLIENT ID: Batch QC	Lab ID: QC-2444361-004
----	---------------------	------------------------

Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 02/10/26 14:30
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	16.4	mg/kg	3.22	6.0459	13.0	69.4	75-125			S
Barium	19.2	mg/kg	3.22	6.0459	12.6	121	75-125			
Chromium	13.1	mg/kg	3.22	6.0459	3.83	157	75-125			S
Lead	15.6	mg/kg	3.22	6.0459	9.61	109	75-125			
Silver	7.50	mg/kg	3.22	6.0459	<0.399	124	75-125			
Zinc	42.0	mg/kg	6.44	5	83.5	NC	75-125			O

MSD	CLIENT ID: Batch QC	Lab ID: QC-2444361-005
-----	---------------------	------------------------

Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 02/10/26 14:32
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	13.1	mg/kg	3.21	6.0241	13.0	15.7	75-125	22.0	20	RS
Barium	14.6	mg/kg	3.21	6.0241	12.6	45.9	75-125	26.9	20	RS
Chromium	10.8	mg/kg	3.21	6.0241	3.83	120	75-125	18.8	20	
Lead	12.2	mg/kg	3.21	6.0241	9.61	52.1	75-125	24.8	20	RS
Silver	6.61	mg/kg	3.21	6.0241	<0.398	109	75-125	12.6	20	
Zinc	29.5	mg/kg	6.42	5	83.5	NC	75-125	35.0	20	OR

PDS	CLIENT ID: Batch QC	Lab ID: QC-2444361-007
-----	---------------------	------------------------

Method: EPA 6020B **Dilution:** 10 **Analysis Date:** 02/10/26 14:35
Prep Date: 02/06/26 14:06

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	78.9	mg/kg	3.12	58.617	13.0	114	75-125			
Barium	71.9	mg/kg	3.12	58.617	12.6	102	75-125			
Chromium	73.5	mg/kg	3.12	58.617	3.83	119	75-125			
Lead	75.0	mg/kg	3.12	58.617	9.61	113	75-125			
Silver	56.1	mg/kg	3.12	58.617	<0.387	95.6	75-125			
Zinc	137	mg/kg	6.24	58.617	83.5	101	75-125			

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440525

Work Order: HN2601568
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
Surr: Decachlorobiphenyl	30.3	µg/kg		33.33		90.9	53-151			
Surr: Tetrachloro-m-xylene	35.2	µg/kg		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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440525

Work Order: HN2601568
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: 12643 SB01 (1-2')_20260203	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: 12643 SB01 (1-2')_20260203	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	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440525

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3861732

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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'-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	
Surr: Decachlorobiphenyl	32.2	µg/kg		33.175		97.2	53-151	1.80	30	
Surr: Tetrachloro-m-xylene	34.1	µg/kg		33.175		103	67-127	0.0224	30	

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440516

Work Order: HN2601568
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: 12643 SB01 (1-2')_20260203				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: 12643 SB01 (1-2')_20260203				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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2440516

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3862270

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
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

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
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	2620	µg/kg		3333		78.6	48-94			
Surr: 2-Fluorobiphenyl	2870	µg/kg		3333		86.1	50-103			
Surr: 2-Fluorophenol	2880	µg/kg		3333		86.4	43-105			
Surr: 4-Terphenyl-d14	3080	µg/kg		3333		92.3	55-111			
Surr: Nitrobenzene-d5	3110	µg/kg		3333		93.3	47-100			
Surr: Phenol-d6	2930	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	33.0	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			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
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
2,4,5-Trichlorophenol	1070	µg/kg	33.0	1333		80.0	54-98			
2,4,6-Trichlorophenol	1130	µg/kg	33.0	1333		84.9	56-97			
2,4-Dichlorophenol	1100	µg/kg	33.0	1333		82.9	54-99			
2,4-Dimethylphenol	867	µg/kg	33.0	1333		65.1	47-102			
2,4-Dinitrophenol	729	µg/kg	33.0	1333		54.7	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1070	µg/kg	33.0	1333		80.5	62-105			
2,6-Dinitrotoluene (2,6-DNT)	1140	µg/kg	33.0	1333		85.8	62-103			
2-Chloronaphthalene	1090	µg/kg	6.67	1333		81.8	57-101			
2-Chlorophenol	1110	µg/kg	33.0	1333		83.0	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	991	µg/kg	33.0	1333		74.4	42-104			
2-Methylnaphthalene	1160	µg/kg	6.67	1333		86.8	55-102			
2-Methylphenol (o-Cresol)	1010	µg/kg	33.0	1333		76.1	54-103			
2-Nitroaniline	1100	µg/kg	33.0	1333		82.9	57-103			
2-Nitrophenol	1160	µg/kg	33.0	1333		87.2	52-102			
3&4-Methylphenol	1010	µg/kg	33.0	1333		75.6	56-103			
3,3'-Dichlorobenzidine	895	µg/kg	167	1333		67.1	41-91			
3-Nitroaniline	742	µg/kg	33.0	1333		55.7	35-107			
4-Bromophenyl phenyl ether (BDE-3)	1170	µg/kg	33.0	1333		87.8	63-104			
4-Chloro-3-methylphenol	1090	µg/kg	33.0	1333		81.4	57-103			
4-Chloroaniline	1110	µg/kg	67.0	1333		83.3	32-99			
4-Chlorophenyl phenylether	1170	µg/kg	33.0	1333		87.6	62-100			
4-Nitroaniline	481	µg/kg	167	1333		36.1	19-124			
4-Nitrophenol	955	µg/kg	33.0	1333		71.7	44-106			
Acenaphthene	1160	µg/kg	6.67	1333		86.7	60-101			
Acenaphthylene	1180	µg/kg	6.67	1333		88.5	59-101			
Acetophenone	1060	µg/kg	33.0	1333		79.7	54-102			
Anthracene	1150	µg/kg	6.67	1333		86.5	63-96			
Atrazine	1110	µg/kg	33.0	1333		83.6	60-110			
Benzaldehyde	259	µg/kg	67.0	1333		19.5	10-143			
Benzo(a)anthracene	1160	µg/kg	6.67	1333		86.9	66-102			
Benzo(a)pyrene	1190	µg/kg	6.67	1333		89.2	66-105			
Benzo(b)fluoranthene	1100	µg/kg	6.67	1333		82.5	67-105			
Benzo(g,h,i)perylene	1410	µg/kg	6.67	1333		105	59-110			
Benzo(k)fluoranthene	1170	µg/kg	6.67	1333		88.0	68-106			
bis(2-Chloroethoxy)methane	1110	µg/kg	33.0	1333		83.2	54-102			
bis(2-Chloroethyl) ether	1070	µg/kg	33.0	1333		80.1	51-101			
Butyl benzyl phthalate	1120	µg/kg	67.0	1333		84.4	59-107			
Caprolactam	861	µg/kg	33.0	1333		64.6	49-103			
Carbazole	1100	µg/kg	33.0	1333		82.9	63-103			
Chrysene	1180	µg/kg	6.67	1333		88.8	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1170	µg/kg	33.0	1333		87.6	63-101			
Dibenz(a,h) anthracene	1340	µg/kg	33.0	1333		101	61-109			
Dibenzofuran	1160	µg/kg	33.0	1333		86.7	61-101			
Diethyl phthalate	1120	µg/kg	33.0	1333		84.1	63-105			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
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: 12643 SB01 (1-2')_20260203	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	<57.7	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			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3868930

