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# FILL MATERIAL SAMPLING REPORT

8070 WISNER AVENUE
DETROIT, WAYNE COUNTY, MICHIGAN 48234

NOVEMBER 11, 2025
REVISED DECEMBER 12, 2025

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

Mannik Smith GROUP

# Fill Material Sampling Report

8070 Wisner
Detroit, Wayne County, Michigan 48234


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Mannik Smith Group

# 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 8070 Wisner Avenue, 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); semivolatile 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 8070 SB01, 8070 SB02, and 8070 SB03 generally consisted of four and a half to five feet of brown to dark brown sand and clayey sand with little gravel underlain by brown silty clay to six feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores ranged from 0.1 to 19.9 parts per million (ppm). 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 each soil boring.
- Concentrations of arsenic and chromium (Total) were detected in soil samples 8070 SB02 (3-4') and/or 8070 SB03 (5-6') in excess of their respective Part 201 drinking water protection criteria (DWPC), groundwater surface water interface protection criteria (GSIPC), and/or direct contact criteria (DCC).
- Concentrations of 1,2,4-trimethylbenzene, 2-methylnaphthalene, 4,4-DDD, 4,4-DDE, 4,4-DDT, acetone, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chloride, copper, dieldrin, fluoranthene, lead, mercury, pyrene, chlordane, and zinc were detected in soil samples 8070 SB01 (1-2'), 8070 SB02 (3-4'), 8070 SB03 (5-6'), and/or 8070 Wisner SB02 (3-4')-R 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 arsenic and chromium 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.*
- PCBs were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable.

Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Given that the site is residential, exceedances of DCC may merit further consideration.

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

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

# TABLE OF CONTENTS

# 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 8070 Wisner Avenue, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location as referenced to nearby roads and major geographic features is presented as *Figure 1, Site Location Map*. *Figure 2, Site Layout,* depicts the current layout of the Site.

The purpose of this work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths. The scope of work for this investigation was performed in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. This report presents the findings of this investigation. Soil samples were collected by MSG on August 14, 2025, October 7, 2025, and October 28, 2025. The findings of this report are valid as of the report date, subject to the limitations presented in *Appendix A, Limitations*.

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

# 2.0 PURPOSE AND SCOPE OF WORK

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

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

- Advanced three (3) onsite soil borings to a maximum depth of six (6) 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); semivolatile 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 August 14, 2025, October 7, 2025, and October 28, 2025. Daily field activity reports prepared by MSG are presented in *Appendix B, Daily Field Reports.*

## 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) initial soil borings, designated 8070 SB01, 8070 SB02, and 8070 SB03, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during completion of this work are provided in *Appendix C, Investigation Photographs*.

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

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

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

### 3.3 Toxicity Characteristic Leaching Procedure (TCLP) Soil Sample Collection

On October 7, 2025, MSG mobilized to the Site to collect an additional soil sample based on request from the COD. Sample location and analyte(s) were based on the laboratory results of the initial soil investigation. MSG personnel advanced one soil boring in the immediate vicinity of the soil boring location that exhibited the highest laboratory result(s) in excess of Part 201 GRCC. Soils were continuously profiled from the ground surface to the termination depth of six feet bgs using a direct push drill rig. These soils were homogenized in a stainless-steel bowl (or equivalent) to produce a single, composite soil sample. The composite soil sample was placed into unpreserved laboratory-supplied sample containers, as appropriate for the associated laboratory analyses.

The composite soil sample was collected to create a single, representative sample to provide a laboratory result that includes the overlying and/or underlying soils in the area of concern to comprehensively represent the backfill soils that may be removed.

On October 28, 2025, MSG mobilized to the Site to collect an additional soil sample based on request from the COD in order to fulfill waste characterization parameters required at a Type II landfill. Sample location and analyte(s) were based on the laboratory results of the initial soil sampling event, as 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*. Soils were continuously profiled at the supplemental soil boring locations from the ground surface to the termination depth using a 5-foot long, closed-piston Macro-Core® sampling device. When warranted, 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.

### 3.4 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.

### 3.5 Analytical Methods

A total of four (4) soil samples, designated 8070 SB01 (1-2'), 8070 SB02 (3-4'), 8070 SB03 (5-6'), and 8070 Wisner SB02 (3-4')-R, and one (1) composite soil sample designated 8070 Wisner SB02 TCLP 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.

### 3.6 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 August 14, 2025, October 7, 2025, and October 28, 2025.

### 4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 8070 SB01, 8070 SB02, and 8070 SB03 generally consisted of four and a half to five feet of brown to dark brown sand and clayey sand with little gravel underlain by brown silty clay to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores ranged from 0.1 to 19.9 ppm. 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 each soil boring.

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

## 4.2 Soil Sample Analytical Results

A total of four (4) soil samples, designated 8070 SB01 (1-2'), 8070 SB02 (3-4'), 8070 SB03 (5-6'), and 8070 Wisner SB02 (3-4')-R, were collected from the Site and submitted to ALS for laboratory analysis of VOCs, SVOCs, PCBs, Michigan 10 Metals, chloride, herbicides, and/or pesticides.

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

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

| Chemical | CAS Number | Soil Sample (feet bgs) | Part 201 GRCC Exceeded / Concentration (µg/kg[1]) | Maximum Detected Concentration (µg/kg) |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 8070 SB02 (3-4')<br>8070 SB03 (5-6') | DWPC[2] / 4,600<br>GSIPC[3] / 4,600<br>DCC[4] / 7,600 | 16,700 |
| Chromium (Total) | 7440-47-3 | 8070 SB02 (3-4')<br>8070 SB03 (5-6') | GSIPC / 3,300 | 24,500 |

[1]µg/kg – micrograms per kilogram;
[2]DWPC – Drinking Water Protection Criteria
[3]GSIPC – Groundwater Surface Water Interface Protection Criteria
[4]DCC – Direct Contact Criteria

## 4.3 TCLP Analytical Results

Arsenic and chromium were 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. Given that the site is residential, exceedances of DCC may merit further consideration.

# 5.0 FINDINGS

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

- The stratigraphy encountered during soil boring advancement of 8070 SB01, 8070 SB02, and 8070 SB03 generally consisted of four and a half to five feet of brown to dark brown sand and clayey sand with little gravel underlain by brown silty clay to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores ranged from 0.1 to 19.9 ppm. 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 each soil boring.
- Concentrations of arsenic and chromium (Total) were detected in soil samples 8070 SB02 (3-4') and/or 8070 SB03 (5-6') in excess of their respective Part 201 DWPC, GSIPC, and/or DCC.
- Concentrations of 1,2,4-trimethylbenzene, 2-methylnaphthalene, 4,4-DDD, 4,4-DDE, 4,4-DDT, acetone, barium, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chloride, copper, dieldrin, fluoranthene, lead, mercury, pyrene, chlordane, and zinc were detected in soil samples 8070 SB01 (1-2'), 8070 SB02 (3-4'), 8070 SB03 (5-6'), and/or 8070 Wisner SB02 (3-4')-R 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 arsenic and chromium 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.*
- PCBs 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 DW exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Given that the site is residential, exceedances of DCC may merit further consideration.

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

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

# FIGURES

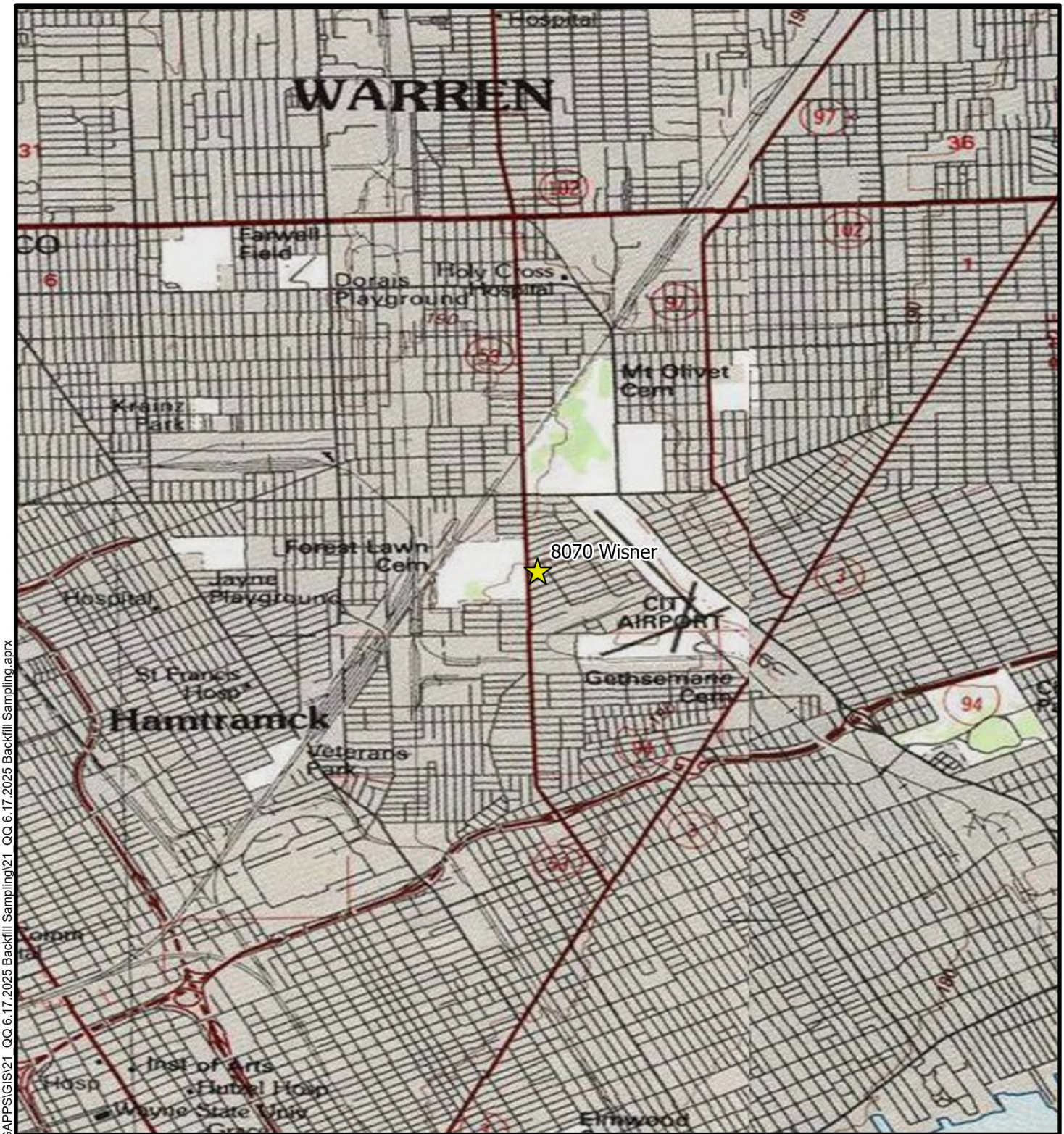


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**FIGURE 1**

SITE LOCATION

8070 Wisner, Detroit, MI

| DATE | DRAWN BY | DESIGNED BY | PROJECT NO. |
|---|---|---|---|
| 9/23/2025 | JWW | JWW | DETR0060 |

Date Saved: 9/22/2025 8:38 PM Coordinate System: GCS WGS 1984
Path: W:\Projects\Projects A-E\DETR0060\ENGAPPS\GIS\21 QQ 6.17.2025 Backfill Sampling\21 QQ 6.17.2025 Backfill Sampling.aprx

Basemap Source: ESRI USA_Topo_Maps Web Service


MSG

0 20 40
Feet

Sample Locations
Parcels (Current)
Subject Property

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

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# FIGURE 2

Site Layout

8070 Wisner, Detroit, MI

| DATE | DRAWN BY | DESIGNED BY | PROJECT NO. |
|---|---|---|---|
| 9/23/2025 | JWW | KRB | DETR0060 |

Date Saved: 9/23/2025 10:36 AM
Path: W:\Projects\Projects A-E\DETR0060\ENGAPPS\GIS\21_QQ 6.17.2025 Backfill Sampling\21_QQ 6.17.2025 Backfill Sampling.aprx

# TABLES

# Table 1
# Soil Sample Analytical Detection Summary

Detroit Backfill Sampling
8070 Wisner, Detroit, Michigan



| SOIL: Part 201/213 Generic Residential Cleanup Criteria<br>Revised October 12, 2023<br>Units: µg/kg | | | Volatile Organic Compounds (VOCs) | | Semivolatile Organic Compounds (SVOCs) | | | | | | Michigan 10 Metals | | | | | | | | | | Pesticides/Herbicides | | | | | | | Polychlorinated Biphenyls (PCBs) | Inorganic Anions/Ions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Acetone | 1,2,4-Trimethylbenzene | 2-Methylnaphthalene | Benzo(a)anthracene | Benzo(b)fluoranthene | Benzo(a)pyrene | Fluoranthene | Pyrene | Arsenic | Barium (B) | Cadmium (B) | Chromium (Total) | Copper (B) | Lead (B) | Mercury (B,Z) | Selenium (B) | Silver (B) | Zinc (B) | 4,4;-DDD | 4,4;-DDE | 4,4;-DDT | Dieldrin | alpha-Chlordane | gamma-Chlordane | Chlordane | | Chloride |
| CAS Number | | | 67-64-1 | 95-63-6 | 91-57-6 | 56-55-3 | 205-99-2 | 50-32-8 | 206-44-0 | 129-00-0 | 7440-38-2 | 7440-39-3 | 7440-43-9 | 7440-47-3 | 7440-50-8 | 7439-92-1 | 7439-97-6 | 7782-49-2 | 7440-22-4 | 7440-66-6 | 72548 | 72559 | 50-29-3 | 60-57-1 | NA | NA | 57-74-9 | | 16887006 |
| Statewide Default Background Levels | | | NA | NA | NA | NA | NA | NA | NA | NA | 5,800 | 75,000 | 1,200 | 18,000 | 32,000 | 21,000 | 130 | 410 | 1,000 | 47,000 | NA | NA | NA | NA | NA | NA | NA | | NA |
| Drinking Water Protection Criteria (DWPC) | | | 15,000 | 2,100 | 57,000 | NLL | NLL | NLL | 7.3E+05 | 4.8E+05 | 4,600 | 1.3E+06 | 6,000 | 30,000 | 5.8E+06 | 7.0E+05 | 1,700 | 4,000 | 4,500 | 2.4E+06 | NLL | NLL | NLL | NLL | NA | NA | NLL | | 5.00E+06 |
| Groundwater Surface Water Interface Protection Criteria (GSIPC) | | | 34,000 | 570 | 4,200 | NLL | NLL | NLL | 5,500 | ID | 4,600 | (G) | (G,X) | 3,300 | (G) | (G,X) | 50 (M); 1.2 | 400 | 100 (M); 27 | (G) | NLL | NLL | NLL | NLL | NA | NA | NLL | | (X) |
| Soil Volatilization to Indoor Air Inhalation (SVIIC) | | | 2.9E+8 (C) | 4.3E+6 (C) | 2,700,000 | NLV | ID | NLV | 1.0E+09 (D) | 1.0E+09 (D) | NLV | NLV | NLV | NLV | NLV | NLV | 48,000 | NLV | NLV | NLV | NLV | NLV | NLV | 1.40E+05 | NA | NA | 1.10E+07 | | NLV |
| Soil Volatilization to Indoor Air Pathway (SVIAP) | | | 2.6E+05 (EE) | 150 (JT) | NA | 1.6E+05 (MM) | NA | NA | NA | 2.5E+07 | NA | NA | NA | -- | NA | NA | 22 (M) | NA | NA | NA | NLV | NA | -- | 770 | NA | NA | 13,000 | | -- |
| Infinite Source Volatile Soil Inhalation Criteria (VSIC) | | | 1.3E+08 | 2.1E+07 | 1,500,000 | NLV | ID | NLV | 7.4E+08 | 6.5E+08 | NLV | NLV | NLV | NLV | NLV | NLV | 52,000 | NLV | NLV | NLV | NLV | NLV | NLV | 19000 | NA | NA | 1.20E+06 | | NLV |
| Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m) | | | 1.3E+08 | 5.0E+08 | 1,500,000 | NLV | ID | NLV | 7.4E+08 | 6.5E+08 | NLV | NLV | NLV | NLV | NLV | NLV | 52,000 | NLV | NLV | NLV | NLV | NLV | NLV | 1900 | NA | NA | 1.20E+06 | | NLV |
| Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m) | | | 1.9E+08 | 5.0E+08 | 1,500,000 | NLV | ID | NLV | 7.4E+08 | 6.5E+08 | NLV | NLV | NLV | NLV | NLV | NLV | 52,000 | NLV | NLV | NLV | NLV | NLV | NLV | 19000 | NA | NA | 1.20E+06 | | NLV |
| Particulate Soil Inhalation Criteria (PSIC) | | | 3.9E+11 | 8.2E+10 | 6.7E+08 | ID | ID | 1.5E+06 | 9.3E+09 | 6.7E+09 | 7.2E+05 | 3.3E+08 | 1.7E+06 | 2.6E+05 | 1.3E+08 | 1.0E+08 | 2.0E+07 | 1.3E+08 | 6.7E+06 | ID | 4.4E+07 | 3.20E+07 | 3.20E+07 | 6.8E+05 | NA | NA | 3.1E+07 | | ID |
| Direct Contact Criteria (DCC) | | | 2.3E+07 | 3.2E+07 (C) | 8,100,000 | 20,000 | 20,000 | 2,000 | 4.6E+07 | 2.9E+07 | 7,600 | 3.7E+07 | 5.5E+05 | 2.5E+06 | 2.0E+07 | 4.0E+05 | 1.6E+05 | 2.6E+06 | 2.5E+06 | 1.7E+08 | 95,000 | 45,000 | 57,000 | 1,100 | NA | NA | 31,000 | | 5.0E+5 (F) |
| Soil Saturation Concentration Screening Levels ($C_{sat}$) | | | 1.1E+08 | 1.1E+05 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA |
| Recommended Interim Action Screening Level (RIASL) | | | 2.6E+05 | 150 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.7E-02 | NA | NA | NA | NA | NA | -- | NA | NA | NA | NA | | -- |
| SAMPLE ID | DEPTH | SAMPLE DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8070 SB01 | 1-2 | 8/14/2025 | <127 | <38 | <3,700 | <3,700 | <3,700 | <3,700 | <3,700 | <3,700 | **3,910** | **35,600** | <1,140 | **10,500** | **12,500** | **28,400** | **43** | <2,860 | <2,860 | **42,500** | **4.5** | **24** | **9.6** | <1.9 | **3.0** | **2.7** | **5.7** | ND | **45,500** |
| 8070 SB02 | 3-4 | 8/14/2025 | **630** | **110** | <3,900 | <3,900 | <3,900 | <3,900 | <3,900 | <3,900 | **16,700** | **24,100** | <1,320 | **24,500** | **6,550** | **25,000** | **121** | <3,330 | <3,330 | **33,800** | **9.1** | **33** | **4.3** | **2.4** | <2.0 | <2.0 | <9.7 | ND | **67,800** |
| 8070 SB03 | 5-6 | 8/14/2025 | <146 | <43.8 | <2,300 | <2,300 | <2,300 | <2,300 | <2,300 | <2,300 | **9,660** | **81,700** | <1,280 | **20,200** | **15,000** | **49,400** | **55.3** | <3,210 | <3,210 | **97,800** | **5.4** | **15** | **3.6** | <2.1 | <2.1 | <2.1 | <10 | ND | **18,600** |
| 8070 Wisner SB02 - R | 3-4 | 10/28/2025 | NS | NS | **209** | **244** | **244** | **244** | **209** | **435** | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

**Notes:**
**Bold** indicates concentration above laboratory reporting limits.
Exceeds DWPC
Exceeds GSIPC
Exceeds Applicable Soil Vapor Inhalation screening level
Exceeds Two or More DWPC, GSIPC, and/or Applicable Soil Vapor Inhalation screening levels
Exceeds PSIC, DCC, and/or Csat, likely exceeds others
ND = Not Detected above laboratory reporting limits
NS = Not Sampled or Not Analyzed
NR = Not Reported (Data missing from provided report)
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, updated October 12, 2023
VIAP Screening Levels and notes from EGLE Guidance Document For The Vapor Intrusion Pathway, Appendix D.1 Vapor Intrusion Screening Values, May 2013, updated February 26, 2024

**Table 2**
**TCLP Analytical Detection Summary**

Detroit Backfill Sampling
8070 Wisner, Detroit, Michigan

| 40 C.F.R. § 261.24<br>Code of Federal Regulations<br>Title 40 - Protection of Environment<br>Chapter I - Environmental Protection Agency<br>Subchapter I - Solid Wastes<br>Part 261- Identification and Listing of Hazardous Waste<br>Subpart C - Characteristics of Hazardous Waste<br>*Units: mg/L* | | **TCLP Metals** | |
|---|---|---|---|
| | | Chromium | Arsenic |
| Maximum Concentration of Contaminants for the Toxicity Characteristic | | 5.00 | 5.00 |
| SAMPLE ID | SAMPLE DATE | | |
| 8070 Wisner SB02 TCLP | 10/7/2025 | <0.0499 | <0.0499 |

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 REPORTS

# DAILY FIELD REPORT

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

**Date:** 08/14/2025 **Day:** Thursday
**MSG Personnel:** SRK, BM
**Personnel:** MSG
**MSG Hours On-Site:** ~ 1 hours

| | | (AM) | | (PM) |
|---|---|---|---|---|
| **Temp:** | 70 º F | (AM) | N/A | (PM) |
| **Cloud Cover:** | 0% | (AM) | N/A | (PM) |
| **Precip.:** | N/A | (AM) | N/A | (PM) |

**Contractors Information**

| Contractor: | No. Men and Type: | Equipment Type: |
|---|---|---|
| MSG | 2; Operator/Geologist | 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:**

- 0940 – SRK and BM onsite (8070 Wisner Avenue)
- 0942 – Unloaded equipment and marked boring locations
- 0949 – Began drilling SB01
- 0951 – Finished drilling SB01
- 0953 – Began drilling SB02
- 0955 – Finished drilling SB02
- 0957 – Began drilling SB03
- 0957 – Sampled 8070 SB01 (1-2')
- 0959 – Finished drilling SB03
- 1013 – Sampled 8070 SB02 (3-4')
- 1026 – Sampled 8070 SB03 (5-6')
- 1030 – Packed up equipment
- 1038 – MSG off site

**Supporting Documentation**

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

**Problem Identification and Corrective Measures**

N/A

Resolved? Yes ☐ No ☐

# DAILY FIELD REPORT

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

**Date:** 10/7/2025 **Day:** Tuesday
**MSG Personnel:** SRK, JF, EB
**Personnel:** MSG
**MSG Hours On-Site:** ~ 1 hours

| | | | | |
|---|---|---|---|---|
| **Temp:** | N/A | **(AM)** | 60 º F | **(PM)** |
| **Cloud Cover:** | N/A | **(AM)** | 100% | **(PM)** |
| **Precip.:** | N/A | **(AM)** | Scattered Showers | **(PM)** |

**Contractors Information**

| Contractor: | No. Men and Type: | Equipment Type: |
|---|---|---|
| MSG | 3; Operator/Geologist | Geoprobe 7822DT |

**Summary of Work Performed:**

- Advanced one (1) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs)
- Collected TCLP of fill material from soil boring (composite sample of from zero to 6 feet bgs).