MS	CLIENT ID: 12643 SB01 (1-2')_20260203	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
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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3868930

MS	CLIENT ID: 12643 SB01 (1-2')_20260203	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: 12643 SB01 (1-2')_20260203	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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3868930

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2442280

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3868930

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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	
<i>Surr: 2,4,6-Tribromophenol</i>	6960	µg/kg		7986.4		87.2	48-94	3.01	30	
<i>Surr: 2-Fluorobiphenyl</i>	6740	µg/kg		7986.4		84.4	50-103	1.83	30	
<i>Surr: 2-Fluorophenol</i>	6540	µg/kg		7986.4		81.8	43-105	1.09	30	
<i>Surr: 4-Terphenyl-d14</i>	7230	µg/kg		7986.4		90.5	55-111	3.15	30	
<i>Surr: Nitrobenzene-d5</i>	7300	µg/kg		7986.4		91.4	47-100	0.516	30	
<i>Surr: Phenol-d6</i>	6780	µg/kg		7986.4		84.9	49-110	0.244	30	

The following samples were analyzed in this batch: HN2601568-001, HN2601568-003



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

Semivolatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2448090-001
----	-------------------------	------------------------

Method: EPA 8270E**Dilution:** 1**Analysis Date:** 02/11/26 11:49**Prep Date:** 02/10/26 10:18

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

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

MB	CLIENT ID: Method Blank	Lab ID: QC-2448090-001
----	-------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 11:49

Prep Date: 02/10/26 10:18

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	2650	µg/kg		3333		79.6	48-94			
Surr: 2-Fluorobiphenyl	2750	µg/kg		3333		82.4	50-103			
Surr: 2-Fluorophenol	2710	µg/kg		3333		81.2	43-105			
Surr: 4-Terphenyl-d14	2910	µg/kg		3333		87.4	55-111			
Surr: Nitrobenzene-d5	3000	µg/kg		3333		90.0	47-100			
Surr: Phenol-d6	2640	µg/kg		3333		79.2	49-110			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2448090-002
-----	--------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 12:17

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1160	µg/kg	33.0	1333		87.1	57-101			
1,2,4,5-Tetrachlorobenzene	1170	µg/kg	33.0	1333		87.9	54-98			
1-Methylnaphthalene	1130	µg/kg	6.67	1333		84.5	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	1060	µg/kg	33.0	1333		79.4	50-101			
2,3,4,6-Tetrachlorophenol	1110	µg/kg	67.0	1333		83.2	48-103			



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2448090-002
-----	--------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 12:17