**Field Notes:**

- 1417 – MSG (SRK, JF) onsite (8070 Wisner)
- 1420 – Attempted to locate previous boring locations. Marked out new boring location.
- 1428 – Began drilling SB02 TCLP
- 1430 – Finished drilling SB02 TCLP
- 1435 – Sampled 8070 Wisner SB02 TCLP
- 1435 – EB onsite to collect samples
- 1440 – Collected GPS points
- 1445 – EB offsite with samples
- 1450 – Packed up equipment
- 1455 – MSG off site

**Supporting Documentation**

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

**Problem Identification and Corrective Measures**

N/A

Resolved? Yes ☐ No ☐

# DAILY FIELD REPORT

**Client:** City of Detroit Demolition Department
**Project:** Sampling and Analysis of Fill Material
**Report No.:** 3
**Job No.:** DETR0060

**Date:** 10/28/2025 **Day:** Tuesday
**MSG Personnel:** WRD, BSM

| | | (AM) | (PM) |
|---|---|---|---|
| **Temp:** | 53 º F | N/A | |
| **Cloud Cover:** | 0% | N/A | |
| **Precip.:** | N/A | N/A | |

**Personnel:** MSG
**MSG Hours On-Site:** ~ 0.5 hours

**Contractors Information**

| Contractor: | No. Men and Type: | Equipment Type: |
|---|---|---|
| MSG | 2; Operator/Geologist | Geoprobe 7822DT |

**Summary of Work Performed:**

- Advanced one (1) onsite soil borings to a maximum depth of 4 feet below ground surface (bgs)
- Collected soil sample from soil boring (from the interval 3-4' to analyze for SVOCs).

**Field Notes:**

- 1113 – MSG (WRD, BSM) onsite (8070 Wisner)
- 1116 – Attempted to locate previous boring locations. Marked out new boring location.
- 1118 – Began drilling SB02 (3-4')-R
- 1125 – Finished drilling SB02 (3-4')-R
- 1128 – Sampled 8070 Wisner SB02 (3-4')-R
- 1134 – Packed up equipment
- 1138 – MSG off site

**Supporting Documentation**

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

**Problem Identification and Corrective Measures**

N/A

Resolved? Yes ☐ No ☐

# APPENDIX C

INVESTIGATION PHOTOGRAPHS

Photo 1: Viewing Site Pre-Drilling, Facing Southeast.

Photo 2: Viewing 8070 SB01 Drilling, Facing East.

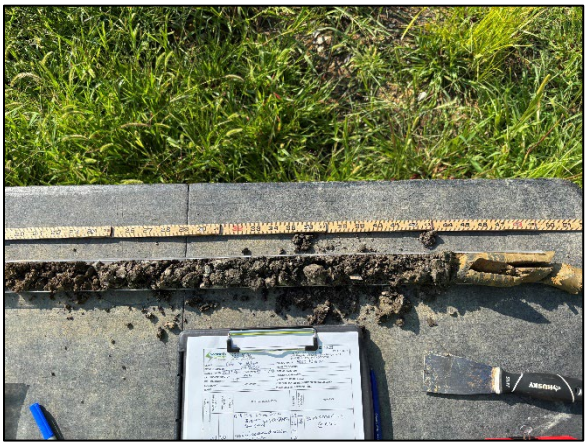

Photo 3: Viewing 8070 SB01 Soils, Facing Southeast.

Photo 4: Viewing 8070 SB02 Drilling, Facing East.

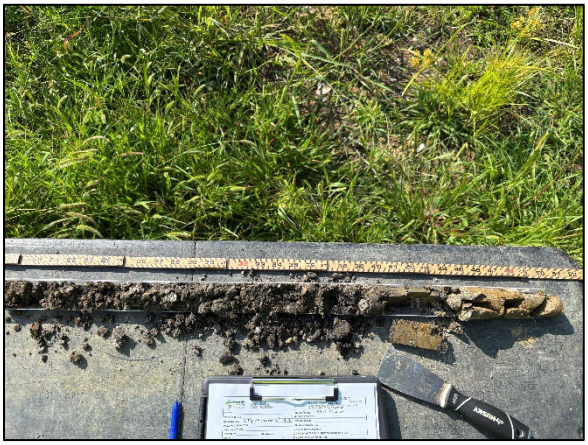

Photo 5: Viewing 8070 SB02 Soils, Facing Southeast.

Photo 6: Viewing 8070 SB03 Drilling, Facing East.

Photo 7: Viewing 8070 SB03 Soils, Facing Southeast.

Photo 8: Viewing Site Post-Drilling, Facing Southeast.

Photo 9: View of Site at the time of TCLP soil boring activities.

Photo 10: View of soil recovery at the time of TCLP sampling

Photo 11: View of TCLP soil boring location.

Photo 12: View of Site at the time of supplemental soil sampling activities

Photo 13: Viewing soil recovery at the time of supplemental soil sampling activities

Photo 14: View of supplemental soil sample soil boring location

# APPENDIX D

SOIL BORING LOGS

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

# BORING ID: SB01



**CLIENT** City of Detroit
**PROJECT NAME** 8070 Wisner
**PROJECT NUMBER** DETR0060
**PROJECT LOCATION** 8070 Wisner Ave, Detroit, Michigan
**DATE STARTED** 8/14/25 **COMPLETED** 8/14/25
**BORING DIAMETER:** 3.25 inches
**DRILLING CONTRACTOR** MSG
**SURVEY COORDINATES:** N/A
**DRILLING METHOD** Direct Push
**GROUND SURFACE ELEV.:** N/A
**LOGGED BY** SRK **CHECKED BY** PDH
**GROUND WATER ENCOUNTERED DURING DRILLING:** Not Encountered
**NOTES**
**WATER LEVEL AFTER DRILLING:** N/A

| DEPTH (FEET) | SAMPLE TYPE NUMBER | RECOVERY (FEET) | GRAPHIC LOG | DEPTH (FEET) | MATERIAL DESCRIPTION | PID (ppm) | LABORATORY SAMPLE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Brown to Dark Brown Clayey SAND, some gravel | 1.2 | | |
| | | | | | | 2.8 | | Collected soil sample 8070 SB01 (1-2) at 9:57 |
| | MC 1 | 3.0 | | | Some concrete debris scattered from 2 - 4.5 feet bgs | 19.9 | | |
| | | | | | | 10.8 | | |
| 5 | | | | 5.0 | | 1.8 | | |
| | | | | | Brown Silty CLAY, trace gravel, trace sand | | | |
| | | | | 6.0 | | 0.9 | | |
| | | | | | Bottom of borehole at 6.0 feet. | | | |

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

# BORING ID: SB02



**CLIENT** City of Detroit
**PROJECT NAME** 8070 Wisner
**PROJECT NUMBER** DETR0060
**PROJECT LOCATION** 8070 Wisner Ave, Detroit, Michigan
**DATE STARTED** 8/14/25 **COMPLETED** 8/14/25
**BORING DIAMETER:** 3.25 inches
**DRILLING CONTRACTOR** MSG
**SURVEY COORDINATES:** N/A
**DRILLING METHOD** Direct Push
**GROUND SURFACE ELEV.:** N/A
**LOGGED BY** SRK **CHECKED BY** PDH
**GROUND WATER ENCOUNTERED DURING DRILLING:** Not Encountered
**NOTES**
**WATER LEVEL AFTER DRILLING:** N/A

| DEPTH (FEET) | SAMPLE TYPE NUMBER | RECOVERY (FEET) | GRAPHIC LOG | DEPTH (FEET) | MATERIAL DESCRIPTION | PID (ppm) | LABORATORY SAMPLE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Brown to Dark Brown Clayey SAND, trace gravel | 0.1 | | |
| | | | | | | 6.9 | | |
| | MC 1 | 3.0 | | | Some concrete debris scattered from 2 - 4.5 feet bgs | 7.0 | X | Collected soil sample 8070 SB02 (3-4) at 10:13 |
| | | | | | | 9.0 | | |
| | | | | 4.5 | | | | |
| 5 | | | | | Brown Silty CLAY, some sand, some gravel | 2.6 | | |
| | | | | 6.0 | | | | |
| | | | | | Bottom of borehole at 6.0 feet. | 1.3 | | |

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

# BORING ID: SB03



**CLIENT** City of Detroit
**PROJECT NAME** 8070 Wisner
**PROJECT NUMBER** DETR0060
**PROJECT LOCATION** 8070 Wisner Ave, Detroit, Michigan
**DATE STARTED** 8/14/25 **COMPLETED** 8/14/25
**BORING DIAMETER:** 3.25 inches
**DRILLING CONTRACTOR** MSG
**SURVEY COORDINATES:** N/A
**DRILLING METHOD** Direct Push
**GROUND SURFACE ELEV.:** N/A
**LOGGED BY** SRK **CHECKED BY** PDH
**GROUND WATER ENCOUNTERED DURING DRILLING:** Not Encountered
**NOTES**
**WATER LEVEL AFTER DRILLING:** N/A

| DEPTH (FEET) | SAMPLE TYPE NUMBER | RECOVERY (FEET) | GRAPHIC LOG | DEPTH (FEET) | MATERIAL DESCRIPTION | PID (ppm) | LABORATORY SAMPLE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Brown SAND, some gravel, little clay | 13.2 | | |
| | | | | | | 4.1 | | |
| | MC 1 | 2.5 | | | Some concrete debris scattered from 2 - 4.5 feet bgs | 2.8 | | |
| | | | | | | 5.3 | | |
| | | | | 4.5 | | | | |
| 5 | | | | | Brown Silty CLAY, trace gravel, little sand | 4.6 | X | Collected soil sample 8070 SB03 (5-6) at 10:26 |
| | | | | 5.8 | | | | |
| | | | | 6.0 | Concrete debris (Fill) | 2.0 | | |
| | | | | | Bottom of borehole at 6.0 feet. | | | |

# APPENDIX E

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS

right solutions.
right partner.

# CERTIFICATE OF ANALYSIS

## Work Order

**HN2511514**

## Client

**The Mannik & Smith Group, Inc.**

## Project

**8070_Wisner**

## Project Date

**August 15, 2025**

## Reporting Contact

**Ryan Montri**

right solutions.
right partner.

September 11, 2025

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

Work Order: **HN2511514**

Re: **8070_Wisner**

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

**Bill Carey**
**/S/ BILL CAREY**

**Project Manager**

**Client:** The Mannik & Smith Group, Inc. **Work Order:** HN2511514
**Project:** 8070_Wisner **Date Received:** 15-Aug-2025

## CASE NARRATIVE

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

### Sample Receipt

3 soil/solid samples were received for analysis at ALS Environmental on 15-Aug-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

### Metals

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

##### Run ID: 3418146

The MSD recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ba, Pb, Zn Batch 2170126
The MS recovery was outside of the control limit. However, the MSD recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte: Cu Batch 2170126
The MS recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ba, Pb, Zn Batch 2170126
HN2511514-001: Cadmium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-001: Selenium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-001: Silver - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-002: Silver - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-002: Selenium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-002: Cadmium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-003: Cadmium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-003: Silver - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag
HN2511514-003: Selenium - The reporting limit is elevated due to dilution for high concentrations of non-target analytes. Cd, Se, Ag

### Organics

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

**Run ID: 3431804**

The Continuing Calibration Verification did not meet acceptance criteria with high bias, however, the sample results were non-detect for the following analytes: methyl bromide

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

## Inorganics

### EPA 9056A-S (High)

**Run ID: 3408572**

The MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: Chloride, Sulfate

# 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: 8070 SB01 (1-2) | | Lab ID: HN2511514-001 | | | |
|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MRL** | **Units** | **Method** |
| Arsenic | 3.91 | | 2.86 | mg/kg | EPA 6020B |
| Barium | 35.6 | | 2.86 | mg/kg | EPA 6020B |
| Chloride | 45.5 | | 10.8 | mg/kg | EPA 9056A |
| Chromium | 10.5 | | 2.86 | mg/kg | EPA 6020B |
| Copper | 12.5 | | 2.86 | mg/kg | EPA 6020B |
| Lead | 28.4 | | 2.86 | mg/kg | EPA 6020B |
| Mercury | 0.0430 | | 0.0217 | mg/kg | EPA 7471B |
| Percent Moisture | 10.8 | | 0.1 | % | EPA 3550C |
| Subcontract Analysis | See attached. | | | - | EPA 8151A |
| Subcontract Analysis | See attached. | | | - | EPA 8081B |
| Subcontract Analysis | See attached. | | | - | EPA 8082A |
| Subcontract Analysis | See attached. | | | - | EPA 8270E |
| Zinc | 42.5 | | 5.72 | mg/kg | EPA 6020B |

| CLIENT ID: 8070 SB02 (3-4) | | Lab ID: HN2511514-002 | | | |
|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MRL** | **Units** | **Method** |
| 1,2,4-Trimethylbenzene | 110 | | 40.4 | µg/kg | EPA 8260D |
| Acetone | 630 | | 135 | µg/kg | EPA 8260D |
| Arsenic | 16.7 | | 3.30 | mg/kg | EPA 6020B |
| Barium | 24.1 | | 3.30 | mg/kg | EPA 6020B |
| Chloride | 67.8 | | 11.7 | mg/kg | EPA 9056A |
| Chromium | 24.5 | | 3.30 | mg/kg | EPA 6020B |
| Copper | 6.55 | | 3.30 | mg/kg | EPA 6020B |
| Lead | 25.0 | | 3.30 | mg/kg | EPA 6020B |
| Mercury | 0.121 | | 0.0209 | mg/kg | EPA 7471B |
| Percent Moisture | 14.9 | | 0.1 | % | EPA 3550C |
| Subcontract Analysis | See attached. | | | - | EPA 8151A |
| Subcontract Analysis | See attached. | | | - | EPA 8081B |
| Subcontract Analysis | See attached. | | | - | EPA 8082A |
| Subcontract Analysis | See attached. | | | - | EPA 8270E |
| Zinc | 33.8 | | 6.61 | mg/kg | EPA 6020B |

| CLIENT ID: 8070 SB03 (5-6) | | Lab ID: HN2511514-003 | | | |
|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MRL** | **Units** | **Method** |
| Arsenic | 9.66 | | 3.21 | mg/kg | EPA 6020B |
| Barium | 81.7 | | 3.21 | mg/kg | EPA 6020B |
| Chloride | 18.6 | | 12.0 | mg/kg | EPA 9056A |
| Chromium | 20.2 | | 3.21 | mg/kg | EPA 6020B |
| Copper | 15.0 | | 3.21 | mg/kg | EPA 6020B |
| Lead | 49.4 | | 3.21 | mg/kg | EPA 6020B |
| Mercury | 0.0553 | | 0.0220 | mg/kg | EPA 7471B |

# 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: 8070 SB03 (5-6) | | | Lab ID: HN2511514-003 | | |
|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MRL** | **Units** | **Method** |
| Percent Moisture | 18.6 | | 0.1 | % | EPA 3550C |
| Subcontract Analysis | See attached. | | | - | EPA 8151A |
| Subcontract Analysis | See attached. | | | - | EPA 8081B |
| Subcontract Analysis | See attached. | | | - | EPA 8082A |
| Subcontract Analysis | See attached. | | | - | EPA 8270E |
| Zinc | 97.8 | | 6.42 | mg/kg | EPA 6020B |

# SAMPLE SUMMARY

**Client:** The Mannik & Smith Group, Inc.
**Project:** 8070_Wisner
**Workorder:** HN2511514

| Laboratory Sample ID | Client Sample ID | Sample Matrix | Collection Date | Date Received |
|---|---|---|---|---|
| HN2511514-001 | 8070 SB01 (1-2) | SOIL/SOLID | 08/14/25 09:57 | 08/15/25 08:00 |
| HN2511514-002 | 8070 SB02 (3-4) | SOIL/SOLID | 08/14/25 10:13 | 08/15/25 08:00 |
| HN2511514-003 | 8070 SB03 (5-6) | SOIL/SOLID | 08/14/25 10:26 | 08/15/25 08:00 |

ALS Environmental

**Laboratory location:**

# Chain of Custody Form

Page 1 of 1

**ALS Project Manager:** | **Work Order #:**

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| Purchase Order | | Project Name | 8070_Wisner | A | VOCs (U.S. EPA Method 8260C (or Method 8260)) |
| Work Order | | Project Number | DETR0060 | B | SVOCs (U.S. EPA Method 8270D (or Method 8270)) |
| Company Name | The Mannik and Smith Group | Bill To Company | The Mannik and Smith Group | C | PCBs (U.S. EPA Method 8082) |
| Send Report To | Ryan Montri | Invoice Attn. | | D | Mi 10 Metals (U.S. EPA 6000/7000 Series Methods) |
| Address | 2365 Haggerty Rd South Suite 100 | Address | 2365 Haggerty Rd South Suite 100 | E | Chorides (U.S. EPA Method 9056A) |
| | | | | F | Pesticides (U.S. EPA Method 8081B (or Method 8081)) |
| City/State/Zip | Canton, MI 48188 | City/State/Zip | Canton, MI 48188 | G | Herbicides (U.S. EPA Method 8151A (or Method 8151)) |
| Phone | 734-397-3100 | Phone | 734-397-3100 | H | |
| Fax | | Fax | | I | |
| e-Mail Address | RMontri@manniksmithgroup.com | e-Mail Address | | J | |

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8070 SB01 ( 1-2 ) | 8/14/25 | 9:57 | Soil | 7 | 3 | X | X | X | X | X | X | X | | | | |
| 2 | 8070 SB02 ( 3-4 ) | 8/14/25 | 10:13 | Soil | 7 | 3 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | | | |
| 3 | 8070 SB03 ( 5-6 ) | 8/14/25 | 10:26 | Soil | 7 | 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

Environmental Division Holland

Work Order Reference

HN2511514

Telephone : +1 616 399 6070

**Sampler(s): Please Print & Sign** Shannon Kaczmarek

**Shipment Method:**

**Required Turnaround Time:** ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

**Results Due Date:**

| | | | | | |
|---|---|---|---|---|---|
| **Relinquished by:** | **Date:** 8/14/25 | **Time:** | **Received by:** | **Notes:** Quote# HN-061825-M&S-MA | |
| **Relinquished by:** | **Date:** 8/14/25 | **Time:** 1700 | **Received by (Laboratory):** | **Cooler Temp.** | **QC Package: (Check Box Below)** |
| **Logged by (Laboratory):** | **Date:** | **Time:** | **Checked by (Laboratory):** | | ☐ Level II: Standard QC ☐ TRRP-Checklist<br>☐ Level III: Std QC + Raw Data ☐ TRRP Level IV<br>☐ Level IV: SW846 CLP-Like<br>☐ 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 Holland Sample Receiving Checklist

| | |
|---|---|
| Received by: | BC |
| Date/Time: | 8/15/25 08:00 |
| 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): | 2.1°C |
| Thermometer(s): | IR6 |
| Sample(s) received on ice? | Yes / No |
| Matrix/Matrices: | ~~Water~~ BC Soil |
| Cooler(s)/Kit(s): | 1 |
| Date/Time sample(s) sent to storage: | 8/15/25 |
| 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 Reporting Limit |
| E | Value above quantitation range |
| H | Analyzed outside of Holding Time |
| J | Analyte is present at an estimated concentration between the MDL and Report Limit |
| NC | Not Calculated |
| ND | Not Detected at the Reporting Limit |
| O | Sample amount is > 4 times amount spiked |
| P | Dual Column results percent difference > 40% |
| R | RPD above laboratory control limit |
| S | Spike Recovery outside laboratory control limits |
| U | Analyzed but not detected above the MDL |
| V | The Continuing Calibration Verification was outside of control criteria |
| X | Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level. |

## Holland Laboratory Certifications[1]

| Agency | Type | ID | Issued | Expires |
|---|---|---|---|---|
| Alabama | Drinking Water (Secondary) | 42500 | 12/17/2024 | 12/31/2025 |
| Colorado | UST | | 07/01/2025 | 06/30/2026 |
| Connecticut | Drinking Water (Secondary) | PH-0155 | 12/10/2024 | 12/31/2026 |
| Florida | NELAP (Primary) | E871106 | 07/01/2025 | 06/30/2026 |
| Illinois | NELAP (Secondary) | 200076 | 11/14/2024 | 12/31/2025 |
| Indiana | Drinking Water (Secondary) | C-MI-08 | 12/31/2024 | 09/04/2026 |
| Iowa | State Specific | 403 | 09/18/2023 | 09/01/2025 |
| Kansas | NELAP (Secondary) | E-10411 | 07/09/2024 | 07/31/2025 |
| Kentucky | Waste Water | KY98004 | 12/20/2024 | 12/31/2025 |
| Kentucky | UST | 120474 | 06/24/2024 | 06/30/2025 |
| Michigan | Drinking Water (Primary) | 0022 | 12/19/2023 | 09/04/2026 |
| Minnesota | NELAP (Secondary) | 026-999-449 | 12/17/2024 | 12/31/2025 |
| Missouri | Drinking Water (Secondary) | 01262 | 11/14/2024 | 12/30/2027 |
| New Jersey | NELAP (Secondary) | MI015 | 07/01/2024 | 6/30/2025 |
| New York | NELAP (Secondary) | 12128 | 04/01/2025 | 04/01/2026 |
| North Dakota | State Specific | R-192 | 11/18/2024 | 06/30/2025 |
| Ohio | Drinking Water (Secondary) | 87783 | 06/26/2025 | 6/30/2026 |
| Pennsylvania | NELAP (Secondary) | 68-03827 | 06/14/2024 | 07/31/2025 |
| Texas | NELAP (Secondary) | T104704494 | 02/12/2025 | 01/31/2026 |
| USDA | Domestic CA | Soil-MI-007 | 02/06/2025 | 08/07/2026 |
| USDA | Soil Import | 525-23-62-77572 | 03/03/2023 | 03/03/2026 |
| West Virginia | State Specific | 355 | 06/07/2025 | 08/31/2026 |
| Wisconsin | State Specific | 399084510 | 08/15/2024 | 08/31/2025 |

1 - Scope available upon request

# ANALYST SUMMARY

**Client:** The Mannik & Smith Group, Inc. **Work Order:** HN2511514
**Project:** 8070_Wisner

**Sample Name:** 8070 SB01 (1-2) **Date Collected:** 08/14/25
**Laboratory Code:** HN2511514-001 **Date Received:** 08/15/25
**Sample Matrix:** SOIL/SOLID

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 3550C | | 001-AC | 2170197 | | 3416403 | Nicole Maleski |
| EPA 6020B | EPA 3050B | 001-AC | 2170126 | Weston Kotecki | 3418146 | Hunter Johnson |
| EPA 7471B | Method | 001-AC | 2170118 | Maxx Richey | 3420366 | Maxx Richey |
| EPA 8081B | | 001-AD | | | 3484512 | Bill Carey |
| EPA 8082A | | 001-AD | | | 3484512 | Bill Carey |
| EPA 8151A | | 001-AD | | | 3484512 | Bill Carey |
| EPA 8260D | EPA 5035A | 001-AA | 2162539 | Jonathan Vazquez | 3431804 | Ali Cook |
| EPA 8270E | | 001-AD | | | 3484512 | Bill Carey |
| EPA 9056A | EPA 9056A | 001-AC | 2165419 | Katrina Grassel | 3408572 | Riley Miller |

**Sample Name:** 8070 SB02 (3-4) **Date Collected:** 08/14/25
**Laboratory Code:** HN2511514-002 **Date Received:** 08/15/25
**Sample Matrix:** SOIL/SOLID

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 3550C | | 002-AC | 2170197 | | 3416403 | Nicole Maleski |
| EPA 6020B | EPA 3050B | 002-AC | 2170126 | Weston Kotecki | 3418146 | Hunter Johnson |
| EPA 7471B | Method | 002-AC | 2170118 | Maxx Richey | 3420366 | Maxx Richey |
| EPA 8081B | | 002-AD | | | 3484512 | Bill Carey |
| EPA 8082A | | 002-AD | | | 3484512 | Bill Carey |
| EPA 8151A | | 002-AD | | | 3484512 | Bill Carey |
| EPA 8260D | EPA 5035A | 002-AA | 2162539 | Jonathan Vazquez | 3431804 | Ali Cook |
| EPA 8270E | | 002-AD | | | 3484512 | Bill Carey |
| EPA 9056A | EPA 9056A | 002-AC | 2165419 | Katrina Grassel | 3408572 | Riley Miller |

**Sample Name:** 8070 SB03 (5-6) **Date Collected:** 08/14/25
**Laboratory Code:** HN2511514-003 **Date Received:** 08/15/25
**Sample Matrix:** SOIL/SOLID

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 3550C | | 003-AC | 2170197 | | 3416403 | Nicole Maleski |

# ANALYST SUMMARY

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | | |

| | | | |
|---|---|---|---|
| **Sample Name:** | 8070 SB03 (5-6) | **Date Collected:** | 08/14/25 |
| **Laboratory Code:** | HN2511514-003 | **Date Received:** | 08/15/25 |
| **Sample Matrix:** | SOIL/SOLID | | |

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 6020B | EPA 3050B | 003-AC | 2170126 | Weston Kotecki | 3418146 | Hunter Johnson |
| EPA 7471B | Method | 003-AC | 2170118 | Maxx Richey | 3420366 | Maxx Richey |
| EPA 8081B | | 003-AD | | | 3484512 | Bill Carey |
| EPA 8082A | | 003-AD | | | 3484512 | Bill Carey |
| EPA 8151A | | 003-AD | | | 3484512 | Bill Carey |
| EPA 8260D | EPA 5035A | 003-AA | 2162539 | Jonathan Vazquez | 3431804 | Ali Cook |
| EPA 8270E | | 003-AD | | | 3484512 | Bill Carey |
| EPA 9056A | EPA 9056A | 003-AC | 2165419 | Katrina Grassel | 3408572 | Riley Miller |

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB01 (1-2)** **Lab ID: HN2511514-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters** | | | | | | | | |
| Percent Moisture | EPA 3550C | **10.8** | | % | 0.1 | 1 | 08/20/25 14:08 | NA |
| Chloride | EPA 9056A | **45.5** | | mg/kg | 10.8 | 1 | 08/17/25 17:37 | 08/17/25 14:43 |
| **Metals** | | | | | | | | |
| Arsenic | EPA 6020B | **3.91** | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Barium | EPA 6020B | **35.6** | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Cadmium | EPA 6020B | ND | | mg/kg | 1.14 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Chromium | EPA 6020B | **10.5** | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Copper | EPA 6020B | **12.5** | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Lead | EPA 6020B | **28.4** | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Selenium | EPA 6020B | ND | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Silver | EPA 6020B | ND | | mg/kg | 2.86 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Zinc | EPA 6020B | **42.5** | | mg/kg | 5.72 | 10 | 08/20/25 20:31 | 08/20/25 09:47 |
| Mercury | EPA 7471B | **0.0430** | | mg/kg | 0.0217 | 1 | 08/21/25 10:25 | 08/21/25 08:13 |
| **Subcontracted Parameters** | | | | | | | | |
| Subcontract Analysis | EPA 8081B | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8082A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8151A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8270E | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| **Volatile Organic Compounds by GC-MS** | | | | | | | | |
| 1,1,1-Trichloroethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,1,2,2-Tetrachloroethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,1,2-Trichloroethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,1-Dichloroethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,1-Dichloroethylene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2,3-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2,3-Trichloropropane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2,4-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2,4-Trimethylbenzene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2-Dibromo-3-chloropropane (DBCP) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB01 (1-2)** **Lab ID: HN2511514-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane (EDB, Ethylene dibromide) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2-Dichlorobenzene (o-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2-Dichloroethane (Ethylene dichloride) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,2-Dichloropropane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,3,5-Trimethylbenzene | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,3-Dichlorobenzene (m-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 76.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 1,4-Dichlorobenzene (p-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 2-Butanone (Methyl ethyl ketone, MEK) | EPA 8260D | ND | | µg/kg | 253 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 2-Hexanone | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| 4-Methyl-2-pentanone (MIBK) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Acetone | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Benzene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Bromochloromethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Bromodichloromethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Bromoform | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Carbon disulfide | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Carbon tetrachloride | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Chlorobenzene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Chlorodibromomethane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Chloroethane (Ethyl chloride) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Chloroform | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| cis & trans-1,2-Dichloroethene | EPA 8260D | ND | | µg/kg | 76.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| cis-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| cis-1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Cyclohexane | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Dichlorodifluoromethane (Freon-12) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Ethylbenzene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Isopropylbenzene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB01 (1-2)** **Lab ID: HN2511514-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| m+p-Xylene | EPA 8260D | ND | | µg/kg | 76.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methyl acetate | EPA 8260D | ND | | µg/kg | 317 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methyl bromide (Bromomethane) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methyl chloride (Chloromethane) | EPA 8260D | ND | | µg/kg | 127 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methyl tert-butyl ether (MTBE) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methylcyclohexane | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Methylene chloride (Dichloromethane) | EPA 8260D | ND | | µg/kg | 317 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| o-Xylene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Styrene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Tetrachloroethylene (Perchloroethylene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Toluene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Total Xylene | EPA 8260D | ND | | µg/kg | 114 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| trans-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| trans-1,3-Dichloropropylene | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Trichloroethene (Trichloroethylene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| Vinyl chloride (Chloroethene) | EPA 8260D | ND | | µg/kg | 38.0 | 1 | 08/23/25 10:55 | 08/15/25 13:16 |
| *Surr: 1,2-Dichloroethane-d4* | *EPA 8260D* | ***100*** | | *%REC* | *80-120* | *1* | *08/23/25 10:55* | *08/15/25 13:16* |
| *Surr: 4-Bromofluorobenzene* | *EPA 8260D* | ***101*** | | *%REC* | *80-120* | *1* | *08/23/25 10:55* | *08/15/25 13:16* |
| *Surr: Dibromofluoromethane* | *EPA 8260D* | ***95.2*** | | *%REC* | *80-120* | *1* | *08/23/25 10:55* | *08/15/25 13:16* |
| *Surr: Toluene-d8* | *EPA 8260D* | ***105*** | | *%REC* | *80-120* | *1* | *08/23/25 10:55* | *08/15/25 13:16* |

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB02 (3-4)** **Lab ID: HN2511514-002**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters** | | | | | | | | |
| Percent Moisture | EPA 3550C | **14.9** | | % | 0.1 | 1 | 08/20/25 14:08 | NA |
| Chloride | EPA 9056A | **67.8** | | mg/kg | 11.7 | 1 | 08/17/25 17:47 | 08/17/25 14:43 |
| **Metals** | | | | | | | | |
| Arsenic | EPA 6020B | **16.7** | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Barium | EPA 6020B | **24.1** | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Cadmium | EPA 6020B | ND | | mg/kg | 1.32 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Chromium | EPA 6020B | **24.5** | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Copper | EPA 6020B | **6.55** | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Lead | EPA 6020B | **25.0** | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Selenium | EPA 6020B | ND | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Silver | EPA 6020B | ND | | mg/kg | 3.30 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Zinc | EPA 6020B | **33.8** | | mg/kg | 6.61 | 10 | 08/20/25 20:36 | 08/20/25 09:47 |
| Mercury | EPA 7471B | **0.121** | | mg/kg | 0.0209 | 1 | 08/21/25 10:27 | 08/21/25 08:13 |
| **Subcontracted Parameters** | | | | | | | | |
| Subcontract Analysis | EPA 8081B | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8082A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8151A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8270E | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| **Volatile Organic Compounds by GC-MS** | | | | | | | | |
| 1,1,1-Trichloroethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,1,2,2-Tetrachloroethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,1,2-Trichloroethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,1-Dichloroethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,1-Dichloroethylene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2,3-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2,3-Trichloropropane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2,4-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2,4-Trimethylbenzene | EPA 8260D | **110** | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2-Dibromo-3-chloropropane (DBCP) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB02 (3-4)** **Lab ID: HN2511514-002**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane (EDB, Ethylene dibromide) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2-Dichlorobenzene (o-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2-Dichloroethane (Ethylene dichloride) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,2-Dichloropropane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,3,5-Trimethylbenzene | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,3-Dichlorobenzene (m-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 80.9 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 1,4-Dichlorobenzene (p-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 2-Butanone (Methyl ethyl ketone, MEK) | EPA 8260D | ND | | µg/kg | 270 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 2-Hexanone | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| 4-Methyl-2-pentanone (MIBK) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Acetone | EPA 8260D | **630** | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Benzene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Bromochloromethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Bromodichloromethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Bromoform | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Carbon disulfide | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Carbon tetrachloride | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Chlorobenzene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Chlorodibromomethane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Chloroethane (Ethyl chloride) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Chloroform | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| cis & trans-1,2-Dichloroethene | EPA 8260D | ND | | µg/kg | 80.9 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| cis-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| cis-1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Cyclohexane | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Dichlorodifluoromethane (Freon-12) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Ethylbenzene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Isopropylbenzene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB02 (3-4)** **Lab ID: HN2511514-002**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| m+p-Xylene | EPA 8260D | ND | | µg/kg | 80.9 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methyl acetate | EPA 8260D | ND | | µg/kg | 337 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methyl bromide (Bromomethane) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methyl chloride (Chloromethane) | EPA 8260D | ND | | µg/kg | 135 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methyl tert-butyl ether (MTBE) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methylcyclohexane | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Methylene chloride (Dichloromethane) | EPA 8260D | ND | | µg/kg | 337 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| o-Xylene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Styrene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Tetrachloroethylene (Perchloroethylene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Toluene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Total Xylene | EPA 8260D | ND | | µg/kg | 121 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| trans-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| trans-1,3-Dichloropropylene | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Trichloroethene (Trichloroethylene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| Vinyl chloride (Chloroethene) | EPA 8260D | ND | | µg/kg | 40.4 | 1 | 08/23/25 11:14 | 08/15/25 13:16 |
| *Surr: 1,2-Dichloroethane-d4* | *EPA 8260D* | ***92.2*** | | *%REC* | *80-120* | *1* | *08/23/25 11:14* | *08/15/25 13:16* |
| *Surr: 4-Bromofluorobenzene* | *EPA 8260D* | ***102*** | | *%REC* | *80-120* | *1* | *08/23/25 11:14* | *08/15/25 13:16* |
| *Surr: Dibromofluoromethane* | *EPA 8260D* | ***88.0*** | | *%REC* | *80-120* | *1* | *08/23/25 11:14* | *08/15/25 13:16* |
| *Surr: Toluene-d8* | *EPA 8260D* | ***101*** | | *%REC* | *80-120* | *1* | *08/23/25 11:14* | *08/15/25 13:16* |

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB03 (5-6)** **Lab ID: HN2511514-003**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters** | | | | | | | | |
| Percent Moisture | EPA 3550C | **18.6** | | % | 0.1 | 1 | 08/20/25 14:08 | NA |
| Chloride | EPA 9056A | **18.6** | | mg/kg | 12.0 | 1 | 08/17/25 17:57 | 08/17/25 14:43 |
| **Metals** | | | | | | | | |
| Arsenic | EPA 6020B | **9.66** | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Barium | EPA 6020B | **81.7** | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Cadmium | EPA 6020B | ND | | mg/kg | 1.28 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Chromium | EPA 6020B | **20.2** | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Copper | EPA 6020B | **15.0** | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Lead | EPA 6020B | **49.4** | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Selenium | EPA 6020B | ND | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Silver | EPA 6020B | ND | | mg/kg | 3.21 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Zinc | EPA 6020B | **97.8** | | mg/kg | 6.42 | 10 | 08/20/25 20:38 | 08/20/25 09:47 |
| Mercury | EPA 7471B | **0.0553** | | mg/kg | 0.0220 | 1 | 08/21/25 10:35 | 08/21/25 08:13 |
| **Subcontracted Parameters** | | | | | | | | |
| Subcontract Analysis | EPA 8081B | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8082A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8151A | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| Subcontract Analysis | EPA 8270E | **See attached.** | | - | | 1 | 09/11/25 10:45 | NA |
| **Volatile Organic Compounds by GC-MS** | | | | | | | | |
| 1,1,1-Trichloroethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,1,2,2-Tetrachloroethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,1,2-Trichloroethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,1-Dichloroethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,1-Dichloroethylene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2,3-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2,3-Trichloropropane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2,4-Trichlorobenzene | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2,4-Trimethylbenzene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2-Dibromo-3-chloropropane (DBCP) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB03 (5-6)** **Lab ID: HN2511514-003**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane (EDB, Ethylene dibromide) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2-Dichlorobenzene (o-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2-Dichloroethane (Ethylene dichloride) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,2-Dichloropropane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,3,5-Trimethylbenzene | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,3-Dichlorobenzene (m-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 87.6 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 1,4-Dichlorobenzene (p-Dichlorobenzene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 2-Butanone (Methyl ethyl ketone, MEK) | EPA 8260D | ND | | µg/kg | 292 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 2-Hexanone | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| 4-Methyl-2-pentanone (MIBK) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Acetone | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Benzene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Bromochloromethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Bromodichloromethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Bromoform | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Carbon disulfide | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Carbon tetrachloride | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Chlorobenzene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Chlorodibromomethane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Chloroethane (Ethyl chloride) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Chloroform | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| cis & trans-1,2-Dichloroethene | EPA 8260D | ND | | µg/kg | 87.6 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| cis-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| cis-1,3-Dichloropropene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Cyclohexane | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Dichlorodifluoromethane (Freon-12) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Ethylbenzene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Isopropylbenzene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2511514 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 08/15/25 08:00 |

**CLIENT ID: 8070 SB03 (5-6)** **Lab ID: HN2511514-003**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| m+p-Xylene | EPA 8260D | ND | | µg/kg | 87.6 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methyl acetate | EPA 8260D | ND | | µg/kg | 365 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methyl bromide (Bromomethane) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methyl chloride (Chloromethane) | EPA 8260D | ND | | µg/kg | 146 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methyl tert-butyl ether (MTBE) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methylcyclohexane | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Methylene chloride (Dichloromethane) | EPA 8260D | ND | | µg/kg | 365 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| o-Xylene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Styrene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Tetrachloroethylene (Perchloroethylene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Toluene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Total Xylene | EPA 8260D | ND | | µg/kg | 131 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| trans-1,2-Dichloroethylene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| trans-1,3-Dichloropropylene | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Trichloroethene (Trichloroethylene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| Vinyl chloride (Chloroethene) | EPA 8260D | ND | | µg/kg | 43.8 | 1 | 08/23/25 11:33 | 08/15/25 13:16 |
| *Surr: 1,2-Dichloroethane-d4* | *EPA 8260D* | ***92.6*** | | *%REC* | *80-120* | *1* | *08/23/25 11:33* | *08/15/25 13:16* |
| *Surr: 4-Bromofluorobenzene* | *EPA 8260D* | ***97.1*** | | *%REC* | *80-120* | *1* | *08/23/25 11:33* | *08/15/25 13:16* |
| *Surr: Dibromofluoromethane* | *EPA 8260D* | ***90.2*** | | *%REC* | *80-120* | *1* | *08/23/25 11:33* | *08/15/25 13:16* |
| *Surr: Toluene-d8* | *EPA 8260D* | ***100*** | | *%REC* | *80-120* | *1* | *08/23/25 11:33* | *08/15/25 13:16* |

November 20, 2025 Service Request No:R2510166

Bill Carey
ALS Environmental - Holland
3352 128th Avenue
Holland, MI 49424

**Laboratory Results for: 8070_Wisner**

Dear Bill,

Enclosed are the results of the sample(s) submitted to our laboratory August 20, 2025
For your reference, these analyses have been assigned our service request number **R2510166.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7476. You may also contact me via email at Chris.Leavy@alsglobal.com.