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	1040	µg/kg	33.0	1333		78.1	54-98			
2,4,6-Trichlorophenol	1040	µg/kg	33.0	1333		78.2	56-97			
2,4-Dichlorophenol	1080	µg/kg	33.0	1333		81.1	54-99			
2,4-Dimethylphenol	971	µg/kg	33.0	1333		72.8	47-102			
2,4-Dinitrophenol	745	µg/kg	333	1333		55.9	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1090	µg/kg	33.0	1333		82.1	62-105			
2,6-Dinitrotoluene (2,6-DNT)	1090	µg/kg	33.0	1333		81.9	62-103			
2-Chloronaphthalene	974	µg/kg	6.67	1333		73.1	57-101			
2-Chlorophenol	1010	µg/kg	33.0	1333		75.9	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1030	µg/kg	33.0	1333		77.5	42-104			
2-Methylnaphthalene	1120	µg/kg	6.67	1333		83.7	55-102			
2-Methylphenol (o-Cresol)	995	µg/kg	33.0	1333		74.7	54-103			
2-Nitroaniline	929	µg/kg	33.0	1333		69.7	57-103			
2-Nitrophenol	1110	µg/kg	33.0	1333		83.5	52-102			
3&4-Methylphenol	971	µg/kg	33.0	1333		72.9	56-103			
3,3'-Dichlorobenzidine	733	µg/kg	167	1333		55.0	41-91			
3-Nitroaniline	711	µg/kg	33.0	1333		53.4	35-107			
4-Bromophenyl phenyl ether (BDE-3)	1130	µg/kg	33.0	1333		84.8	63-104			
4-Chloro-3-methylphenol	1100	µg/kg	33.0	1333		82.8	57-103			
4-Chloroaniline	1140	µg/kg	67.0	1333		85.4	32-99			
4-Chlorophenyl phenylether	1130	µg/kg	33.0	1333		84.5	62-100			
4-Nitroaniline	409	µg/kg	167	1333		30.7	19-124			
4-Nitrophenol	972	µg/kg	333	1333		72.9	44-106			
Acenaphthene	1060	µg/kg	6.67	1333		79.5	60-101			
Acenaphthylene	1090	µg/kg	6.67	1333		81.8	59-101			
Acetophenone	1030	µg/kg	33.0	1333		77.4	54-102			
Anthracene	1100	µg/kg	6.67	1333		82.7	63-96			
Atrazine	1180	µg/kg	33.0	1333		88.6	60-110			
Benzaldehyde	186	µg/kg	67.0	1333		14.0	10-143			
Benzo(a)anthracene	1100	µg/kg	6.67	1333		82.2	66-102			
Benzo(a)pyrene	1120	µg/kg	6.67	1333		84.1	66-105			
Benzo(b)fluoranthene	1030	µg/kg	6.67	1333		77.5	67-105			
Benzo(g,h,i)perylene	1150	µg/kg	6.67	1333		86.6	59-110			
Benzo(k)fluoranthene	1140	µg/kg	6.67	1333		85.5	68-106			
bis(2-Chloroethoxy)methane	1060	µg/kg	33.0	1333		79.4	54-102			
bis(2-Chloroethyl) ether	1010	µg/kg	33.0	1333		75.9	51-101			
Butyl benzyl phthalate	1110	µg/kg	67.0	1333		83.6	59-107			
Caprolactam	909	µg/kg	33.0	1333		68.2	49-103			
Carbazole	1070	µg/kg	33.0	1333		80.3	63-103			
Chrysene	1100	µg/kg	6.67	1333		82.8	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1080	µg/kg	33.0	1333		81.4	63-101			
Dibenz(a,h) anthracene	1140	µg/kg	33.0	1333		85.3	61-109			
Dibenzofuran	1090	µg/kg	33.0	1333		81.5	61-101			
Diethyl phthalate	1120	µg/kg	33.0	1333		83.9	63-105			



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2448090-002
-----	--------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 12:17

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Dimethyl phthalate	1110	µg/kg	33.0	1333		83.2	64-104			
Fluoranthene	1070	µg/kg	6.67	1333		80.2	66-105			
Fluorene	1100	µg/kg	6.67	1333		82.5	62-101			
Hexachlorobenzene	1140	µg/kg	33.0	1333		85.6	61-104			
Hexachlorobutadiene	1180	µg/kg	33.0	1333		88.5	52-99			
Hexachlorocyclopentadiene	1080	µg/kg	33.0	1333		80.7	39-106			
Hexachloroethane	1020	µg/kg	33.0	1333		76.2	59-99			
Indeno(1,2,3-cd) pyrene	1180	µg/kg	6.67	1333		88.2	57-114			
Isophorone	1140	µg/kg	167	1333		85.4	55-101			
Methylphenol, Total	1970	µg/kg	67.0	2667		73.7	54-103			
Naphthalene	1110	µg/kg	6.67	1333		83.2	54-99			
Nitrobenzene	1140	µg/kg	167	1333		85.6	53-100			
n-Nitrosodi-n-propylamine	1030	µg/kg	33.0	1333		77.1	52-104			
N-Nitrosodiphenylamine	1070	µg/kg	33.0	1333		80.5	61-104			
Pentachlorophenol	915	µg/kg	33.0	1333		68.6	35-100			
Phenanthrene	1090	µg/kg	6.67	1333		82.0	64-101			
Phenol	1000	µg/kg	33.0	1333		75.2	51-107			
Pyrene	1220	µg/kg	6.67	1333		91.5	62-114			
Pyridine	790	µg/kg	167	1333		59.3	40-84			
Surr: 2,4,6-Tribromophenol	2940	µg/kg		3333		88.1	48-94			
Surr: 2-Fluorobiphenyl	2700	µg/kg		3333		81.0	50-103			
Surr: 2-Fluorophenol	2640	µg/kg		3333		79.3	43-105			
Surr: 4-Terphenyl-d14	3050	µg/kg		3333		91.5	55-111			
Surr: Nitrobenzene-d5	3100	µg/kg		3333		93.1	47-100			
Surr: Phenol-d6	2650	µg/kg		3333		79.6	49-110			

MS	CLIENT ID: 12643 SB02 (3-4')_20260203	Lab ID: QC-2448090-005
----	---------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 12:45

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1160	µg/kg	35.7	1332.1	<5.41	86.9	57-101			
1,2,4,5-Tetrachlorobenzene	1170	µg/kg	361	1332.1	<7.68	87.7	54-98			
1-Methylnaphthalene	1120	µg/kg	7.22	1332.1	<4.80	83.9	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	1040	µg/kg	35.7	1332.1	<7.80	77.9	50-101			
2,3,4,6-Tetrachlorophenol	1120	µg/kg	72.2	1332.1	<24.4	84.0	48-103			
2,4,5-Trichlorophenol	1080	µg/kg	35.7	1332.1	<19.7	81.3	54-98			
2,4,6-Trichlorophenol	1050	µg/kg	35.7	1332.1	<8.86	79.0	56-97			
2,4-Dichlorophenol	1090	µg/kg	35.7	1332.1	<17.9	81.7	54-99			
2,4-Dimethylphenol	1030	µg/kg	35.7	1332.1	<17.1	77.6	47-102			
2,4-Dinitrophenol	<244	µg/kg	361	1332.1	<244	13.1	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1090	µg/kg	35.7	1332.1	<21.6	81.6	62-105			
2,6-Dinitrotoluene (2,6-DNT)	1090	µg/kg	35.7	1332.1	<8.50	81.6	62-103			
2-Chloronaphthalene	959	µg/kg	7.22	1332.1	<4.66	72.0	57-101			

U

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

MS	CLIENT ID: 12643 SB02 (3-4')_20260203	Lab ID: QC-2448090-005
----	---------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 12:45

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2-Chlorophenol	1000	µg/kg	35.7	1332.1	<21.8	75.4	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	823	µg/kg	35.7	1332.1	<27.8	61.8	42-104			
2-Methylnaphthalene	1100	µg/kg	7.22	1332.1	<3.39	82.9	55-102			
2-Methylphenol (o-Cresol)	993	µg/kg	35.7	1332.1	<9.00	74.6	54-103			
2-Nitroaniline	928	µg/kg	35.7	1332.1	<18.5	69.7	57-103			
2-Nitrophenol	1110	µg/kg	35.7	1332.1	<9.49	83.3	52-102			
3&4-Methylphenol	979	µg/kg	35.7	1332.1	<18.2	73.5	56-103			
3,3'-Dichlorobenzidine	691	µg/kg	180	1332.1	<15.5	51.9	41-91			
3-Nitroaniline	670	µg/kg	35.7	1332.1	<19.3	50.3	35-107			
4-Bromophenyl phenyl ether (BDE-3)	1130	µg/kg	35.7	1332.1	<18.2	84.7	63-104			
4-Chloro-3-methylphenol	1110	µg/kg	35.7	1332.1	<9.49	83.2	57-103			
4-Chloroaniline	1140	µg/kg	72.2	1332.1	<16.9	85.2	32-99			
4-Chlorophenyl phenylether	1120	µg/kg	35.7	1332.1	<9.20	84.3	62-100			
4-Nitroaniline	322	µg/kg	180	1332.1	<51.7	24.2	19-124			
4-Nitrophenol	971	µg/kg	361	1332.1	<78.0	72.9	44-106			
Acenaphthene	1050	µg/kg	7.22	1332.1	<4.82	79.1	60-101			
Acenaphthylene	1070	µg/kg	7.22	1332.1	<5.78	80.4	59-101			
Acetophenone	1010	µg/kg	35.7	1332.1	<5.22	75.7	54-102			
Anthracene	1080	µg/kg	7.22	1332.1	<4.70	81.3	63-96			
Atrazine	1200	µg/kg	35.7	1332.1	<19.5	90.1	60-110			
Benzaldehyde	169	µg/kg	72.2	1332.1	<51.2	12.7	10-143			
Benzo(a)anthracene	1070	µg/kg	7.22	1332.1	<5.76	80.1	66-102			
Benzo(a)pyrene	1120	µg/kg	7.22	1332.1	7.12	83.5	66-105			
Benzo(b)fluoranthene	1060	µg/kg	7.22	1332.1	9.96	78.6	67-105			
Benzo(g,h,i)perylene	1100	µg/kg	7.22	1332.1	7.83	82.3	59-110			
Benzo(k)fluoranthene	1170	µg/kg	7.22	1332.1	<5.05	87.7	68-106			
bis(2-Chloroethoxy)methane	1040	µg/kg	35.7	1332.1	<21.1	77.9	54-102			
bis(2-Chloroethyl) ether	1020	µg/kg	35.7	1332.1	<9.43	76.6	51-101			
Butyl benzyl phthalate	1160	µg/kg	72.2	1332.1	<41.7	86.8	59-107			
Caprolactam	956	µg/kg	35.7	1332.1	<30.1	71.8	49-103			
Carbazole	1060	µg/kg	35.7	1332.1	<9.82	79.4	63-103			
Chrysene	1090	µg/kg	7.22	1332.1	<5.69	82.0	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1130	µg/kg	35.7	1332.1	<27.6	85.0	63-101			
Dibenz(a,h) anthracene	1060	µg/kg	35.7	1332.1	<3.60	79.3	61-109			
Dibenzofuran	1080	µg/kg	35.7	1332.1	<4.90	80.8	61-101			
Diethyl phthalate	1120	µg/kg	35.7	1332.1	<11.3	84.1	63-105			
Dimethyl phthalate	1090	µg/kg	35.7	1332.1	<6.50	81.5	64-104			
Fluoranthene	1090	µg/kg	7.22	1332.1	8.54	81.3	66-105			
Fluorene	1090	µg/kg	7.22	1332.1	<4.84	81.8	62-101			
Hexachlorobenzene	1130	µg/kg	35.7	1332.1	<9.69	84.6	61-104			
Hexachlorobutadiene	1160	µg/kg	35.7	1332.1	<7.85	87.2	52-99			
Hexachlorocyclopentadiene	1060	µg/kg	35.7	1332.1	<32.6	79.8	39-106			
Hexachloroethane	1030	µg/kg	35.7	1332.1	<13.8	77.0	59-99			
Indeno(1,2,3-cd) pyrene	1130	µg/kg	7.22	1332.1	9.96	83.9	57-114			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