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Christopher Leavy
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

# Narrative Documents

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Received:** 08/20/2025

## CASE NARRATIVE

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

**Sample Receipt:**

Three soil samples were received for analysis at ALS Environmental on 08/20/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

**Semivolatiles by GC/MS:**

Method 8270E: The Method Reporting Limit (MRL) was elevated due to less than optimal sample mass (15g) used in the microwave preparation process. The nature of the sample necessitated using less mass of sample to avoid overheating. Overheating causes the extraction solvent to vent out of the vessel and may cause damage to the microwave vessels.

Method 8270E, 891252: The reporting limit is elevated for one or more analytes. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and viscous, which indicated the need to perform a dilution prior to injection into the instrument. The result(s) are flagged to indicate the matrix interference.

**Semivoa GC:**

Method 8081B, 09/10/2025: The control limits were exceeded for analytes in the Continuing Calibration Verification (CCV). The QC failure was most likely due to the composition of the sample(s) immediately preceding the failing CCV. In order to protect the integrity of the instrument, no further corrective action was taken. Results should be considered estimated.

**General Chemistry:**

No significant anomalies were noted with this analysis.

Approved by _____ Date 11/20/2025

## SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

| CLIENT ID: 8070 SB01 (1-2) | | | Lab ID: R2510166-001 | | | |
|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MDL** | **MRL** | **Units** | **Method** |
| 4,4'-DDD | 4.5 | | 0.94 | 1.9 | ug/Kg | 8081B |
| 4,4'-DDE | 24 | | 0.94 | 1.9 | ug/Kg | 8081B |
| 4,4'-DDT | 9.6 | | 0.94 | 1.9 | ug/Kg | 8081B |
| alpha-Chlordane | 3.0 | P | 0.94 | 1.9 | ug/Kg | 8081B |
| gamma-Chlordane | 2.7 | | 0.94 | 1.9 | ug/Kg | 8081B |
| Total Solids | 89.2 | | | | Percent | ALS SOP |

| CLIENT ID: 8070 SB02 (3-4) | | | Lab ID: R2510166-002 | | | |
|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MDL** | **MRL** | **Units** | **Method** |
| 4,4'-DDD | 9.1 | | 0.98 | 2.0 | ug/Kg | 8081B |
| 4,4'-DDE | 33 | | 0.98 | 2.0 | ug/Kg | 8081B |
| 4,4'-DDT | 4.3 | | 0.98 | 2.0 | ug/Kg | 8081B |
| alpha-Chlordane | 2.0 | J | 0.98 | 2.0 | ug/Kg | 8081B |
| Dieldrin | 2.4 | | 0.98 | 2.0 | ug/Kg | 8081B |
| Total Solids | 85.1 | | | | Percent | ALS SOP |

| CLIENT ID: 8070 SB03 (5-6) | | | Lab ID: R2510166-003 | | | |
|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MDL** | **MRL** | **Units** | **Method** |
| 4,4'-DDD | 5.4 | | 1.1 | 2.1 | ug/Kg | 8081B |
| 4,4'-DDE | 15 | | 1.1 | 2.1 | ug/Kg | 8081B |
| 4,4'-DDT | 3.6 | P | 1.1 | 2.1 | ug/Kg | 8081B |
| Total Solids | 81.4 | | | | Percent | ALS SOP |

# Sample Receipt Information

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

**Client:** ALS Environmental - US **Service Request:**R2510166
**Project:** 8070_Wisner

## SAMPLE CROSS-REFERENCE

| SAMPLE # | CLIENT SAMPLE ID | DATE | TIME |
|---|---|---|---|
| R2510166-001 | 8070 SB01 (1-2) | 8/14/2025 | 0957 |
| R2510166-002 | 8070 SB02 (3-4) | 8/14/2025 | 1013 |
| R2510166-003 | 8070 SB03 (5-6) | 8/14/2025 | 1026 |

**ALS Group USA, Corp.**
3352 128th Ave Holland Michigan 49424 United States
T+1 616 399 6070 | F

right solutions, right partner.

# Subcontract Chain of Custody

**SAMPLING STATE:**

**COC ID: HN2511514**

**Subcontract To:**
Rochester - Environmental TEL: +1 585 288 5380
1565 Jefferson Road, Building 300, Suite 360 FAX:
Rochester New York 14623

Due Date: 08/26/2025
Analysis Report Format: ALS Standard – Level II
Electronic Data Deliverable:

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| **Purchase Order** | | **Project Name** | 8070_Wisner | **A** | EPA 8081B-3546-S (INT SUB) |
| **Work Order** | HN2511514 | | | **B** | EPA 8082A-3546-S (INT SUB) |
| **Company Name** | Holland - Environmental | **Bill To Company** | Holland - Environmental | **C** | EPA 8151A-S (INT SUB) |
| **Send Report To** | Bill Carey | **Inv Attn** | Accounts Payable | **D** | EPA 8270E-TCL-3546-S (INT SUB) |
| **Address** | 3352 128th Ave | **Address** | 3352 128th Ave | **E** | |
| | | | | **F** | |
| **City/State/Zip** | Holland Michigan 49424 | **City/State/Zip** | Holland Michigan 49424 | **G** | |
| **Phone** | +1 616 399 6070 | **Phone** | +1 616 399 6070 | **H** | |
| **Fax** | | **Fax** | | **I** | |
| **Email Address** | bill.carey@alsglobal.com | | | **J** | |

| ALS Sample ID | Client Sample ID | Matrix | Collection Date | Bottle | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HN2511514-001 | 8070 SB01 (1-2) | Soil/Solid | 08/14/2025 09:57 | 001-AD | x | x | x | x | | | | | | |
| HN2511514-002 | 8070 SB02 (3-4) | Soil/Solid | 08/14/2025 10:13 | 002-AD | x | x | x | x | | | | | | |
| HN2511514-003 | 8070 SB03 (5-6) | Soil/Solid | 08/14/2025 10:26 | 003-AD | x | x | x | x | | | | | | |

| Relinquished by | Date Time | Received by | Date Time |
|---|---|---|---|
| | | [illegible] | 8/20/25 9:30 |
| **Relinquished by** | **Date Time** | **Received by** | **Date Time** |
| | | | |
| **Sampled by** | | | |

Cooler ID's

R2510166 5
ALS Environmental - Holland
8070_Wisner

# Cooler Receipt and Preservation Check Form

R2510166 5
ALS Environmental - Holland
8070_Wiener

Project/Client _____ Folder Number _____

Cooler received on 8/20/25 by: RM

**COURIER:** ALS UPS (FEDEX) VELOCITY CLIENT

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Were **Custody seals** on outside of cooler? | Y (N) | | 5a | Did **VOA** vials have sig* **bubbles?** | | | Y N (NA) | |
| 2 | **Custody papers** properly completed (ink, signed)? | (Y) N | | 5b | Sig* bubbles: **Alk?** | Y N (NA) | **Sulfide?** | Y N (NA) | |
| 3 | Did all bottles arrive in good **condition** (unbroken)? | (Y) N | | 6 | Where did the bottles originate? | | ALS/ROC | (CLIENT) | |
| 4 | Circle: (Wet Ice) **Dry Ice Gel packs** present? | (Y) N | | 7 | Soil VOA received as: | Bulk Encore 5035set | | (NA) | |

8. Temperature Readings Date: 8/20/25 Time: 10:01 ID: IR#12 (IR#11) From: Temp Blank (Sample Bottle)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Temp (°C) | 4.7 | 4.5 | 5.5 | | | | |
| Within 0-6°C? | (Y) N | (Y) N | (Y) N | Y N | Y N | Y N | Y N |
| If <0°C, were samples frozen? | Y N | Y N | Y N | Y N | Y N | Y N | Y N |

**If out of Temperature, note packing/ice condition:** _____ Ice melted Poorly Packed (described below) Same Day Rule

**&Client Approval to Run Samples:** _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by RM on 8120 at 12:16
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/20/25 Time: 15:49 by: MM

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Were dissolved metals filtered in the field? YES NO (N/A)
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N. Canisters Pressurized Tedlar® Bags Inflated (N/A)

| pH | Lot of test paper | Reagent | Preserved? Yes | Preserved? No | Lot Received | Exp | Sample ID Adjusted | Vol. Added | Lot Added | Final pH |
|---|---|---|---|---|---|---|---|---|---|---|
| ≥12 | | NaOH | | | | | | | | |
| ≤2 | | $HNO_3$ | | | | | | | | |
| ≤2 | | $H_2SO_4$ | | | | | | | | |
| <4 | | $NaHSO_4$ | | | | | | | | |
| 5-9 | | For 608pest | | | No=Notify for 3day | | | | | |
| Residual Chlorine (-) | | For CN, Phenol, 625, 608pest, 522 | | | If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol). | | | | | |
| | | $Na_2S_2O_3$ | | | | | | | | |
| | | ZnAcetate | - | - | | | **VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives). | | | |
| | | HCl | ** | ** | | | | | | |

Bottle lot numbers: 062325-1SR
Explain all Discrepancies/ Other Comments:

| | |
|---|---|
| HPROD | BULK |
| HTR | FLDT |
| SUB | HGFB |
| ALS | LL3541 |

Labels secondary reviewed by: MM

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

# Miscellaneous Forms

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

# REPORT QUALIFIERS AND DEFINITIONS

| | |
|---|---|
| U | Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative. |
| J | Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors). |
| B | Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result. |
| E | Inorganics- Concentration is estimated due to the serial dilution was outside control limits. |
| E | Organics- Concentration has exceeded the calibration range for that specific analysis. |
| D | Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed. |
| * | Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time. |
| H | Analysis was performed out of hold time for tests that have an "immediate" hold time criteria. |
| # | Spike was diluted out. |
| + | Correlation coefficient for MSA is <0.995. |
| N | Inorganics- Matrix spike recovery was outside laboratory limits. |
| N | Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search. |
| S | Concentration has been determined using Method of Standard Additions (MSA). |
| W | Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance. |
| P | Concentration >40% difference between the two GC columns. |
| C | Confirmed by GC/MS |
| Q | DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns). |
| X | See Case Narrative for discussion. |
| MRL<br>LOQ | Method Reporting Limit. Also known as:<br>Limit of Quantitation (LOQ)<br>The lowest concentration at which the method analyte may be reliably quantified under the method conditions. |
| MDL | Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier). |
| LOD | Limit of Detection. A value at or above the MDL which has been verified to be detectable. |
| ND | Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier. |

## Rochester Lab ID # for State Accreditations[1]

| NELAP States |
|---|
| Florida ID # E87674 |
| New Hampshire ID # 2941 |
| New York ID # 10145 |
| Pennsylvania ID# 68-786 |
| Texas ID#T104704581 |
| Virginia #460167 |

| Non-NELAP States |
|---|
| Connecticut ID #PH0556 |
| Delaware Approved |
| Maine ID #NY01587 |
| North Carolina #36701 |
| North Carolina #676 |
| Rhode Island LAO00333 |

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

# ALS Laboratory Group

**Acronyms**

| | |
|---|---|
| ASTM | American Society for Testing and Materials |
| A2LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner

## Non-Certified Analytes

**Certifying Agency:** New York Department of Health

| Method | Matrix | Analyte |
|---|---|---|
| 8270E | Soil | 1-Methylnaphthalene |
| ALS SOP | Soil | Total Solids |

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner/

**Sample Name:** 8070 SB01 (1-2) **Date Collected:** 08/14/25
**Lab Code:** R2510166-001 **Date Received:** 08/20/25
**Sample Matrix:** Soil

| Analysis Method | Extracted/Digested By | Analyzed By |
|---|---|---|
| 8081B | JVANHEYNINGEN | AFELSER |
| 8082A | JVANHEYNINGEN | AFELSER |
| 8151A | JVANHEYNINGEN | AFELSER |
| 8270E | JVANHEYNINGEN | AMOSES |
| ALS SOP | | CKUTZER |

**Sample Name:** 8070 SB02 (3-4) **Date Collected:** 08/14/25
**Lab Code:** R2510166-002 **Date Received:** 08/20/25
**Sample Matrix:** Soil

| Analysis Method | Extracted/Digested By | Analyzed By |
|---|---|---|
| 8081B | JVANHEYNINGEN | AFELSER |
| 8082A | JVANHEYNINGEN | AFELSER |
| 8151A | JVANHEYNINGEN | AFELSER |
| 8270E | JVANHEYNINGEN | AMOSES |
| ALS SOP | | CKUTZER |

**Sample Name:** 8070 SB03 (5-6) **Date Collected:** 08/14/25
**Lab Code:** R2510166-003 **Date Received:** 08/20/25
**Sample Matrix:** Soil

| Analysis Method | Extracted/Digested By | Analyzed By |
|---|---|---|
| 8081B | JVANHEYNINGEN | AFELSER |
| 8082A | JVANHEYNINGEN | AFELSER |
| 8151A | JVANHEYNINGEN | AFELSER |
| 8270E | JVANHEYNINGEN | AMOSES |
| ALS SOP | | CKUTZER |

# PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

## INORGANIC

**Water/Liquid Matrix**

| Analytical Method | Preparation Method |
|---|---|
| 200.7 / 200.8 | 200.2 |
| 6010D | 3005A/3010A |
| 6020B | ILM05.3 |
| 9034 Sulfide Acid Soluble | 9030B |
| SM 4500-CN-N-2016 Amenable and Residual Cyanide | SM 4500-CN-G and SM 4500-CN-B,C-2016 |
| SM 4500-CN-E WAD Cyanide | SM 4500-CN-I |

**Solid/Soil/Non-Aqueous Matrix**

| Analytical Method | Preparation Method |
|---|---|
| 6010D | 3050B |
| 6010D TCLP (1311) extract | 3005A/3010A |
| 6010D SPLP (1312) extract | 3005A/3010A |
| 7199 | 3060A |
| 300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions | DI extraction |
| For analytical methods not listed, the preparation method is the same as the analytical method reference. | |

## ORGANIC

**Preparation Methods for Organic methods are listed in the header of the Results pages.**

**Regarding "Bulk/5035A":**
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

# Sample Results

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

# Semivolatile Organic Compounds by GC/MS

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-001 | **Basis:** | Dry |

**Semivolatile Organic Compounds by GC/MS using Microwave Digestion**

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 820 | U | 3700 | 820 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 1-Methylnaphthalene | 680 | U | 3700 | 680 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Methylnaphthalene | 1300 | U | 3700 | 1300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Acenaphthene | 700 | U | 3700 | 700 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Acenaphthylene | 750 | U | 3700 | 750 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Anthracene | 620 | U | 3700 | 620 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benz(a)anthracene | 550 | U | 3700 | 550 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzo(a)pyrene | 980 | U | 3700 | 980 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzo(b)fluoranthene | 620 | U | 3700 | 620 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzo(g,h,i)perylene | 850 | U | 3700 | 850 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 1,4-Dichlorobenzene | 620 | U | 3700 | 620 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzo(k)fluoranthene | 600 | U | 3700 | 600 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Biphenyl | 1100 | U | 3700 | 1100 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Chrysene | 540 | U | 3700 | 540 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Dibenz(a,h)anthracene | 800 | U | 3700 | 800 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 1,4-Dioxane | 360 | U | 750 | 360 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Dibenzofuran | 670 | U | 3700 | 670 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Fluoranthene | 930 | U | 3700 | 930 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Fluorene | 690 | U | 3700 | 690 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Indeno(1,2,3-cd)pyrene | 1200 | U | 3700 | 1200 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Naphthalene | 690 | U | 3700 | 690 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Phenanthrene | 520 | U | 3700 | 520 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Pyrene | 610 | U | 3700 | 610 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,3,4,6-Tetrachlorophenol | 1300 | U | 3700 | 1300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4,5-Trichlorophenol | 910 | U | 3700 | 910 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4,6-Trichlorophenol | 820 | U | 3700 | 820 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4-Dichlorophenol | 710 | U | 3700 | 710 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4-Dimethylphenol | 660 | U | 3700 | 660 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4-Dinitrophenol | 6300 | U | 19000 | 6300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,4-Dinitrotoluene | 1500 | U | 3700 | 1500 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2,6-Dinitrotoluene | 810 | U | 3700 | 810 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Chloronaphthalene | 740 | U | 3700 | 740 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Chlorophenol | 620 | U | 3700 | 620 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Methylphenol | 760 | U | 3700 | 760 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Nitroaniline | 870 | U | 19000 | 870 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 2-Nitrophenol | 860 | U | 3700 | 860 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 3,3'-Dichlorobenzidine | 1400 | U | 3700 | 1400 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 3- and 4-Methylphenol Coelution | 710 | U | 3700 | 710 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 3-Nitroaniline | 740 | U | 19000 | 740 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4,6-Dinitro-2-methylphenol | 2100 | U | 19000 | 2100 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4-Bromophenyl Phenyl Ether | 970 | U | 3700 | 970 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4-Chloro-3-methylphenol | 740 | U | 3700 | 740 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4-Chloroaniline | 1400 | U | 3700 | 1400 | 10 | 08/26/25 17:56 | 8/25/25 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-001 | **Basis:** | Dry |

## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl Phenyl Ether | 790 U | 3700 | 790 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4-Nitroaniline | 800 U | 19000 | 800 | 10 | 08/26/25 17:56 | 8/25/25 | |
| 4-Nitrophenol | 1900 U | 19000 | 1900 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Acetophenone | 1100 U | 3700 | 1100 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Atrazine | 1100 U | 3700 | 1100 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzaldehyde | 890 U | 19000 | 890 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Benzoic Acid | 5800 U | 19000 | 5800 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Bis(1-chloroisopropyl) Ether | 760 U | 3700 | 760 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Bis(2-chloroethoxy)methane | 900 U | 3700 | 900 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Bis(2-chloroethyl) Ether | 730 U | 3700 | 730 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Bis(2-ethylhexyl) Phthalate | 670 U | 5600 | 670 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Butyl Benzyl Phthalate | 1100 U | 3700 | 1100 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Caprolactam | 810 U | 3700 | 810 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Carbazole | 600 U | 3700 | 600 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Di-n-butyl Phthalate | 600 U | 3700 | 600 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Di-n-octyl Phthalate | 1300 U | 3700 | 1300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Diethyl Phthalate | 660 U | 3700 | 660 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Dimethyl Phthalate | 700 U | 3700 | 700 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Hexachlorobenzene | 890 U | 3700 | 890 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Hexachlorobutadiene | 1300 U | 3700 | 1300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Hexachlorocyclopentadiene | 1200 U | 3700 | 1200 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Hexachloroethane | 690 U | 3700 | 690 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Isophorone | 770 U | 3700 | 770 | 10 | 08/26/25 17:56 | 8/25/25 | |
| N-Nitrosodi-n-propylamine | 1200 U | 3700 | 1200 | 10 | 08/26/25 17:56 | 8/25/25 | |
| N-Nitrosodiphenylamine | 2300 U | 3700 | 2300 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Nitrobenzene | 660 U | 3700 | 660 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Pentachlorophenol (PCP) | 3700 U | 19000 | 3700 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Phenol | 740 U | 3700 | 740 | 10 | 08/26/25 17:56 | 8/25/25 | |
| Pyridine | 500 U | 19000 | 500 | 10 | 08/26/25 17:56 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| 2-Fluorobiphenyl | 52 | 18 - 104 | 08/26/25 17:56 | |
| Nitrobenzene-d5 | 53 | 12 - 98 | 08/26/25 17:56 | |
| p-Terphenyl-d14 | 68 | 26 - 134 | 08/26/25 17:56 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-002 | **Basis:** | Dry |