MS		CLIENT ID: 12643 SB02 (3-4')_20260203				Lab ID: QC-2448090-005			
Method: EPA 8270E		Dilution: 1		Analysis Date: 02/11/26 12:45		Prep Date: 02/10/26 10:18			
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit Qual
Isophorone	1120	µg/kg	180	1332.1	<6.51	84.2	55-101		
Methylphenol, Total	1970	µg/kg	35.7	2665.2	<9.00	74.0	54-103		
Naphthalene	1100	µg/kg	7.22	1332.1	<4.26	82.7	54-99		
Nitrobenzene	1110	µg/kg	180	1332.1	<11.2	83.2	53-100		
n-Nitrosodi-n-propylamine	1010	µg/kg	35.7	1332.1	<5.50	75.8	52-104		
N-Nitrosodiphenylamine	1070	µg/kg	35.7	1332.1	<19.3	80.5	61-104		
Pentachlorophenol	891	µg/kg	35.7	1332.1	<26.5	66.9	35-100		
Phenanthrene	1070	µg/kg	7.22	1332.1	<3.10	80.7	64-101		
Phenol	991	µg/kg	35.7	1332.1	<16.7	74.4	51-107		
Pyrene	1210	µg/kg	7.22	1332.1	7.12	90.4	52-114		
Pyridine	990	µg/kg	180	1332.1	<65.6	74.3	40-84		
Surr: 2,4,6-Tribromophenol	2940	µg/kg		3330.8		88.4	48-94		
Surr: 2-Fluorobiphenyl	2620	µg/kg		3330.8		78.6	50-103		
Surr: 2-Fluorophenol	2580	µg/kg		3330.8		77.6	43-105		
Surr: 4-Terphenyl-d14	3030	µg/kg		3330.8		90.8	55-111		
Surr: Nitrobenzene-d5	3020	µg/kg		3330.8		90.7	47-100		
Surr: Phenol-d6	2570	µg/kg		3330.8		77.3	49-110		

MSD		CLIENT ID: 12643 SB02 (3-4')_20260203				Lab ID: QC-2448090-006			
Method: EPA 8270E		Dilution: 1		Analysis Date: 02/11/26 13:14		Prep Date: 02/10/26 10:18			
Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit Qual
1,1'-Biphenyl (BZ-0)	1020	µg/kg	35.5	1325	<5.41	76.8	57-101	12.9	30
1,2,4,5-Tetrachlorobenzene	1070	µg/kg	359	1325	<7.69	80.5	54-98	9.15	30
1-Methylnaphthalene	1010	µg/kg	7.18	1325	<4.80	76.0	56-100	10.5	30
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	970	µg/kg	35.5	1325	<7.81	73.2	50-101	6.69	30
2,3,4,6-Tetrachlorophenol	1010	µg/kg	71.8	1325	<24.4	76.3	48-103	10.1	30
2,4,5-Trichlorophenol	991	µg/kg	35.5	1325	<19.8	74.8	54-98	8.80	30
2,4,6-Trichlorophenol	955	µg/kg	35.5	1325	<8.87	72.1	56-97	9.73	30
2,4-Dichlorophenol	1000	µg/kg	35.5	1325	<17.9	75.5	54-99	8.42	30
2,4-Dimethylphenol	791	µg/kg	35.5	1325	<17.1	59.7	47-102	26.5	30
2,4-Dinitrophenol	<244	µg/kg	359	1325	<244	15.8	10-100	0	U
2,4-Dinitrotoluene (2,4-DNT)	971	µg/kg	35.5	1325	<21.6	73.3	62-105	11.3	30
2,6-Dinitrotoluene (2,6-DNT)	962	µg/kg	35.5	1325	<8.51	72.6	62-103	12.1	30
2-Chloronaphthalene	865	µg/kg	7.18	1325	<4.66	65.3	57-101	10.2	30
2-Chlorophenol	952	µg/kg	35.5	1325	<21.8	71.9	52-102	5.35	30
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	769	µg/kg	35.5	1325	<27.8	58.0	42-104	6.87	30
2-Methylnaphthalene	1010	µg/kg	7.18	1325	<3.39	76.2	55-102	9.02	30
2-Methylphenol (o-Cresol)	928	µg/kg	35.5	1325	<9.01	70.1	54-103	6.76	30
2-Nitroaniline	841	µg/kg	35.5	1325	<18.5	63.5	57-103	9.85	30
2-Nitrophenol	1020	µg/kg	35.5	1325	<9.50	77.1	52-102	8.33	30
3&4-Methylphenol	915	µg/kg	35.5	1325	<18.2	69.1	56-103	6.77	30
3,3'-Dichlorobenzidine	571	µg/kg	180	1325	<15.6	43.1	41-91	19.0	30



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

MSD	CLIENT ID: 12643 SB02 (3-4')_20260203	Lab ID: QC-2448090-006
-----	---------------------------------------	------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 13:14