**Semivolatile Organic Compounds by GC/MS using Microwave Digestion**

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 860 | U | 3900 | 860 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 1-Methylnaphthalene | 710 | U | 3900 | 710 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Methylnaphthalene | 1400 | U | 3900 | 1400 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Acenaphthene | 730 | U | 3900 | 730 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Acenaphthylene | 790 | U | 3900 | 790 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Anthracene | 650 | U | 3900 | 650 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benz(a)anthracene | 580 | U | 3900 | 580 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzo(a)pyrene | 1100 | U | 3900 | 1100 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzo(b)fluoranthene | 650 | U | 3900 | 650 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzo(g,h,i)perylene | 890 | U | 3900 | 890 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 1,4-Dichlorobenzene | 650 | U | 3900 | 650 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzo(k)fluoranthene | 630 | U | 3900 | 630 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Biphenyl | 1200 | U | 3900 | 1200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Chrysene | 570 | U | 3900 | 570 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Dibenz(a,h)anthracene | 840 | U | 3900 | 840 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 1,4-Dioxane | 380 | U | 790 | 380 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Dibenzofuran | 710 | U | 3900 | 710 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Fluoranthene | 970 | U | 3900 | 970 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Fluorene | 730 | U | 3900 | 730 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Indeno(1,2,3-cd)pyrene | 1300 | U | 3900 | 1300 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Naphthalene | 730 | U | 3900 | 730 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Phenanthrene | 550 | U | 3900 | 550 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Pyrene | 650 | U | 3900 | 650 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,3,4,6-Tetrachlorophenol | 1400 | U | 3900 | 1400 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4,5-Trichlorophenol | 960 | U | 3900 | 960 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4,6-Trichlorophenol | 860 | U | 3900 | 860 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4-Dichlorophenol | 750 | U | 3900 | 750 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4-Dimethylphenol | 700 | U | 3900 | 700 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4-Dinitrophenol | 6600 | U | 20000 | 6600 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,4-Dinitrotoluene | 1500 | U | 3900 | 1500 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2,6-Dinitrotoluene | 850 | U | 3900 | 850 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Chloronaphthalene | 780 | U | 3900 | 780 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Chlorophenol | 650 | U | 3900 | 650 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Methylphenol | 800 | U | 3900 | 800 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Nitroaniline | 920 | U | 20000 | 920 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 2-Nitrophenol | 900 | U | 3900 | 900 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 3,3'-Dichlorobenzidine | 1500 | U | 3900 | 1500 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 3- and 4-Methylphenol Coelution | 740 | U | 3900 | 740 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 3-Nitroaniline | 780 | U | 20000 | 780 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4,6-Dinitro-2-methylphenol | 2200 | U | 20000 | 2200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4-Bromophenyl Phenyl Ether | 1100 | U | 3900 | 1100 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4-Chloro-3-methylphenol | 780 | U | 3900 | 780 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4-Chloroaniline | 1500 | U | 3900 | 1500 | 10 | 08/26/25 18:20 | 8/25/25 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-002 | **Basis:** | Dry |

## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl Phenyl Ether | 830 U | 3900 | 830 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4-Nitroaniline | 840 U | 20000 | 840 | 10 | 08/26/25 18:20 | 8/25/25 | |
| 4-Nitrophenol | 2000 U | 20000 | 2000 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Acetophenone | 1200 U | 3900 | 1200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Atrazine | 1200 U | 3900 | 1200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzaldehyde | 940 U | 20000 | 940 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Benzoic Acid | 6100 U | 20000 | 6100 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Bis(1-chloroisopropyl) Ether | 800 U | 3900 | 800 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Bis(2-chloroethoxy)methane | 950 U | 3900 | 950 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Bis(2-chloroethyl) Ether | 770 U | 3900 | 770 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Bis(2-ethylhexyl) Phthalate | 710 U | 5900 | 710 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Butyl Benzyl Phthalate | 1200 U | 3900 | 1200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Caprolactam | 850 U | 3900 | 850 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Carbazole | 630 U | 3900 | 630 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Di-n-butyl Phthalate | 630 U | 3900 | 630 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Di-n-octyl Phthalate | 1400 U | 3900 | 1400 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Diethyl Phthalate | 690 U | 3900 | 690 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Dimethyl Phthalate | 740 U | 3900 | 740 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Hexachlorobenzene | 930 U | 3900 | 930 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Hexachlorobutadiene | 1400 U | 3900 | 1400 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Hexachlorocyclopentadiene | 1300 U | 3900 | 1300 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Hexachloroethane | 730 U | 3900 | 730 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Isophorone | 810 U | 3900 | 810 | 10 | 08/26/25 18:20 | 8/25/25 | |
| N-Nitrosodi-n-propylamine | 1200 U | 3900 | 1200 | 10 | 08/26/25 18:20 | 8/25/25 | |
| N-Nitrosodiphenylamine | 2500 U | 3900 | 2500 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Nitrobenzene | 690 U | 3900 | 690 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Pentachlorophenol (PCP) | 3900 U | 20000 | 3900 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Phenol | 780 U | 3900 | 780 | 10 | 08/26/25 18:20 | 8/25/25 | |
| Pyridine | 520 U | 20000 | 520 | 10 | 08/26/25 18:20 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| 2-Fluorobiphenyl | 71 | 18 - 104 | 08/26/25 18:20 | |
| Nitrobenzene-d5 | 65 | 12 - 98 | 08/26/25 18:20 | |
| p-Terphenyl-d14 | 86 | 26 - 134 | 08/26/25 18:20 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-003 | **Basis:** | Dry |

**Semivolatile Organic Compounds by GC/MS using Microwave Digestion**

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 520 U | 2300 | 520 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 1-Methylnaphthalene | 430 U | 2300 | 430 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Methylnaphthalene | 830 U | 2300 | 830 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Acenaphthene | 450 U | 2300 | 450 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Acenaphthylene | 480 U | 2300 | 480 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Anthracene | 390 U | 2300 | 390 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benz(a)anthracene | 350 U | 2300 | 350 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzo(a)pyrene | 630 U | 2300 | 630 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzo(b)fluoranthene | 390 U | 2300 | 390 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzo(g,h,i)perylene | 540 U | 2300 | 540 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 1,4-Dichlorobenzene | 390 U | 2300 | 390 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzo(k)fluoranthene | 380 U | 2300 | 380 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Biphenyl | 690 U | 2300 | 690 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Chrysene | 350 U | 2300 | 350 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 1,4-Dioxane | 230 U | 470 | 230 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Dibenz(a,h)anthracene | 510 U | 2300 | 510 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Dibenzofuran | 430 U | 2300 | 430 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Fluoranthene | 590 U | 2300 | 590 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Fluorene | 440 U | 2300 | 440 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Indeno(1,2,3-cd)pyrene | 760 U | 2300 | 760 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Naphthalene | 440 U | 2300 | 440 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Phenanthrene | 330 U | 2300 | 330 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Pyrene | 390 U | 2300 | 390 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,3,4,6-Tetrachlorophenol | 820 U | 2300 | 820 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4,5-Trichlorophenol | 580 U | 2300 | 580 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4,6-Trichlorophenol | 520 U | 2300 | 520 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4-Dichlorophenol | 450 U | 2300 | 450 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4-Dimethylphenol | 420 U | 2300 | 420 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4-Dinitrophenol | 4000 U | 12000 | 4000 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,4-Dinitrotoluene | 900 U | 2300 | 900 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2,6-Dinitrotoluene | 510 U | 2300 | 510 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Chloronaphthalene | 470 U | 2300 | 470 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Chlorophenol | 390 U | 2300 | 390 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Methylphenol | 490 U | 2300 | 490 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Nitroaniline | 560 U | 12000 | 560 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 2-Nitrophenol | 550 U | 2300 | 550 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 3,3'-Dichlorobenzidine | 860 U | 2300 | 860 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 3- and 4-Methylphenol Coelution | 450 U | 2300 | 450 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 3-Nitroaniline | 470 U | 12000 | 470 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4,6-Dinitro-2-methylphenol | 1400 U | 12000 | 1400 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4-Bromophenyl Phenyl Ether | 620 U | 2300 | 620 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4-Chloro-3-methylphenol | 470 U | 2300 | 470 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4-Chloroaniline | 860 U | 2300 | 860 | 2 | 08/26/25 18:44 | 8/25/25 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-003 | **Basis:** | Dry |

## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl Phenyl Ether | 500 U | 2300 | 500 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4-Nitroaniline | 510 U | 12000 | 510 | 2 | 08/26/25 18:44 | 8/25/25 | |
| 4-Nitrophenol | 1300 U | 12000 | 1300 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Acetophenone | 680 U | 2300 | 680 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Atrazine | 700 U | 2300 | 700 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzaldehyde | 570 U | 12000 | 570 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Benzoic Acid | 3700 U | 12000 | 3700 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Bis(1-chloroisopropyl) Ether | 480 U | 2300 | 480 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Bis(2-chloroethoxy)methane | 570 U | 2300 | 570 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Bis(2-chloroethyl) Ether | 460 U | 2300 | 460 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Bis(2-ethylhexyl) Phthalate | 430 U | 3500 | 430 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Butyl Benzyl Phthalate | 690 U | 2300 | 690 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Caprolactam | 520 U | 2300 | 520 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Carbazole | 380 U | 2300 | 380 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Di-n-butyl Phthalate | 380 U | 2300 | 380 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Di-n-octyl Phthalate | 820 U | 2300 | 820 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Diethyl Phthalate | 420 U | 2300 | 420 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Dimethyl Phthalate | 450 U | 2300 | 450 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Hexachlorobenzene | 560 U | 2300 | 560 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Hexachlorobutadiene | 830 U | 2300 | 830 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Hexachlorocyclopentadiene | 750 U | 2300 | 750 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Hexachloroethane | 440 U | 2300 | 440 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Isophorone | 490 U | 2300 | 490 | 2 | 08/26/25 18:44 | 8/25/25 | |
| N-Nitrosodi-n-propylamine | 720 U | 2300 | 720 | 2 | 08/26/25 18:44 | 8/25/25 | |
| N-Nitrosodiphenylamine | 1500 U | 2300 | 1500 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Nitrobenzene | 420 U | 2300 | 420 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Pentachlorophenol (PCP) | 2400 U | 12000 | 2400 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Phenol | 470 U | 2300 | 470 | 2 | 08/26/25 18:44 | 8/25/25 | |
| Pyridine | 320 U | 12000 | 320 | 2 | 08/26/25 18:44 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| 2-Fluorobiphenyl | 69 | 18 - 104 | 08/26/25 18:44 | |
| Nitrobenzene-d5 | 64 | 12 - 98 | 08/26/25 18:44 | |
| p-Terphenyl-d14 | 96 | 26 - 134 | 08/26/25 18:44 | |

# Semivolatile Organic Compounds by GC

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-001 | **Basis:** | Dry |

## Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Analysis Method:** 8081B
**Prep Method:** EPA 3546

| Analyte Name | Result | | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | **4.5** | | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| 4,4'-DDE | **24** | | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| 4,4'-DDT | **9.6** | | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Aldrin | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Chlordane | 4.7 | U | 9.2 | 4.7 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Dieldrin | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endosulfan I | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endosulfan II | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endosulfan Sulfate | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endrin | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endrin Aldehyde | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Endrin Ketone | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Heptachlor | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Heptachlor Epoxide | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Methoxychlor | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| Toxaphene | 22 | U | 37 | 22 | 1 | 09/10/25 01:12 | 8/25/25 | |
| alpha-BHC | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| alpha-Chlordane | **3.0** | **P** | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| beta-BHC | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| delta-BHC | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| gamma-BHC (Lindane) | 0.94 | U | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |
| gamma-Chlordane | **2.7** | | 1.9 | 0.94 | 1 | 09/10/25 01:12 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 68 | 10 - 159 | 09/10/25 01:12 | |
| Tetrachloro-m-xylene | 51 | 10 - 132 | 09/10/25 01:12 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-002 | **Basis:** | Dry |

## Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Analysis Method:** 8081B
**Prep Method:** EPA 3546

| Analyte Name | Result | | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | **9.1** | | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| 4,4'-DDE | **33** | | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| 4,4'-DDT | **4.3** | | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Aldrin | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Chlordane | 4.9 | U | 9.7 | 4.9 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Dieldrin | **2.4** | | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endosulfan I | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endosulfan II | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endosulfan Sulfate | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endrin | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endrin Aldehyde | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Endrin Ketone | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Heptachlor | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Heptachlor Epoxide | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Methoxychlor | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| Toxaphene | 23 | U | 38 | 23 | 1 | 09/10/25 01:29 | 8/25/25 | |
| alpha-BHC | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| alpha-Chlordane | **2.0** | **J** | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| beta-BHC | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| delta-BHC | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| gamma-BHC (Lindane) | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |
| gamma-Chlordane | 0.98 | U | 2.0 | 0.98 | 1 | 09/10/25 01:29 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 52 | 10 - 159 | 09/10/25 01:29 | |
| Tetrachloro-m-xylene | 33 | 10 - 132 | 09/10/25 01:29 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-003 | **Basis:** | Dry |

## Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Analysis Method:** 8081B
**Prep Method:** EPA 3546

| Analyte Name | Result | | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | **5.4** | | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| 4,4'-DDE | **15** | | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| 4,4'-DDT | **3.6** | **P** | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Aldrin | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Chlordane | 5.1 | U | 10 | 5.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Dieldrin | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endosulfan I | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endosulfan II | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endosulfan Sulfate | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endrin | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endrin Aldehyde | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Endrin Ketone | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Heptachlor | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Heptachlor Epoxide | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Methoxychlor | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| Toxaphene | 24 | U | 40 | 24 | 1 | 09/10/25 01:47 | 8/25/25 | |
| alpha-BHC | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| alpha-Chlordane | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| beta-BHC | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| delta-BHC | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| gamma-BHC (Lindane) | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |
| gamma-Chlordane | 1.1 | U | 2.1 | 1.1 | 1 | 09/10/25 01:47 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 70 | 10 - 159 | 09/10/25 01:47 | |
| Tetrachloro-m-xylene | 44 | 10 - 132 | 09/10/25 01:47 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-001 | **Basis:** | Dry |

## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Analysis Method:** 8082A
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1221 | 29 U | 74 | 29 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1232 | 22 U | 37 | 22 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1242 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1248 | 20 U | 37 | 20 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1254 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1260 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1262 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |
| Aroclor 1268 | 19 U | 37 | 19 | 1 | 08/30/25 00:41 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 66 | 10 - 138 | 08/30/25 00:41 | |
| Tetrachloro-m-xylene | 44 | 11 - 122 | 08/30/25 00:41 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-002 | **Basis:** | Dry |

## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Analysis Method:** 8082A
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1221 | 31 U | 78 | 31 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1232 | 23 U | 38 | 23 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1242 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1248 | 21 U | 38 | 21 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1254 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1260 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1262 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |
| Aroclor 1268 | 20 U | 38 | 20 | 1 | 08/30/25 00:54 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 49 | 10 - 138 | 08/30/25 00:54 | |
| Tetrachloro-m-xylene | 34 | 11 - 122 | 08/30/25 00:54 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-003 | **Basis:** | Dry |

## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Analysis Method:** 8082A
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1221 | 32 U | 81 | 32 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1232 | 24 U | 40 | 24 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1242 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1248 | 22 U | 40 | 22 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1254 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1260 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1262 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |
| Aroclor 1268 | 21 U | 40 | 21 | 1 | 08/30/25 01:08 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 64 | 10 - 138 | 08/30/25 01:08 | |
| Tetrachloro-m-xylene | 46 | 11 - 122 | 08/30/25 01:08 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-001 | **Basis:** | Dry |

## Chlorinated Herbicides by GC

**Analysis Method:** 8151A
**Prep Method:** Method

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 5.6 U | 11 | 5.6 | 1 | 09/03/25 23:18 | 8/27/25 | |
| 2,4,5-TP | 5.1 U | 11 | 5.1 | 1 | 09/03/25 23:18 | 8/27/25 | |
| 2,4-D | 7.3 U | 11 | 7.3 | 1 | 09/03/25 23:18 | 8/27/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| DCAA | 46 | 10 - 151 | 09/03/25 23:18 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-002 | **Basis:** | Dry |

## Chlorinated Herbicides by GC

**Analysis Method:** 8151A
**Prep Method:** Method

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 5.9 U | 12 | 5.9 | 1 | 09/03/25 23:37 | 8/27/25 | |
| 2,4,5-TP | 5.3 U | 12 | 5.3 | 1 | 09/03/25 23:37 | 8/27/25 | |
| 2,4-D | 7.7 U | 12 | 7.7 | 1 | 09/03/25 23:37 | 8/27/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| DCAA | 49 | 10 - 151 | 09/03/25 23:37 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Units:** | ug/Kg |
| **Lab Code:** | R2510166-003 | **Basis:** | Dry |

## Chlorinated Herbicides by GC

**Analysis Method:** 8151A
**Prep Method:** Method

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 6.1 U | 12 | 6.1 | 1 | 09/03/25 23:55 | 8/27/25 | |
| 2,4,5-TP | 5.5 U | 12 | 5.5 | 1 | 09/03/25 23:55 | 8/27/25 | |
| 2,4-D | 7.9 U | 12 | 7.9 | 1 | 09/03/25 23:55 | 8/27/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| DCAA | 72 | 10 - 151 | 09/03/25 23:55 | |

# General Chemistry

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 09:57 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB01 (1-2) | **Basis:** | As Received |
| **Lab Code:** | R2510166-001 | | |

## Inorganic Parameters

| Analyte Name | Analysis Method | Result | Units | MRL | MDL | Dil. | Date Analyzed | Q |
|---|---|---|---|---|---|---|---|---|
| Total Solids | ALS SOP | **89.2** | Percent | - | - | 1 | 08/29/25 10:00 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:13 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB02 (3-4) | **Basis:** | As Received |
| **Lab Code:** | R2510166-002 | | |

## Inorganic Parameters

| Analyte Name | Analysis Method | Result | Units | MRL | MDL | Dil. | Date Analyzed | Q |
|---|---|---|---|---|---|---|---|---|
| Total Solids | ALS SOP | **85.1** | Percent | - | - | 1 | 08/29/25 10:00 | |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | 08/14/25 10:26 |
| **Sample Matrix:** | Soil | **Date Received:** | 08/20/25 09:30 |
| **Sample Name:** | 8070 SB03 (5-6) | **Basis:** | As Received |
| **Lab Code:** | R2510166-003 | | |

## Inorganic Parameters

| Analyte Name | Analysis Method | Result | Units | MRL | MDL | Dil. | Date Analyzed | Q |
|---|---|---|---|---|---|---|---|---|
| Total Solids | ALS SOP | **81.4** | Percent | - | - | 1 | 08/29/25 10:00 | |

# QC Summary Forms

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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# Semivolatile Organic Compounds by GC/MS

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner
**Sample Matrix:** Soil

## SURROGATE RECOVERY SUMMARY

### Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Analysis Method:** 8270E
**Extraction Method:** EPA 3546

| Sample Name | Lab Code | 2-Fluorobiphenyl 18 - 104 | Nitrobenzene-d5 12 - 98 | p-Terphenyl-d14 26 - 134 |
|---|---|---|---|---|
| 8070 SB01 (1-2) | R2510166-001 | 52 | 53 | 68 |
| 8070 SB02 (3-4) | R2510166-002 | 71 | 65 | 86 |
| 8070 SB03 (5-6) | R2510166-003 | 69 | 64 | 96 |
| Method Blank | RQ2511248-01 | 60 | 58 | 92 |
| Lab Control Sample | RQ2511248-02 | 57 | 50 | 81 |
| Duplicate Lab Control Sample | RQ2511248-03 | 71 | 61 | 104 |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | NA |
| **Sample Matrix:** | Soil | **Date Received:** | NA |
| **Sample Name:** | Method Blank | **Units:** | ug/Kg |
| **Lab Code:** | RQ2511248-01 | **Basis:** | Dry |