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
3-Nitroaniline	575	µg/kg	35.5	1325	<19.4	43.4	35-107	15.3	30	
4-Bromophenyl phenyl ether (BDE-3)	992	µg/kg	35.5	1325	<18.3	74.9	63-104	12.8	30	
4-Chloro-3-methylphenol	1010	µg/kg	35.5	1325	<9.50	76.6	57-103	8.80	30	
4-Chloroaniline	1020	µg/kg	71.8	1325	<16.9	76.6	32-99	11.2	30	
4-Chlorophenyl phenylether	1000	µg/kg	35.5	1325	<9.21	75.6	62-100	11.5	30	
4-Nitroaniline	288	µg/kg	180	1325	<51.7	21.8	19-124	11.2	30	
4-Nitrophenol	928	µg/kg	359	1325	<78.1	70.1	44-106	4.52	30	
Acenaphthene	948	µg/kg	7.18	1325	<4.82	71.5	60-101	10.6	30	
Acenaphthylene	962	µg/kg	7.18	1325	<5.78	72.6	59-101	10.7	30	
Acetophenone	931	µg/kg	35.5	1325	<5.22	70.3	54-102	8.00	30	
Anthracene	960	µg/kg	7.18	1325	<4.70	72.4	63-96	12.0	30	
Atrazine	1110	µg/kg	35.5	1325	<19.5	83.7	60-110	7.96	30	
Benzaldehyde	118	µg/kg	71.8	1325	<51.2	8.90	10-143	35.3	30	RS
Benzo(a)anthracene	958	µg/kg	7.18	1325	<5.76	72.3	66-102	10.8	30	
Benzo(a)pyrene	997	µg/kg	7.18	1325	7.12	74.7	66-105	11.6	30	
Benzo(b)fluoranthene	944	µg/kg	7.18	1325	9.96	70.5	67-105	11.2	30	
Benzo(g,h,i)perylene	946	µg/kg	7.18	1325	7.83	70.8	59-110	15.4	30	
Benzo(k)fluoranthene	1040	µg/kg	7.18	1325	<5.05	78.2	68-106	12.0	30	
bis(2-Chloroethoxy)methane	970	µg/kg	35.5	1325	<21.1	73.2	54-102	6.69	30	
bis(2-Chloroethyl) ether	938	µg/kg	35.5	1325	<9.44	70.8	51-101	8.47	30	
Butyl benzyl phthalate	1010	µg/kg	71.8	1325	<41.7	76.4	59-107	13.3	30	
Caprolactam	879	µg/kg	35.5	1325	<30.1	66.3	49-103	8.43	30	
Carbazole	942	µg/kg	35.5	1325	<9.82	71.1	63-103	11.6	30	
Chrysene	961	µg/kg	7.18	1325	<5.69	72.5	66-105	12.8	30	
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1030	µg/kg	35.5	1325	<27.6	77.6	63-101	9.63	30	
Dibenz(a,h) anthracene	924	µg/kg	35.5	1325	<3.60	69.8	61-109	13.3	30	
Dibenzofuran	963	µg/kg	35.5	1325	<4.90	72.7	61-101	11.2	30	
Diethyl phthalate	1000	µg/kg	35.5	1325	<11.3	75.5	63-105	11.3	30	
Dimethyl phthalate	968	µg/kg	35.5	1325	<6.50	73.0	64-104	11.5	30	
Fluoranthene	974	µg/kg	7.18	1325	8.54	72.9	66-105	11.3	30	
Fluorene	972	µg/kg	7.18	1325	<4.84	73.4	62-101	11.4	30	
Hexachlorobenzene	977	µg/kg	35.5	1325	<9.70	73.8	61-104	14.2	30	
Hexachlorobutadiene	1070	µg/kg	35.5	1325	<7.85	80.5	52-99	8.52	30	
Hexachlorocyclopentadiene	928	µg/kg	35.5	1325	<32.6	70.0	39-106	13.6	30	
Hexachloroethane	964	µg/kg	35.5	1325	<13.8	72.7	59-99	6.21	30	
Indeno(1,2,3-cd) pyrene	946	µg/kg	7.18	1325	9.96	70.7	57-114	17.4	30	
Isophorone	1010	µg/kg	180	1325	<6.51	75.9	55-101	10.9	30	
Methylphenol, Total	1840	µg/kg	67.0	2651.1	<9.01	69.5	54-103	6.76	30	
Naphthalene	1000	µg/kg	7.18	1325	<4.26	75.6	54-99	9.44	30	
Nitrobenzene	1030	µg/kg	180	1325	<11.2	77.4	53-100	7.76	30	
n-Nitrosodi-n-propylamine	937	µg/kg	35.5	1325	<5.50	70.7	52-104	7.43	30	
N-Nitrosodiphenylamine	944	µg/kg	35.5	1325	<19.3	71.3	61-104	12.7	30	
Pentachlorophenol	813	µg/kg	35.5	1325	<26.5	61.4	35-100	9.19	30	
Phenanthrene	944	µg/kg	7.18	1325	<3.10	71.2	64-101	13.0	30	
Phenol	948	µg/kg	35.5	1325	<16.7	71.5	51-107	4.44	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2448090

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3874926

MSD	CLIENT ID: 12643 SB02 (3-4')_20260203	Lab ID: QC-2448090-006
------------	--	-------------------------------

Method: EPA 8270E

Dilution: 1

Analysis Date: 02/11/26 13:14

Prep Date: 02/10/26 10:18

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Pyrene	1040	µg/kg	7.18	1325	7.12	77.8	52-114	15.4	30	
Pyridine	962	µg/kg	180	1325	<65.6	72.6	40-84	2.91	30	
<i>Surr: 2,4,6-Tribromophenol</i>	2590	µg/kg		3313.1		78.2	48-94	12.8	30	
<i>Surr: 2-Fluorobiphenyl</i>	2360	µg/kg		3313.1		71.2	50-103	10.4	30	
<i>Surr: 2-Fluorophenol</i>	2470	µg/kg		3313.1		74.6	43-105	4.40	30	
<i>Surr: 4-Terphenyl-d14</i>	2590	µg/kg		3313.1		78.2	55-111	15.5	30	
<i>Surr: Nitrobenzene-d5</i>	2750	µg/kg		3313.1		83.1	47-100	9.30	30	
<i>Surr: Phenol-d6</i>	2440	µg/kg		3313.1		73.7	49-110	5.30	30	

The following samples were analyzed in this batch: HN2601568-002



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
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

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
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 (Fluorotrichloromethane, Freon 11)	<15.3	µg/kg	30.0							U
Vinyl chloride (Chloroethene)	<19.9	µg/kg	30.0							U
Surr: 1,2-Dichloroethane-d4	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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
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			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
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: 12643 SB01 (1-2')_20260203	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			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3862247

MS	CLIENT ID: 12643 SB01 (1-2')_20260203	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: 12643 SB01 (1-2')_20260203	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: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3862247

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2441302

Work Order: HN2601568
Date Collected: NA
Date Received: NA
Run ID: 3862247

MSD	CLIENT ID: 12643 SB01 (1-2')_20260203	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
<i>Surr: 1,2-Dichloroethane-d4</i>	2210	<i>µg/kg</i>		2114.2		104	80-120	0.907	30	
<i>Surr: 4-Bromofluorobenzene</i>	2190	<i>µg/kg</i>		2114.2		103	80-120	2.40	30	
<i>Surr: Dibromofluoromethane</i>	2140	<i>µg/kg</i>		2114.2		101	72-120	0.644	30	
<i>Surr: Toluene-d8</i>	2120	<i>µg/kg</i>		2114.2		100	80-120	2.48	30	

The following samples were analyzed in this batch: HN2601568-001, HN2601568-002, HN2601568-003



right solutions.
right partner.

April 07, 2026

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

Re: **12643 Barlow**

Date Received: **03/31/2026**

Work Order: **HN2605050**

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: 12643 Barlow

Work Order: HN2605050
Date Received: 31-Mar-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

1 soil sample was received for analysis at ALS Environmental on 31-Mar-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.

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Workorder: HN2605050

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2605050-001	12643 SB03 (5-6')_20260203	SOIL	02/03/26 12:57	03/31/26 08:00

	Sample Date & Time	Original Sample	Site	Full Sample ID	Sample ID	TCLP:
	2/3/2026 12:57	HN2601568-002	12643 Barlow	12643 SB03 (5-6')_20260203	SB03 (5-6')	Lead
	2/10/2026 12:45	HN2601991-003	12243 Flanders	12243 SB03 (3-4')_20260210	SB03 (3-4')	Lead
	2/4/2026 12:21	HN2601663-003	9161 Norcross	9161 SB03 (5-6')_20260204	SB03 (5-6')	Lead
	2/5/2026 12:09	HN2601730-002	3943 Marlborough	3943 SB02 (3-4')_20100205	SB02 (3-4')	Lead
	2/11/2026 10:09	HN2602078-001	3999 Harding	3999 SB01 (1-2')_20260211	SB01 (1-2')	Lead
	2/11/2026 12:38	HN2602081-003	2622 Lemay	2622 SB03 (5-6')_20260211	SB03 (5-6')	Lead
✓	2/13/2026 11:10	HN2602268-001	6315 Frontenac	6315 SB01 (3-4')_20260213	SB01 (3-4')	Lead
/	2/13/2026 12:05	HN2602267-002	7661 Sherwood	7661 SB02 (3-4')_20260213	SB02 (3-4')	Lead
	2/16/2026 10:55	HN2602334-001	2652 E Kirby	2652 SB01 (1-2')_20260216	SB01 (1-2')	Lead
	2/16/2026	HN2602337-004	6026 Vermont	6026 DUP-1_20260216	DUP-1	Lead
	2/16/2026 14:30	HN2602338-001	4652 18th St	4652 SB01 (1-2')_20260216	SB01 (1-2')	Lead
	2/17/2026 12:50	HN2602410-001	4551 25th St	4551 SB01 (1-2')_20260217	SB01 (1-2')	Lead
	2/17/2026 14:45	HN2602414-002	3736 Roosevelt	3736 SB02 (5-6')_20260217	SB02 (5-6')	Lead
	2/18/2026 8:55	HN2602488-002	3526 25th St	3526 SB02 (1-2')_20260218	SB02 (1-2')	Lead
	2/3/2026 9:06	HN2601590-002	317 Cavalry	317 SB02 (5-6')_20260203	SB02 (5-6')	Lead
	2/3/2026 13:43	HN2601589-001	4608 Burton	4608 SB01 (1-2')_20260203	SB01 (1-2')	Lead
	2/4/2026 13:55	HN2601654-002	7347 American	7347 SB02 (5-6')_20260204	SB02 (5-6')	Lead
	2/4/2026 14:32	HN2601655-001	7356 Wheeler	7356 SB01 (1-2')_20260204	SB01 (1-2')	Lead
	2/5/2026 9:05	HN2601758-001	8717 Dayton	8717 SB01 (1-2')_20260205	SB01 (1-2')	Lead
	2/5/2026 13:58	HN2601746-002	5452 24th St	5452 SB02 (3-4')_20260205	SB02 (3-4')	Lead
	2/6/2026 10:20	HN2601834-001	5243 Spokane	5243 SB01 (1-2')_20260206	SB01 (1-2')	Lead
	2/9/2026 15:15	HN2601890-001	3727 Rochester	3727 SB01 (1-2')_20260209	SB01 (1-2')	Lead
	2/10/2026 13:20	HN2601975-002	8815 American	8815 SB02 (3-4')_20260210	SB02 (3-4')	Chromium
	2/11/2026	HN2602071-004	8999 N Clarendon	8999 DUP-1_20260211	DUP-1	Lead
	2/12/2026	HN2602155-004	12316 Wisconsin	12316 DUP-1_20260212	DUP-1	Lead
	2/18/2026 9:27	HN2602502-002	12878 Robson	12878 SB02 (5-6')_20260218	SB02 (5-6')	Lead
	2/19/2026 13:14	HN2602689-001	14202 Wisconsin	14202 SB01 (5-6')_20260219	SB01 (5-6')	Lead
	2/20/2026 13:48	HN2602700-003	15496 Roselawn	15496 SB03 (1-2')_20260220 RO	SB03 (1-2')	Lead
	2/20/2026 14:10	HN2602707-003	15033 Parkside	15033 SB03 (1-2')_20260220	SB03 (1-2')	Lead
	2/26/2026 15:33	HN2602988-012	5673 28TH ST.	5673 28th SB12 (0-1')_20260226	SB12 (0-1')	Lead
	2/27/2026 12:08	HN2603081-001	8612 ALPINE	8612 Alp SB01 (1-2')_20260227	SB01 (1-2')	Lead
	2/27/2026 14:46	HN2603084-010	1493 ANNABELLE	1493 Ann SB09 (0-1')_20260227	SB09 (0-1')	Lead
	2/27/2026 14:47	HN2603086-010	12725 AUGUST	12725 Aug SB10 (0-1')_20260227	SB10 (0-1')	Lead
	3/4/2026 9:52	HN2603358-006	9624 BESSEMORE	9624 Bes SB04 (0-1')_20260304	SB04 (0-1')	Lead
	3/9/2026 12:27	HN2603642-008	15871 ILIAD	15871 Ili SB06 (0-1')_20260309	SB06 (0-1')	Lead, Chromium
	3/9/2026 12:32	HN2603642-009	15871 ILIAD	15871 Ili SB08 (0-1')_20260309	SB08 (0-1')	Lead
	3/16/2026 14:52	HN2604244-005	2638 LIDDESDALE	2638 Lid SB02 (0-1')_20260316	SB02 (0-1')	Lead
	3/16/2026 11:39	HN2604243-003	11945 VISGER	11945 Vis SB12 (1-2')_20260316	SB12 (1-2')	Lead
	3/10/2026 9:47	HN2603747-001	4852 WOODHALL	4852 Woo SB02 (3-4')_20260310	SB02 (3-4')	Lead