**Semivolatile Organic Compounds by GC/MS using Microwave Digestion**

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 1-Methylnaphthalene | 61 U | 330 | 61 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 1,2,4,5-Tetrachlorobenzene | 74 U | 330 | 74 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Methylnaphthalene | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Acenaphthene | 63 U | 330 | 63 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Acenaphthylene | 67 U | 330 | 67 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Anthracene | 55 U | 330 | 55 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benz(a)anthracene | 49 U | 330 | 49 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzo(a)pyrene | 88 U | 330 | 88 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzo(b)fluoranthene | 55 U | 330 | 55 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzo(g,h,i)perylene | 76 U | 330 | 76 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzo(k)fluoranthene | 54 U | 330 | 54 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 1,4-Dichlorobenzene | 55 U | 330 | 55 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Biphenyl | 98 U | 330 | 98 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Chrysene | 49 U | 330 | 49 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Dibenz(a,h)anthracene | 72 U | 330 | 72 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 1,4-Dioxane | 32 U | 67 | 32 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Dibenzofuran | 60 U | 330 | 60 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Fluoranthene | 83 U | 330 | 83 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Fluorene | 62 U | 330 | 62 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Indeno(1,2,3-cd)pyrene | 110 U | 330 | 110 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Naphthalene | 62 U | 330 | 62 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Phenanthrene | 47 U | 330 | 47 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Pyrene | 55 U | 330 | 55 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,3,4,6-Tetrachlorophenol | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4,5-Trichlorophenol | 82 U | 330 | 82 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4,6-Trichlorophenol | 74 U | 330 | 74 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4-Dichlorophenol | 64 U | 330 | 64 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4-Dimethylphenol | 59 U | 330 | 59 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4-Dinitrophenol | 560 U | 1700 | 560 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,4-Dinitrotoluene | 130 U | 330 | 130 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2,6-Dinitrotoluene | 72 U | 330 | 72 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Chloronaphthalene | 66 U | 330 | 66 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Chlorophenol | 55 U | 330 | 55 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Methylphenol | 69 U | 330 | 69 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Nitroaniline | 78 U | 1700 | 78 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 2-Nitrophenol | 77 U | 330 | 77 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 3,3'-Dichlorobenzidine | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 3- and 4-Methylphenol Coelution | 63 U | 330 | 63 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 3-Nitroaniline | 67 U | 1700 | 67 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4,6-Dinitro-2-methylphenol | 190 U | 1700 | 190 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4-Bromophenyl Phenyl Ether | 87 U | 330 | 87 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4-Chloro-3-methylphenol | 67 U | 330 | 67 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4-Chloroaniline | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | NA |
| **Sample Matrix:** | Soil | **Date Received:** | NA |
| **Sample Name:** | Method Blank | **Units:** | ug/Kg |
| **Lab Code:** | RQ2511248-01 | **Basis:** | Dry |

## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Analysis Method:** 8270E
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 4-Chlorophenyl Phenyl Ether | 71 U | 330 | 71 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4-Nitroaniline | 71 U | 1700 | 71 | 1 | 08/26/25 13:09 | 8/25/25 | |
| 4-Nitrophenol | 170 U | 1700 | 170 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Acetophenone | 95 U | 330 | 95 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Atrazine | 98 U | 330 | 98 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzaldehyde | 80 U | 1700 | 80 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Benzoic Acid | 520 U | 1700 | 520 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Bis(1-chloroisopropyl) Ether | 68 U | 330 | 68 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Bis(2-chloroethoxy)methane | 81 U | 330 | 81 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Bis(2-chloroethyl) Ether | 65 U | 330 | 65 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Bis(2-ethylhexyl) Phthalate | 61 U | 500 | 61 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Butyl Benzyl Phthalate | 96 U | 330 | 96 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Caprolactam | 73 U | 330 | 73 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Carbazole | 54 U | 330 | 54 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Di-n-butyl Phthalate | 54 U | 330 | 54 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Di-n-octyl Phthalate | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Diethyl Phthalate | 59 U | 330 | 59 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Dimethyl Phthalate | 63 U | 330 | 63 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Hexachlorobenzene | 79 U | 330 | 79 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Hexachlorobutadiene | 120 U | 330 | 120 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Hexachlorocyclopentadiene | 110 U | 330 | 110 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Hexachloroethane | 62 U | 330 | 62 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Isophorone | 69 U | 330 | 69 | 1 | 08/26/25 13:09 | 8/25/25 | |
| N-Nitrosodi-n-propylamine | 110 U | 330 | 110 | 1 | 08/26/25 13:09 | 8/25/25 | |
| N-Nitrosodiphenylamine | 210 U | 330 | 210 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Nitrobenzene | 59 U | 330 | 59 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Pentachlorophenol (PCP) | 330 U | 1700 | 330 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Phenol | 67 U | 330 | 67 | 1 | 08/26/25 13:09 | 8/25/25 | |
| Pyridine | 45 U | 1700 | 45 | 1 | 08/26/25 13:09 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| 2-Fluorobiphenyl | 60 | 18 - 104 | 08/26/25 13:09 | |
| Nitrobenzene-d5 | 58 | 12 - 98 | 08/26/25 13:09 | |
| p-Terphenyl-d14 | 92 | 26 - 134 | 08/26/25 13:09 | |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 08/26/25

## Duplicate Lab Control Sample Summary
## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Units:**ug/Kg
**Basis:**Dry

| | | Lab Control Sample | | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | RQ2511248-02 | | | RQ2511248-03 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| 1-Methylnaphthalene | 8270E | 1710 | 3320 | 51 | 2040 | 3310 | 62 | 29-100 | 18 | 30 |
| 1,2,4,5-Tetrachlorobenzene | 8270E | 1740 | 3320 | 52 | 2130 | 3310 | 64 | 20-126 | 20 | 30 |
| 2-Methylnaphthalene | 8270E | 1620 | 3320 | 49 | 1950 | 3310 | 59 | 29-99 | 18 | 30 |
| Acenaphthene | 8270E | 1970 | 3320 | 59 | 2430 | 3310 | 73 | 41-110 | 21 | 30 |
| Acenaphthylene | 8270E | 2180 | 3320 | 66 | 2700 | 3310 | 81 | 44-122 | 21 | 30 |
| Anthracene | 8270E | 2250 | 3320 | 68 | 2840 | 3310 | 86 | 41-123 | 23 | 30 |
| Benz(a)anthracene | 8270E | 2330 | 3320 | 70 | 3020 | 3310 | 91 | 44-116 | 26 | 30 |
| Benzo(a)pyrene | 8270E | 2640 | 3320 | 79 | 3380 | 3310 | 102 | 56-146 | 25 | 30 |
| Benzo(b)fluoranthene | 8270E | 2200 | 3320 | 66 | 2840 | 3310 | 86 | 47-120 | 25 | 30 |
| Benzo(g,h,i)perylene | 8270E | 2210 | 3320 | 67 | 2850 | 3310 | 86 | 41-129 | 25 | 30 |
| Benzo(k)fluoranthene | 8270E | 2350 | 3320 | 71 | 3020 | 3310 | 91 | 49-124 | 25 | 30 |
| 1,4-Dichlorobenzene | 8270E | 1620 | 3320 | 49 | 1990 | 3310 | 60 | 16-83 | 20 | 30 |
| Biphenyl | 8270E | 1810 | 3320 | 54 | 2190 | 3310 | 66 | 24-112 | 19 | 30 |
| Chrysene | 8270E | 2350 | 3320 | 71 | 3060 | 3310 | 92 | 44-119 | 26 | 30 |
| 1,4-Dioxane | 8270E | 955 | 3320 | 29 | 1220 | 3310 | 37 | 10-58 | 24 | 30 |
| Dibenz(a,h)anthracene | 8270E | 2340 | 3320 | 71 | 3030 | 3310 | 92 | 18-146 | 25 | 30 |
| Dibenzofuran | 8270E | 2050 | 3320 | 62 | 2550 | 3310 | 77 | 43-113 | 22 | 30 |
| Fluoranthene | 8270E | 2360 | 3320 | 71 | 2930 | 3310 | 89 | 39-128 | 22 | 30 |
| Fluorene | 8270E | 2120 | 3320 | 64 | 2620 | 3310 | 79 | 40-117 | 21 | 30 |
| Indeno(1,2,3-cd)pyrene | 8270E | 2450 | 3320 | 74 | 3180 | 3310 | 96 | 43-129 | 26 | 30 |
| Naphthalene | 8270E | 1620 | 3320 | 49 | 1950 | 3310 | 59 | 31-93 | 18 | 30 |
| Phenanthrene | 8270E | 2080 | 3320 | 63 | 2600 | 3310 | 79 | 39-120 | 22 | 30 |
| Pyrene | 8270E | 2340 | 3320 | 70 | 2980 | 3310 | 90 | 45-125 | 24 | 30 |
| 2,3,4,6-Tetrachlorophenol | 8270E | 2490 | 3320 | 75 | 3230 | 3310 | 98 | 42-117 | 26 | 30 |
| 2,4,5-Trichlorophenol | 8270E | 2230 | 3320 | 67 | 2790 | 3310 | 84 | 40-114 | 23 | 30 |
| 2,4,6-Trichlorophenol | 8270E | 2070 | 3320 | 62 | 2620 | 3310 | 79 | 33-108 | 23 | 30 |
| 2,4-Dichlorophenol | 8270E | 1890 | 3320 | 57 | 2270 | 3310 | 69 | 30-103 | 18 | 30 |
| 2,4-Dimethylphenol | 8270E | 1860 | 3320 | 56 | 2260 | 3310 | 68 | 32-100 | 19 | 30 |
| 2,4-Dinitrophenol | 8270E | 1660 J | 3320 | 50 | 2200 | 3310 | 66 | 10-97 | 28 | 30 |
| 2,4-Dinitrotoluene | 8270E | 2390 | 3320 | 72 | 3010 | 3310 | 91 | 53-120 | 23 | 30 |
| 2,6-Dinitrotoluene | 8270E | 2350 | 3320 | 71 | 2890 | 3310 | 87 | 48-119 | 21 | 30 |
| 2-Chloronaphthalene | 8270E | 1920 | 3320 | 58 | 2370 | 3310 | 72 | 33-103 | 21 | 30 |
| 2-Chlorophenol | 8270E | 1820 | 3320 | 55 | 2230 | 3310 | 67 | 26-90 | 20 | 30 |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 08/26/25

## Duplicate Lab Control Sample Summary
## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Units:**ug/Kg
**Basis:**Dry

| | | Lab Control Sample | | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | RQ2511248-02 | | | RQ2511248-03 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| 2-Methylphenol | 8270E | 2020 | 3320 | 61 | 2460 | 3310 | 74 | 33-99 | 20 | 30 |
| 2-Nitroaniline | 8270E | 2200 | 3320 | 66 | 2720 | 3310 | 82 | 41-119 | 22 | 30 |
| 2-Nitrophenol | 8270E | 1720 | 3320 | 52 | 2110 | 3310 | 64 | 24-98 | 20 | 30 |
| 3- and 4-Methylphenol Coelution | 8270E | 2100 | 3320 | 63 | 2580 | 3310 | 78 | 32-100 | 20 | 30 |
| 3-Nitroaniline | 8270E | 1890 | 3320 | 57 | 2400 | 3310 | 72 | 29-105 | 24 | 30 |
| 4,6-Dinitro-2-methylphenol | 8270E | 2280 | 3320 | 69 | 2890 | 3310 | 87 | 20-105 | 23 | 30 |
| 4-Bromophenyl Phenyl Ether | 8270E | 2290 | 3320 | 69 | 2860 | 3310 | 86 | 37-116 | 22 | 30 |
| 4-Chloro-3-methylphenol | 8270E | 2070 | 3320 | 62 | 2480 | 3310 | 75 | 40-116 | 18 | 30 |
| 4-Chloroaniline | 8270E | 1760 | 3320 | 53 | 2260 | 3310 | 68 | 10-87 | 25 | 30 |
| 4-Chlorophenyl Phenyl Ether | 8270E | 2090 | 3320 | 63 | 2590 | 3310 | 78 | 42-111 | 21 | 30 |
| 4-Nitroaniline | 8270E | 1900 | 3320 | 57 | 2390 | 3310 | 72 | 43-120 | 22 | 30 |
| 4-Nitrophenol | 8270E | 1840 | 3320 | 55 | 2340 | 3310 | 71 | 34-116 | 24 | 30 |
| Acetophenone | 8270E | 1750 | 3320 | 53 | 2110 | 3310 | 64 | 23-87 | 18 | 30 |
| Benzoic Acid | 8270E | 1760 | 3320 | 53 | 2300 | 3310 | 70 | 10-126 | 27 | 30 |
| Bis(1-chloroisopropyl) Ether | 8270E | 1910 | 3320 | 58 | 2330 | 3310 | 70 | 22-99 | 20 | 30 |
| Bis(2-chloroethoxy)methane | 8270E | 1920 | 3320 | 58 | 2290 | 3310 | 69 | 38-119 | 18 | 30 |
| Bis(2-chloroethyl) Ether | 8270E | 1760 | 3320 | 53 | 2160 | 3310 | 65 | 23-94 | 21 | 30 |
| Bis(2-ethylhexyl) Phthalate | 8270E | 2530 | 3320 | 76 | 3190 | 3310 | 96 | 38-139 | 23 | 30 |
| Butyl Benzyl Phthalate | 8270E | 2480 | 3320 | 75 | 3140 | 3310 | 95 | 40-134 | 24 | 30 |
| Caprolactam | 8270E | 1970 | 3320 | 59 | 2310 | 3310 | 70 | 21-128 | 16 | 30 |
| Carbazole | 8270E | 2310 | 3320 | 70 | 2860 | 3310 | 86 | 42-131 | 21 | 30 |
| Di-n-butyl Phthalate | 8270E | 2570 | 3320 | 77 | 3210 | 3310 | 97 | 42-141 | 22 | 30 |
| Di-n-octyl Phthalate | 8270E | 2570 | 3320 | 77 | 3300 | 3310 | 100 | 38-143 | 25 | 30 |
| Diethyl Phthalate | 8270E | 2260 | 3320 | 68 | 2810 | 3310 | 85 | 43-118 | 22 | 30 |
| Dimethyl Phthalate | 8270E | 2260 | 3320 | 68 | 2810 | 3310 | 85 | 40-118 | 21 | 30 |
| Hexachlorobenzene | 8270E | 2260 | 3320 | 68 | 2790 | 3310 | 84 | 35-122 | 21 | 30 |
| Hexachlorobutadiene | 8270E | 1620 | 3320 | 49 | 1970 | 3310 | 60 | 28-96 | 20 | 30 |
| Hexachlorocyclopentadiene | 8270E | 1860 | 3320 | 56 | 2330 | 3310 | 71 | 10-111 | 23 | 30 |
| Hexachloroethane | 8270E | 1650 | 3320 | 50 | 2060 | 3310 | 62 | 18-85 | 22 | 30 |
| Isophorone | 8270E | 1940 | 3320 | 58 | 2320 | 3310 | 70 | 39-104 | 18 | 30 |
| N-Nitrosodi-n-propylamine | 8270E | 1890 | 3320 | 57 | 2330 | 3310 | 70 | 30-98 | 21 | 30 |
| N-Nitrosodiphenylamine | 8270E | 2490 | 3320 | 75 | 3060 | 3310 | 92 | 43-130 | 21 | 30 |
| Nitrobenzene | 8270E | 1730 | 3320 | 52 | 2090 | 3310 | 63 | 31-99 | 19 | 30 |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 08/26/25

## Duplicate Lab Control Sample Summary
## Semivolatile Organic Compounds by GC/MS using Microwave Digestion

**Units:**ug/Kg
**Basis:**Dry

| | | Lab Control Sample | | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | RQ2511248-02 | | | RQ2511248-03 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| Pentachlorophenol (PCP) | 8270E | 2000 | 3320 | 60 | 2550 | 3310 | 77 | 36-138 | 24 | 30 |
| Phenol | 8270E | 1900 | 3320 | 57 | 2330 | 3310 | 70 | 31-100 | 20 | 30 |
| Pyridine | 8270E | 2750 | 6640 | 41 | 3520 | 6620 | 53 | 12-80 | 24 | 30 |

# Semivolatile Organic Compounds by GC

**ALS Environmental—Rochester Laboratory**
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner
**Sample Matrix:** Soil

## SURROGATE RECOVERY SUMMARY

### Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Analysis Method:** 8081B
**Extraction Method:** EPA 3546

| Sample Name | Lab Code | Decachlorobiphenyl 10 - 159 | Tetrachloro-m-xylene 10 - 132 |
|---|---|---|---|
| 8070 SB01 (1-2) | R2510166-001 | 68 | 51 |
| 8070 SB02 (3-4) | R2510166-002 | 52 | 33 |
| 8070 SB03 (5-6) | R2510166-003 | 70 | 44 |
| Method Blank | RQ2511247-01 | 78 | 34 |
| Lab Control Sample | RQ2511247-02 | 81 | 46 |
| Duplicate Lab Control Sample | RQ2511247-03 | 78 | 42 |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | NA |
| **Sample Matrix:** | Soil | **Date Received:** | NA |
| **Sample Name:** | Method Blank | **Units:** | ug/Kg |
| **Lab Code:** | RQ2511247-01 | **Basis:** | Dry |

## Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Analysis Method:** 8081B
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| 4,4'-DDE | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| 4,4'-DDT | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Aldrin | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Chlordane | 4.2 U | 8.3 | 4.2 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Dieldrin | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endosulfan I | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endosulfan II | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endosulfan Sulfate | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endrin | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endrin Aldehyde | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Endrin Ketone | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Heptachlor | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Heptachlor Epoxide | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Methoxychlor | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| Toxaphene | 19 U | 33 | 19 | 1 | 09/08/25 21:38 | 8/25/25 | |
| alpha-BHC | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| alpha-Chlordane | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| beta-BHC | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| delta-BHC | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| gamma-BHC (Lindane) | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |
| gamma-Chlordane | 0.84 U | 1.7 | 0.84 | 1 | 09/08/25 21:38 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 78 | 10 - 159 | 09/08/25 21:38 | |
| Tetrachloro-m-xylene | 34 | 10 - 132 | 09/08/25 21:38 | |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 09/08/25

## Duplicate Lab Control Sample Summary
## Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

**Units:**ug/Kg
**Basis:**Dry

| | | Lab Control Sample | | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | RQ2511247-02 | | | RQ2511247-03 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| 4,4'-DDD | 8081B | 5.27 | 6.62 | 80 | 5.47 | 6.61 | 83 | 48-121 | 4 | 30 |
| 4,4'-DDE | 8081B | 4.82 | 6.62 | 73 | 4.99 | 6.61 | 75 | 51-119 | 3 | 30 |
| 4,4'-DDT | 8081B | 5.80 | 6.62 | 88 | 5.66 | 6.61 | 86 | 51-126 | 2 | 30 |
| Aldrin | 8081B | 4.02 | 6.62 | 61 | 4.07 | 6.61 | 62 | 45-109 | 1 | 30 |
| Dieldrin | 8081B | 4.72 | 6.62 | 71 | 4.98 | 6.61 | 75 | 56-111 | 5 | 30 |
| Endosulfan I | 8081B | 4.13 | 6.62 | 62 | 4.48 | 6.61 | 68 | 54-109 | 8 | 30 |
| Endosulfan II | 8081B | 4.83 | 6.62 | 73 | 4.93 | 6.61 | 75 | 50-116 | 2 | 30 |
| Endosulfan Sulfate | 8081B | 4.97 | 6.62 | 75 | 5.05 | 6.61 | 76 | 55-115 | 2 | 30 |
| Endrin | 8081B | 4.91 | 6.62 | 74 | 5.11 | 6.61 | 77 | 49-124 | 4 | 30 |
| Endrin Aldehyde | 8081B | 4.36 | 6.62 | 66 | 4.99 | 6.61 | 75 | 21-139 | 14 | 30 |
| Endrin Ketone | 8081B | 5.56 | 6.62 | 84 | 5.56 | 6.61 | 84 | 50-124 | <1 | 30 |
| Heptachlor | 8081B | 4.20 | 6.62 | 64 | 4.26 | 6.61 | 64 | 43-115 | 1 | 30 |
| Heptachlor Epoxide | 8081B | 4.60 | 6.62 | 69 | 4.94 | 6.61 | 75 | 53-113 | 7 | 30 |
| Methoxychlor | 8081B | 6.09 | 6.62 | 92 | 6.42 | 6.61 | 97 | 47-141 | 5 | 30 |
| alpha-BHC | 8081B | 3.91 | 6.62 | 59 | 3.86 | 6.61 | 58 | 44-109 | 1 | 30 |
| alpha-Chlordane | 8081B | 4.64 | 6.62 | 70 | 4.76 | 6.61 | 72 | 52-114 | 3 | 30 |
| beta-BHC | 8081B | 4.80 | 6.62 | 73 | 4.83 | 6.61 | 73 | 49-119 | <1 | 30 |
| delta-BHC | 8081B | 4.83 | 6.62 | 73 | 5.07 | 6.61 | 77 | 49-113 | 5 | 30 |
| gamma-BHC (Lindane) | 8081B | 3.96 | 6.62 | 60 | 3.98 | 6.61 | 60 | 43-112 | <1 | 30 |
| gamma-Chlordane | 8081B | 4.75 | 6.62 | 72 | 4.87 | 6.61 | 74 | 51-117 | 2 | 30 |

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner
**Sample Matrix:** Soil

## SURROGATE RECOVERY SUMMARY
## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Analysis Method:** 8082A
**Extraction Method:** EPA 3546

| Sample Name | Lab Code | Decachlorobiphenyl 10 - 138 | Tetrachloro-m-xylene 11 - 122 |
|---|---|---|---|
| 8070 SB01 (1-2) | R2510166-001 | 66 | 44 |
| 8070 SB02 (3-4) | R2510166-002 | 49 | 34 |
| 8070 SB03 (5-6) | R2510166-003 | 64 | 46 |
| Method Blank | RQ2511247-01 | 70 | 32 |
| Lab Control Sample | RQ2511247-04 | 79 | 44 |
| Duplicate Lab Control Sample | RQ2511247-05 | 78 | 43 |

Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | NA |
| **Sample Matrix:** | Soil | **Date Received:** | NA |
| **Sample Name:** | Method Blank | **Units:** | ug/Kg |
| **Lab Code:** | RQ2511247-01 | **Basis:** | Dry |

## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Analysis Method:** 8082A
**Prep Method:** EPA 3546

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1221 | 26 U | 67 | 26 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1232 | 19 U | 33 | 19 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1242 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1248 | 18 U | 33 | 18 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1254 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1260 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1262 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |
| Aroclor 1268 | 17 U | 33 | 17 | 1 | 08/29/25 21:32 | 8/25/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| Decachlorobiphenyl | 70 | 10 - 138 | 08/29/25 21:32 | |
| Tetrachloro-m-xylene | 32 | 11 - 122 | 08/29/25 21:32 | |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 08/29/25

## Duplicate Lab Control Sample Summary
## Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

**Units:**ug/Kg
**Basis:**Dry

| | | | Lab Control Sample | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | RQ2511247-04 | | RQ2511247-05 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| Aroclor 1016 | 8082A | 109 | 165 | 66 | 110 | 167 | 66 | 34-141 | <1 | 30 |
| Aroclor 1260 | 8082A | 138 | 165 | 83 | 133 | 167 | 80 | 30-158 | 3 | 30 |

**Client:** ALS Environmental - US **Service Request:** R2510166
**Project:** 8070_Wisner
**Sample Matrix:** Soil

## SURROGATE RECOVERY SUMMARY
## Chlorinated Herbicides by GC

**Analysis Method:** 8151A
**Extraction Method:** Method

| Sample Name | Lab Code | DCAA 10 - 151 |
|---|---|---|
| 8070 SB01 (1-2) | R2510166-001 | 46 |
| 8070 SB02 (3-4) | R2510166-002 | 49 |
| 8070 SB03 (5-6) | R2510166-003 | 72 |
| Method Blank | RQ2511443-01 | 53 |
| Lab Control Sample | RQ2511443-02 | 45 |
| Duplicate Lab Control Sample | RQ2511443-03 | 41 |

| | | | |
|---|---|---|---|
| **Client:** | ALS Environmental - US | **Service Request:** | R2510166 |
| **Project:** | 8070_Wisner | **Date Collected:** | NA |
| **Sample Matrix:** | Soil | **Date Received:** | NA |
| **Sample Name:** | Method Blank | **Units:** | ug/Kg |
| **Lab Code:** | RQ2511443-01 | **Basis:** | Dry |

## Chlorinated Herbicides by GC

**Analysis Method:** 8151A
**Prep Method:** Method

| Analyte Name | Result | MRL | MDL | Dil. | Date Analyzed | Date Extracted | Q |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 5.0 U | 10 | 5.0 | 1 | 09/03/25 21:28 | 8/27/25 | |
| 2,4,5-TP | 4.5 U | 10 | 4.5 | 1 | 09/03/25 21:28 | 8/27/25 | |
| 2,4-D | 6.5 U | 10 | 6.5 | 1 | 09/03/25 21:28 | 8/27/25 | |

| Surrogate Name | % Rec | Control Limits | Date Analyzed | Q |
|---|---|---|---|---|
| DCAA | 53 | 10 - 151 | 09/03/25 21:28 | |

**Client:** ALS Environmental - US
**Project:** 8070_Wisner
**Sample Matrix:** Soil

**Service Request:** R2510166
**Date Analyzed:** 09/03/25

## Duplicate Lab Control Sample Summary
## Chlorinated Herbicides by GC

**Units:**ug/Kg
**Basis:**Dry

| | | | Lab Control Sample | | Duplicate Lab Control Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | RQ2511443-02 | | RQ2511443-03 | | | | | |
| **Analyte Name** | **Analytical Method** | **Result** | **Spike Amount** | **% Rec** | **Result** | **Spike Amount** | **% Rec** | **% Rec Limits** | **RPD** | **RPD Limit** |
| 2,4,5-T | 8151A | 17.5 | 24.9 | 70 | 16.2 | 25.0 | 65 | 19-127 | 7 | 30 |
| 2,4,5-TP | 8151A | 15.1 | 24.9 | 60 | 14.2 | 25.0 | 57 | 18-122 | 6 | 30 |
| 2,4-D | 8151A | 13.2 | 24.9 | 53 | 11.8 | 25.0 | 47 | 31-119 | 11 | 30 |

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# CERTIFICATE OF ANALYSIS

## Work Order

**HN2514808**

## Client

**The Mannik & Smith Group, Inc.**

## Project

**DETR0060**

## Project Date

**October 03, 2025**

## Reporting Contact

**Ryan Montri**

October 15, 2025

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

Date Received: **10/03/2025**
Work Order: **HN2514808**

Re: **DETR0060**

Dear Ryan,

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

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

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

If you have any questions regarding this report, please feel free to contact me:
ADDRESS: 3352 128th Avenue, Holland, MI, USA  PHONE: +1 (616) 399-6070  FAX: +1 (616) 399-6185

## Dale Schipper

**/S/ ALEX CSASZAR on behalf of PM listed above**

**Project Manager**

**Client:** The Mannik & Smith Group, Inc. **Work Order:** HN2514808

**Project:** DETR0060 **Date Received:** 08-Oct-2025

## CASE NARRATIVE

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

### Sample Receipt

1 soil/solid sample was received for analysis at ALS Environmental on 08-Oct-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

# SAMPLE SUMMARY

**Client:** The Mannik & Smith Group, Inc.
**Project:** DETR0060
**Workorder:** HN2514808

| Laboratory Sample ID | Client Sample ID | Sample Matrix | Collection Date | Date Received |
|---|---|---|---|---|
| HN2514808-001 | 8070 Wisner SB02 TCLP | SOIL/SOLID | 10/07/25 14:35 | 10/08/25 07:00 |

ALS Environmental

**Laboratory location:**

# Chain of Custody Form

Page 1 of 1

**ALS Project Manager:** | **Work Order #:**

| Customer Information | | Project Information | | Parameter/Method Request for Analysis |
|---|---|---|---|---|
| Purchase Order | | Project Name | 8070 Wisner | A TCLP Arsenic |
| Work Order | Quote ID - 11631 | Project Number | DETR0060 | B |
| Company Name | Mannik Smith Group | Bill To Company | Mannik Smith Group | C |
| Send Report To | Ryan Montri | Invoice Attn. | | D |
| Address | 2365 South Haggerty Road | Address | 2365 South Haggerty Road | E |
| | | | | F |
| City/State/Zip | Canton, Mi 48188 | City/State/Zip | Canton, Mi 48188 | G |
| Phone | 734-397-3100 | Phone | 734-397-3100 | H |
| Fax | | Fax | | I |
| e-Mail Address | rmontri@manniksmithgroup.com | e-Mail Address | | J |

Environmental Division Holland
Work Order Reference
HN2514808

Telephone : +1 616 399 6070

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | Id |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8070 Wisner SB02 TCLP | 10/7/25 | 1435 | Soil | | 2 | X | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |

**Sampler(s): Please Print & Sign:** Shannon Kaczmarek

**Shipment Method:**

**Required Turnaround Time:** ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

**Results Due Date:**

| | | | | |
|---|---|---|---|---|
| **Relinquished by:** | **Date:** 10/7/25 | **Time:** 1443 | **Received by:** | **Notes:** M: 10/7/25 1700 Nei: QS 10/7/25 1700 |
| **Relinquished by:** Edward Bassett Jr | **Date:** 10/7/25 | **Time:** 1529 | **Received by (Laboratory):** | **Cooler Temp.** |
| **Logged by (Laboratory):** BH | **Date:** 10/8/25 | **Time:** 11:09 | **Checked by (Laboratory):** | IR7 1.5c |

**QC Package: (Check Box Below)**

- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ Other: _____
- ☐ TRRP-Checklist
- ☐ TRRP Level IV

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

**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

QS to Brittany Hayward 10/8/25 0700

# ALS Holland Sample Receiving Checklist

| | |
|---|---|
| Received by: | Brittany H |
| Date/Time: | 10/8/25 0700 |
| 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): | 1.5/1.5c |
| Thermometer(s): | 127 |
| Sample(s) received on ice? | (Yes) / No |
| Matrix/Matrices: | Soil |
| Cooler(s)/Kit(s): | 1 |
| Date/Time sample(s) sent to storage: | 10/8/25 11:09 |
| 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 Reporting Limit |
| E | Value above quantitation range |
| H | Analyzed outside of Holding Time |
| J | Analyte is present at an estimated concentration between the MDL and Report Limit |
| NC | Not Calculated |
| ND | Not Detected at the Reporting Limit |
| O | Sample amount is > 4 times amount spiked |
| P | Dual Column results percent difference > 40% |
| R | RPD above laboratory control limit |
| S | Spike Recovery outside laboratory control limits |
| U | Analyzed but not detected above the MDL |
| V | The Continuing Calibration Verification was outside of control criteria |
| X | Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level. |

## Holland Laboratory Certifications[1]

| Agency | Type | ID | Issued | Expires |
|---|---|---|---|---|
| Alabama | Drinking Water (Secondary) | 42500 | 12/17/2024 | 12/31/2025 |
| Colorado | UST | | 07/01/2025 | 06/30/2026 |
| Connecticut | Drinking Water (Secondary) | PH-0155 | 12/10/2024 | 12/31/2026 |
| Florida | NELAP (Primary) | E871106 | 07/01/2025 | 06/30/2026 |
| Illinois | NELAP (Secondary) | 200076 | 11/14/2024 | 12/31/2025 |
| Indiana | Drinking Water (Secondary) | C-MI-08 | 12/31/2024 | 09/04/2026 |
| Iowa | State Specific | 403 | 09/18/2023 | 09/01/2025 |
| Kansas | NELAP (Secondary) | E-10411 | 07/09/2024 | 07/31/2025 |
| Kentucky | Waste Water | KY98004 | 12/20/2024 | 12/31/2025 |
| Kentucky | UST | 120474 | 06/24/2024 | 06/30/2025 |
| Michigan | Drinking Water (Primary) | 0022 | 12/19/2023 | 09/04/2026 |
| Minnesota | NELAP (Secondary) | 026-999-449 | 12/17/2024 | 12/31/2025 |
| Missouri | Drinking Water (Secondary) | 01262 | 11/14/2024 | 12/30/2027 |
| New Jersey | NELAP (Secondary) | MI015 | 07/01/2024 | 6/30/2025 |
| New York | NELAP (Secondary) | 12128 | 04/01/2025 | 04/01/2026 |
| North Dakota | State Specific | R-192 | 11/18/2024 | 06/30/2025 |
| Ohio | Drinking Water (Secondary) | 87783 | 06/26/2025 | 6/30/2026 |
| Pennsylvania | NELAP (Secondary) | 68-03827 | 06/14/2024 | 07/31/2025 |
| Texas | NELAP (Secondary) | T104704494 | 02/12/2025 | 01/31/2026 |
| USDA | Domestic CA | Soil-MI-007 | 02/06/2025 | 08/07/2026 |
| USDA | Soil Import | 525-23-62-77572 | 03/03/2023 | 03/03/2026 |
| West Virginia | State Specific | 355 | 06/07/2025 | 08/31/2026 |
| Wisconsin | State Specific | 399084510 | 08/15/2024 | 08/31/2025 |

1 - Scope available upon request

# ANALYST SUMMARY

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | | |

| | | | |
|---|---|---|---|
| **Sample Name:** | 8070 Wisner SB02 TCLP | **Date Collected:** | 10/07/25 |
| **Laboratory Code:** | HN2514808-001 | **Date Received:** | 10/08/25 |
| **Sample Matrix:** | SOIL/SOLID | | |

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 6020B | EPA 3015A | 001-AD | 2272800 | Nicolee Allen | 3586409 | Hunter Johnson |

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | **Date Collected:** | 10/07/25 14:35 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 10/08/25 07:00 |

**CLIENT ID: 8070 Wisner SB02 TCLP** **Lab ID: HN2514808-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **TCLP Metals** | | | | | | | | |
| Arsenic | EPA 6020B | ND | | mg/L | 0.0499 | 1 | 10/14/25 18:29 | 10/12/25 09:34 |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2272800 | **Run ID:** | 3584478 |

## TCLP Metals

**MB** | **CLIENT ID: Method Blank** | **Lab ID: QC-2272800-001**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/13/25 22:50 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.0499 | | | | | | | |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2272800-002**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/13/25 22:52 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.926 | mg/L | 0.0499 | 1 | | 92.6 | 80-120 | | | |

**MS** | **CLIENT ID: Batch QC** | **Lab ID: QC-2272800-004**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/13/25 22:55 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.926 | mg/L | 0.0499 | 1 | ND | 92.6 | 75-125 | | | |

**MSD** | **CLIENT ID: Batch QC** | **Lab ID: QC-2272800-005**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/13/25 22:57 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.913 | mg/L | 0.0499 | 1 | ND | 91.3 | 75-125 | 1.38 | 20 | |

**The following samples were analyzed in this batch:** HN2514808-001

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October 20, 2025

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

Re: **DETR0060**

Date Received: **10/08/2025**
Work Order: **HN2514808**
Revision: **1**

Dear Ryan,

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

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

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

If you have any questions regarding this report, please feel free to contact me:
ADDRESS: 3352 128th Avenue, Holland, MI, USA  PHONE: +1 (616) 399-6070  FAX: +1 (616) 399-6185

**Dale Schipper**
**/S/ DALE SCHIPPER**

**Project Manager**

**Client:** The Mannik & Smith Group, Inc. **Work Order:** HN2514808

**Project:** DETR0060 **Date Received:** 08-Oct-2025

## CASE NARRATIVE

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

### Sample Receipt

1 soil/solid sample was received for analysis at ALS Environmental on 08-Oct-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

# SAMPLE SUMMARY

**Client:** The Mannik & Smith Group, Inc.
**Project:** DETR0060
**Workorder:** HN2514808

| Laboratory Sample ID | Client Sample ID | Sample Matrix | Collection Date | Date Received |
|---|---|---|---|---|
| HN2514808-001 | 8070 Wisner SB02 TCLP | SOIL/SOLID | 10/07/25 14:35 | 10/08/25 07:00 |

## REPORT QUALIFIERS AND DEFINITIONS

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

## Holland Laboratory Certifications[1]

| Agency | Type | ID | Issued | Expires |
|---|---|---|---|---|
| Alabama | Drinking Water (Secondary) | 42500 | 12/17/2024 | 12/31/2025 |
| Colorado | UST | | 07/01/2025 | 06/30/2026 |
| Connecticut | Drinking Water (Secondary) | PH-0155 | 12/10/2024 | 12/31/2026 |
| Florida | NELAP (Primary) | E871106 | 07/01/2025 | 06/30/2026 |
| Illinois | NELAP (Secondary) | 200076 | 11/14/2024 | 12/31/2025 |
| Indiana | Drinking Water (Secondary) | C-MI-08 | 12/31/2024 | 09/04/2026 |
| Iowa | State Specific | 403 | 09/18/2023 | 09/01/2025 |
| Kansas | NELAP (Secondary) | E-10411 | 07/09/2024 | 07/31/2025 |
| Kentucky | Waste Water | KY98004 | 12/20/2024 | 12/31/2025 |
| Kentucky | UST | 120474 | 06/24/2024 | 06/30/2025 |
| Michigan | Drinking Water (Primary) | 0022 | 12/19/2023 | 09/04/2026 |
| Minnesota | NELAP (Secondary) | 026-999-449 | 12/17/2024 | 12/31/2025 |
| Missouri | Drinking Water (Secondary) | 01262 | 11/14/2024 | 12/30/2027 |
| New Jersey | NELAP (Secondary) | MI015 | 07/01/2024 | 6/30/2025 |
| New York | NELAP (Secondary) | 12128 | 04/01/2025 | 04/01/2026 |
| North Dakota | State Specific | R-192 | 11/18/2024 | 06/30/2025 |
| Ohio | Drinking Water (Secondary) | 87783 | 06/26/2025 | 6/30/2026 |
| Pennsylvania | NELAP (Secondary) | 68-03827 | 06/14/2024 | 07/31/2025 |
| Texas | NELAP (Secondary) | T104704494 | 02/12/2025 | 01/31/2026 |
| USDA | Domestic CA | Soil-MI-007 | 02/06/2025 | 08/07/2026 |
| USDA | Soil Import | 525-23-62-77572 | 03/03/2023 | 03/03/2026 |
| West Virginia | State Specific | 355 | 06/07/2025 | 08/31/2026 |
| Wisconsin | State Specific | 399084510 | 08/15/2024 | 08/31/2025 |

1 - Scope available upon request

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | **Date Collected:** | 10/07/25 14:35 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 10/08/25 07:00 |

**CLIENT ID: 8070 Wisner SB02 TCLP** **Lab ID: HN2514808-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **TCLP Metals** | | | | | | | | |
| Arsenic | EPA 6020B | ND | | mg/L | 0.0499 | 1 | 10/14/25 18:29 | 10/12/25 09:34 |
| Chromium | EPA 6020B | ND | | mg/L | 0.0499 | 1 | 10/14/25 18:29 | 10/12/25 09:34 |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2272800 | **Run ID:** | 3584478 |

## TCLP Metals

**MB** | **CLIENT ID: Method Blank** | **Lab ID: QC-2272800-001**

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 10/13/25 22:50

**Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.0499 | | | | | | | |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2272800-002**

**Method:** EPA 6020B **Dilution:** 1 **Analysis Date:** 10/13/25 22:52

**Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.926 | mg/L | 0.0499 | 1 | | 92.6 | 80-120 | | | |

**The following samples were analyzed in this batch:** HN2514808-001

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2272800 | **Run ID:** | 3586409 |

## TCLP Metals

**MB** | **CLIENT ID: Method Blank** | **Lab ID: QC-2272800-001**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/14/25 18:14 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | ND | mg/L | 0.0499 | | | | | | | |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2272800-002**

**Method:** EPA 6020B | **Dilution:** 1 | **Analysis Date:** 10/14/25 18:16 | **Prep Date:** 10/12/25 09:35

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | 0.932 | mg/L | 0.0499 | 1 | | 93.2 | 80-120 | | | |

**The following samples were analyzed in this batch:** HN2514808-001

# ANALYST SUMMARY

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2514808 |
| **Project:** | DETR0060 | | |

| | | | |
|---|---|---|---|
| **Sample Name:** | 8070 Wisner SB02 TCLP | **Date Collected:** | 10/07/25 |
| **Laboratory Code:** | HN2514808-001 | **Date Received:** | 10/08/25 |
| **Sample Matrix:** | SOIL/SOLID | | |

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 6020B | EPA 3015A | 001-AD | 2272800 | Nicolee Allen | 3586409 | Denise Coffey |

ALS Environmental

**Laboratory location:**

# Chain of Custody Form

Page 1 of 1

**ALS Project Manager:** | **Work Order #:**

| Customer Information | | Project Information | | Parameter/Method Request for Analysis |
|---|---|---|---|---|
| Purchase Order | | Project Name | 8070 Wisner | A TCLP Arsenic |
| Work Order | Quote ID - 11631 | Project Number | DETR0060 | B |
| Company Name | Mannik Smith Group | Bill To Company | Mannik Smith Group | C |
| Send Report To | Ryan Montri | Invoice Attn. | | D |
| Address | 2365 South Haggerty Road | Address | 2365 South Haggerty Road | E |
| | | | | F |
| City/State/Zip | Canton, Mi 48188 | City/State/Zip | Canton, Mi 48188 | G |
| Phone | 734-397-3100 | Phone | 734-397-3100 | H |
| Fax | | Fax | | I |
| e-Mail Address | rmontri@manniksmithgroup.com | e-Mail Address | | J |

Environmental Division Holland
Work Order Reference
HN2514808

Telephone : +1 616 399 6070

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | Id |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8070 Wisner SB02 TCLP | 10/7/25 | 1435 | Soil | | 2 | X | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |

**Sampler(s): Please Print & Sign:** Shannon Kaczmarek

**Shipment Method:**

**Required Turnaround Time:** ☐ STD 10 Wk Days ☑ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

**Results Due Date:**

| | | | | |
|---|---|---|---|---|
| **Relinquished by:** | **Date:** 10/7/25 | **Time:** 1443 | **Received by:** | **Notes:** M/: 10/7/25 1700 Rec: QS 10/7/25 1700 |
| **Relinquished by:** Edward Bassett Jr | **Date:** 10/7/25 | **Time:** 1529 | **Received by (Laboratory):** | **Cooler Temp.** |
| **Logged by (Laboratory):** BH | **Date:** 10/8/25 | **Time:** 11:09 | **Checked by (Laboratory):** | IR7 1.5c |

**QC Package: (Check Box Below)**

- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ Other: _____
- ☐ TRRP-Checklist
- ☐ TRRP Level IV

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

**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

QS to Brittany Hayward 10/8/25 0700

# ALS Holland Sample Receiving Checklist

| | |
|---|---|
| Received by: | Brittany H |
| Date/Time: | 10/8/25 0700 |
| 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): | 1.5/1.5c |
| Thermometer(s): | 127 |
| Sample(s) received on ice? | (Yes) / No |
| Matrix/Matrices: | Soil |
| Cooler(s)/Kit(s): | 1 |
| Date/Time sample(s) sent to storage: | 10/8/25 11:09 |
| 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:

right solutions.
right partner.