Environmental Division
Holland
Work Order Reference
HN2605050



Telephone : +1 616 399 6070

[Handwritten signature]

3/31/26 0800

4.0°C 126



ALS Holland
3352 128th Ave., Holland MI 49424

ALS Holland Sample Receiving Checklist

Received by: Kerry

Date/Time: 3/31/26 0800

Carrier Name: ALS

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): 4.0/4.0°C

Thermometer(s): 126

Sample(s) received on ice? Yes / No

Matrix/Matrices: Soil

Cooler(s)/Kit(s): _____

Date/Time sample(s) sent to storage: 3/31/26 1200

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:

STORED IN LTS FRIDGE

REPORT QUALIFIERS AND DEFINITIONS

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

LABORATORY CERTIFICATIONS¹

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

1 – Scope available upon request

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow

Work Order: HN2605050

Sample Name: 12643 SB03 (5-6')_20260203
Laboratory Code: HN2605050-001
Sample Matrix: SOIL

Date Collected: 02/03/26
Date Received: 03/31/26

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	EPA 3015A	001-AC	2527135	Chloe Patrick	4000916	Hunter Johnson

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL

Work Order: HN2605050
Date Collected: 02/03/26 12:57
Date Received: 03/31/26 08:00

CLIENT ID: 12643 SB03 (5-6')_20260203 **Lab ID:** HN2605050-001

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
TCLP Metals								
Lead	EPA 6020B	<0.00220	U	mg/L	0.0499	1	04/07/26 14:16	04/07/26 12:10

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 12643 Barlow
Matrix: SOIL/SOLID
QC Lot: 2527135

Work Order: HN2605050
Date Collected: NA
Date Received: NA
Run ID: 4000916

TCLP Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2527135-001
-----------	--------------------------------	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 04/07/26 14:13
Prep Date: 04/07/26 12:11

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Lead	<0.00220	mg/L	0.0499							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2527135-002
------------	---	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 04/07/26 14:15
Prep Date: 04/07/26 12:11

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Lead	0.997	mg/L	0.0499	1		99.7	80-120			

MS	CLIENT ID: 12643 SB03 (5-6')_20260203	Lab ID: QC-2527135-004
-----------	--	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 04/07/26 14:18
Prep Date: 04/07/26 12:11

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Lead	0.986	mg/L	0.0499	1	0.00886	97.7	75-125			

MSD	CLIENT ID: 12643 SB03 (5-6')_20260203	Lab ID: QC-2527135-005
------------	--	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 04/07/26 14:20
Prep Date: 04/07/26 12:11

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Lead	1.01	mg/L	0.0499	1	0.00886	99.8	75-125	2.12	20	

The following samples were analyzed in this batch: HN2605050-001