November 07, 2025

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

Date Received: **10/29/2025**
Work Order: **HN2516145**

Re: **DETR0060 - 8070 Wisner**

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. **Work Order:** HN2516145

**Project:** DETR0060 - 8070 Wisner **Date Received:** 29-Oct-2025

## CASE NARRATIVE

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

### Sample Receipt

1 soil/solid sample was received for analysis at ALS Environmental on 29-Oct-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

### Organics

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

##### Run ID: 3667671

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

HN2516145-001: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

# 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: 8070 Wisner SB02(3-4')-R | | Lab ID: HN2516145-001 | | | |
|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **MRL** | **Units** | **Method** |
| 2-Methylnaphthalene | 209 | | 174 | µg/kg | EPA 8270E |
| Benzo(a)anthracene | 244 | | 174 | µg/kg | EPA 8270E |
| Benzo(a)pyrene | 244 | | 174 | µg/kg | EPA 8270E |
| Benzo(b)fluoranthene | 244 | | 174 | µg/kg | EPA 8270E |
| Fluoranthene | 209 | | 174 | µg/kg | EPA 8270E |
| Percent Moisture | 9.7 | | 0.1 | % | EPA 3550C |
| Pyrene | 435 | | 174 | µg/kg | EPA 8270E |

# SAMPLE SUMMARY

**Client:** The Mannik & Smith Group, Inc.
**Project:** DETR0060 - 8070 Wisner
**Workorder:** HN2516145

| Laboratory Sample ID | Client Sample ID | Sample Matrix | Collection Date | Date Received |
|---|---|---|---|---|
| HN2516145-001 | 8070 Wisner SB02(3-4')-R | SOIL/SOLID | 10/28/25 11:28 | 10/29/25 08:00 |

ALS Environmental

**Laboratory location:**

# Chain of Custody Form

Page 1 of 1

**ALS Project Manager:** | **Work Order #:**

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| Purchase Order | | Project Name | 8070 Wisner | A | SVOCs (U.S. EPA Method 8270D (or Method 8270)) |
| Work Order | | Project Number | DETR0060 | B | |
| Company Name | The Mannik and Smith Group | Bill To Company | The Mannik and Smith Group | C | |
| Send Report To | Ryan Montri | Invoice Attn. | | D | |
| Address | 2365 Haggerty Rd South Suite 100 | Address | 2365 Haggerty Rd South Suite 100 | E | |
| | | | | F | |
| City/State/Zip | Canton, MI 48188 | City/State/Zip | Canton, MI 48188 | G | |
| Phone | 734-397-3100 | Phone | 734-397-3100 | H | |
| Fax | | Fax | | I | |
| e-Mail Address | RMontri@manniksmithgroup.com | e-Mail Address | | J | |

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8070 Wisner SB02(3-4')-R | 10/28/25 | 1128 | Soil | None | 1 | X | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

Environmental Division Holland
Work Order Reference
HN2516145

Telephone : +1 616 399 6070

**Sampler(s): Please Print & Sign:** WILEY DAVENPORT

**Shipment Method:**

**Required Turnaround Time:** ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other: 72 hrs

**Results Due Date:**

| | Date: | Time: | | |
|---|---|---|---|---|
| **Relinquished by:** WILEY DAVENPORT | 10/28/25 | 1617 | **Received by:** | **Notes:** Quote# HN-061825-M&S-MA |
| **Relinquished by:** | 10/28 | 1617 | **Received by (Laboratory):** | **Cooler Temp.** |
| **Logged by (Laboratory):** | 10-29-25 | 800 | **Checked by (Laboratory):** | 3.4 216 |

**QC Package: (Check Box Below)**

☐ 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 Holland
3352 128th Ave., Holland MI 49424

# ALS Holland Sample Receiving Checklist

| | |
|---|---|
| Received by: | JV |
| Date/Time: | 10-24-25 800 |
| 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): | 5.4/5.4 |
| Thermometer(s): | IR6 |
| Sample(s) received on ice? | Yes / No |
| Matrix/Matrices: | SOIL |
| Cooler(s)/Kit(s): | |
| Date/Time sample(s) sent to storage: | 10.24.25 |
| 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:

HN-SHT-160-R01, Sample Receipt Checklist

## REPORT QUALIFIERS AND DEFINITIONS

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

## Holland Laboratory Certifications[1]

| Agency | Type | ID | Issued | Expires |
|---|---|---|---|---|
| Alabama | Drinking Water (Secondary) | 42500 | 12/17/2024 | 12/31/2025 |
| Colorado | UST | | 07/01/2025 | 06/30/2026 |
| Connecticut | Drinking Water (Secondary) | PH-0155 | 12/10/2024 | 12/31/2026 |
| Florida | NELAP (Primary) | E871106 | 07/01/2025 | 06/30/2026 |
| Illinois | NELAP (Secondary) | 200076 | 11/14/2024 | 12/31/2025 |
| Indiana | Drinking Water (Secondary) | C-MI-08 | 12/31/2024 | 09/04/2026 |
| Iowa | State Specific | 403 | 09/18/2023 | 09/01/2025 |
| Kansas | NELAP (Secondary) | E-10411 | 07/09/2024 | 07/31/2025 |
| Kentucky | Waste Water | KY98004 | 12/20/2024 | 12/31/2025 |
| Kentucky | UST | 120474 | 06/24/2024 | 06/30/2025 |
| Michigan | Drinking Water (Primary) | 0022 | 12/19/2023 | 09/04/2026 |
| Minnesota | NELAP (Secondary) | 026-999-449 | 12/17/2024 | 12/31/2025 |
| Missouri | Drinking Water (Secondary) | 01262 | 11/14/2024 | 12/30/2027 |
| New Jersey | NELAP (Secondary) | MI015 | 07/01/2024 | 6/30/2025 |
| New York | NELAP (Secondary) | 12128 | 04/01/2025 | 04/01/2026 |
| North Dakota | State Specific | R-192 | 11/18/2024 | 06/30/2025 |
| Ohio | Drinking Water (Secondary) | 87783 | 06/26/2025 | 6/30/2026 |
| Pennsylvania | NELAP (Secondary) | 68-03827 | 06/14/2024 | 07/31/2025 |
| Texas | NELAP (Secondary) | T104704494 | 02/12/2025 | 01/31/2026 |
| USDA | Domestic CA | Soil-MI-007 | 02/06/2025 | 08/07/2026 |
| USDA | Soil Import | 525-23-62-77572 | 03/03/2023 | 03/03/2026 |
| West Virginia | State Specific | 355 | 06/07/2025 | 08/31/2026 |
| Wisconsin | State Specific | 399084510 | 08/15/2024 | 08/31/2025 |

1 - Scope available upon request

# ANALYST SUMMARY

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | | |

| | | | |
|---|---|---|---|
| **Sample Name:** | 8070 Wisner SB02(3-4')-R | **Date Collected:** | 10/28/25 |
| **Laboratory Code:** | HN2516145-001 | **Date Received:** | 10/29/25 |
| **Sample Matrix:** | SOIL/SOLID | | |

| Analysis Method | Preparation Method | Container ID | Preparation Lot | Prepared By | Analysis Lot | Analyzed By |
|---|---|---|---|---|---|---|
| EPA 3550C | | 001-AA | 2305586 | | 3636414 | Nicole Maleski |
| EPA 8270E | EPA 3546 | 001-AA | 2319451 | Willow Julien | 3667671 | Sam Bruzan |

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | 10/28/25 11:28 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 10/29/25 08:00 |

**CLIENT ID: 8070 Wisner SB02(3-4')-R** — **Lab ID: HN2516145-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters** | | | | | | | | |
| Percent Moisture | EPA 3550C | **9.7** | | % | 0.1 | 1 | 10/29/25 13:57 | NA |
| **Semivolatile Organic Compounds by GC-MS** | | | | | | | | |
| 1,1'-Biphenyl (BZ-0) | EPA 8270E | <141 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 1,2,4,5-Tetrachlorobenzene | EPA 8270E | <201 | U | µg/kg | 8700 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 1,4-Dioxane (1,4-Diethyleneoxide) | EPA 8270E | <624 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 1-Methylnaphthalene | EPA 8270E | <125 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether | EPA 8270E | <204 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,3,4,6-Tetrachlorophenol | EPA 8270E | <638 | U | µg/kg | 1740 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4,5-Trichlorophenol | EPA 8270E | <516 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4,6-Trichlorophenol | EPA 8270E | <232 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4-Dichlorophenol | EPA 8270E | <469 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4-Dimethylphenol | EPA 8270E | <448 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4-Dinitrophenol | EPA 8270E | <6370 | U | µg/kg | 8700 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,4-Dinitrotoluene (2,4-DNT) | EPA 8270E | <566 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2,6-Dinitrotoluene (2,6-DNT) | EPA 8270E | <222 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Chloronaphthalene | EPA 8270E | <122 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Chlorophenol | EPA 8270E | <570 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) | EPA 8270E | <727 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Methylnaphthalene | EPA 8270E | **209** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Methylphenol (o-Cresol) | EPA 8270E | <235 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Nitroaniline | EPA 8270E | <484 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 2-Nitrophenol | EPA 8270E | <248 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 3&4-Methylphenol | EPA 8270E | <475 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 3,3'-Dichlorobenzidine | EPA 8270E | <407 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 3-Nitroaniline | EPA 8270E | <506 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 4-Bromophenyl phenyl ether (BDE-3) | EPA 8270E | <477 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | 10/28/25 11:28 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 10/29/25 08:00 |

**CLIENT ID: 8070 Wisner SB02(3-4')-R** **Lab ID: HN2516145-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| 4-Chloro-3-methylphenol | EPA 8270E | <248 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 4-Chloroaniline | EPA 8270E | <443 | U | µg/kg | 1740 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 4-Chlorophenyl phenylether | EPA 8270E | <241 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 4-Nitroaniline | EPA 8270E | <1350 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| 4-Nitrophenol | EPA 8270E | <2040 | U | µg/kg | 8700 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Acenaphthene | EPA 8270E | <126 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Acenaphthylene | EPA 8270E | <151 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Acetophenone | EPA 8270E | <136 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Anthracene | EPA 8270E | <123 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Atrazine | EPA 8270E | <510 | SU | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzaldehyde | EPA 8270E | <1340 | U | µg/kg | 1740 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzo(a)anthracene | EPA 8270E | **244** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzo(a)pyrene | EPA 8270E | **244** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzo(b)fluoranthene | EPA 8270E | **244** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzo(g,h,i)perylene | EPA 8270E | <134 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Benzo(k)fluoranthene | EPA 8270E | <132 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| bis(2-Chloroethoxy) methane | EPA 8270E | <552 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| bis(2-Chloroethyl) ether | EPA 8270E | <247 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Butyl benzyl phthalate | EPA 8270E | <1090 | U | µg/kg | 1740 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Caprolactam | EPA 8270E | <786 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Carbazole | EPA 8270E | <257 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Chrysene | EPA 8270E | <141 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP) | EPA 8270E | <720 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Dibenz(a,h) anthracene | EPA 8270E | <94.1 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Dibenzofuran | EPA 8270E | <128 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Diethyl phthalate | EPA 8270E | <296 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Dimethyl phthalate | EPA 8270E | <170 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Fluoranthene | EPA 8270E | **209** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Fluorene | EPA 8270E | <126 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Hexachlorobenzene | EPA 8270E | <253 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | 10/28/25 11:28 |
| **Matrix:** | SOIL/SOLID | **Date Received:** | 10/29/25 08:00 |

**CLIENT ID: 8070 Wisner SB02(3-4')-R** **Lab ID: HN2516145-001**

| Analyte | Method | Results | Qual | Units | MRL | Dilution Factor | Date Analyzed | Date Extracted |
|---|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | EPA 8270E | <205 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Hexachlorocyclopentadiene | EPA 8270E | <826 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Hexachloroethane | EPA 8270E | <361 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Indeno(1,2,3-cd) pyrene | EPA 8270E | <121 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Isophorone | EPA 8270E | <170 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Methylphenol, Total | EPA 8270E | <235 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Naphthalene | EPA 8270E | <111 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Nitrobenzene | EPA 8270E | <293 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| n-Nitrosodi-n-propylamine | EPA 8270E | <144 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| N-Nitrosodiphenylamine | EPA 8270E | <504 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Pentachlorophenol | EPA 8270E | <692 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Phenanthrene | EPA 8270E | <81.0 | U | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Phenol | EPA 8270E | <437 | U | µg/kg | 862 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Pyrene | EPA 8270E | **435** | | µg/kg | 174 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| Pyridine | EPA 8270E | <1710 | U | µg/kg | 4350 | 10 | 11/06/25 21:26 | 11/05/25 12:25 |
| *Surr: 2,4,6-Tribromophenol* | *EPA 8270E* | ***54.8*** | | *%REC* | *48-94* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |
| *Surr: 2-Fluorobiphenyl* | *EPA 8270E* | ***66.0*** | | *%REC* | *50-103* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |
| *Surr: 2-Fluorophenol* | *EPA 8270E* | ***60.6*** | | *%REC* | *43-105* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |
| *Surr: 4-Terphenyl-d14* | *EPA 8270E* | ***68.6*** | | *%REC* | *55-111* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |
| *Surr: Nitrobenzene-d5* | *EPA 8270E* | ***60.2*** | | *%REC* | *47-100* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |
| *Surr: Phenol-d6* | *EPA 8270E* | ***54.4*** | | *%REC* | *49-110* | *10* | *11/06/25 21:26* | *11/05/25 12:25* |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2305586 | **Run ID:** | 3636414 |

## General Chemistry Parameters

**MB** | **CLIENT ID: Method Blank** | **Lab ID: QC-2305586-001**

**Method:** EPA 3550C | **Dilution:** 1 | **Analysis Date:** 10/29/25 13:57 | **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 | 0 | | NC | 0-0 | | | U |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2305586-002**

**Method:** EPA 3550C | **Dilution:** 1 | **Analysis Date:** 10/29/25 13:57 | **Prep Date:** NA

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

**DUP** | **CLIENT ID: Batch QC** | **Lab ID: QC-2305586-004**

**Method:** EPA 3550C | **Dilution:** 1 | **Analysis Date:** 10/29/25 13:57 | **Prep Date:** NA

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 18.3 | % | 0.1 | 0 | 17.3 | NC | 0-0 | 6.01 | 10 | |

**The following samples were analyzed in this batch:** HN2516145-001

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

## Semivolatile Organic Compounds by GC-MS

| MB | CLIENT ID: Method Blank | Lab ID: QC-2319451-001 |
|---|---|---|

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 11/06/25 12:42

**Prep Date:** 11/05/25 12:26

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

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

**MB** **CLIENT ID: Method Blank** **Lab ID: QC-2319451-001**

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 11/06/25 12:42

**Prep Date:** 11/05/25 12:26

| 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 | 0 | | NC | 0-0 | | | U |
| Caprolactam | <30.1 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Carbazole | <9.82 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Chrysene | <5.39 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP) | <27.6 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Dibenz(a,h) anthracene | <3.60 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Dibenzofuran | <4.90 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Diethyl phthalate | <11.3 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Dimethyl phthalate | <6.50 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Fluoranthene | <3.20 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Fluorene | <4.84 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Hexachlorobenzene | <9.70 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Hexachlorobutadiene | <7.85 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Hexachlorocyclopentadiene | <31.6 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Hexachloroethane | <13.8 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Indeno(1,2,3-cd) pyrene | <4.64 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Isophorone | <6.51 | µg/kg | 167 | 0 | | NC | 0-0 | | | U |
| Methylphenol, Total | <9.01 | µg/kg | 67.0 | 0 | | NC | 0-0 | | | U |
| Naphthalene | <4.26 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Nitrobenzene | <11.2 | µg/kg | 167 | 0 | | NC | 0-0 | | | U |
| n-Nitrosodi-n-propylamine | <5.50 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| N-Nitrosodiphenylamine | <19.3 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Pentachlorophenol | <26.5 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Phenanthrene | <3.10 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Phenol | <16.7 | µg/kg | 33.0 | 0 | | NC | 0-0 | | | U |
| Pyrene | <3.33 | µg/kg | 6.67 | 0 | | NC | 0-0 | | | U |
| Pyridine | <65.6 | µg/kg | 167 | 0 | | NC | 0-0 | | | U |
| *Surr: 2,4,6-Tribromophenol* | ***2410*** | *µg/kg* | | 3333 | | 72.4 | *48-94* | | | |
| *Surr: 2-Fluorobiphenyl* | ***2480*** | *µg/kg* | | 3333 | | 74.4 | *50-103* | | | |
| *Surr: 2-Fluorophenol* | ***2600*** | *µg/kg* | | 3333 | | 77.9 | *43-105* | | | |
| *Surr: 4-Terphenyl-d14* | ***2530*** | *µg/kg* | | 3333 | | 76.0 | *55-111* | | | |
| *Surr: Nitrobenzene-d5* | ***2160*** | *µg/kg* | | 3333 | | 64.7 | *47-100* | | | |
| *Surr: Phenol-d6* | ***2500*** | *µg/kg* | | 3333 | | 74.9 | *49-110* | | | |

**LCS** **CLIENT ID: Laboratory Control Sample** **Lab ID: QC-2319451-002**

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 11/06/25 13:03

**Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl (BZ-0) | 981 | µg/kg | 33.0 | 1333 | | 73.6 | 57-101 | | | |
| 1,2,4,5-Tetrachlorobenzene | 971 | µg/kg | 333 | 1333 | | 72.8 | 54-98 | | | |
| 1-Methylnaphthalene | 971 | µg/kg | 6.67 | 1333 | | 72.8 | 56-100 | | | |
| 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether | 948 | µg/kg | 33.0 | 1333 | | 71.1 | 50-101 | | | |
| 2,3,4,6-Tetrachlorophenol | 1070 | µg/kg | 67.0 | 1333 | | 80.1 | 48-103 | | | |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2319451-002**

**Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 13:03 | **Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-Trichlorophenol | 1010 | µg/kg | 33.0 | 1333 | | 75.9 | 54-98 | | | |
| 2,4,6-Trichlorophenol | 988 | µg/kg | 33.0 | 1333 | | 74.1 | 56-97 | | | |
| 2,4-Dichlorophenol | 929 | µg/kg | 33.0 | 1333 | | 69.7 | 54-99 | | | |
| 2,4-Dimethylphenol | 1010 | µg/kg | 33.0 | 1333 | | 76.0 | 47-102 | | | |
| 2,4-Dinitrophenol | 850 | µg/kg | 333 | 1333 | | 63.8 | 10-100 | | | |
| 2,4-Dinitrotoluene (2,4-DNT) | 1020 | µg/kg | 33.0 | 1333 | | 76.8 | 62-105 | | | |
| 2,6-Dinitrotoluene (2,6-DNT) | 1010 | µg/kg | 33.0 | 1333 | | 75.4 | 62-103 | | | |
| 2-Chloronaphthalene | 957 | µg/kg | 6.67 | 1333 | | 71.8 | 57-101 | | | |
| 2-Chlorophenol | 973 | µg/kg | 33.0 | 1333 | | 73.0 | 52-102 | | | |
| 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) | 967 | µg/kg | 33.0 | 1333 | | 72.5 | 42-104 | | | |
| 2-Methylnaphthalene | 955 | µg/kg | 6.67 | 1333 | | 71.6 | 55-102 | | | |
| 2-Methylphenol (o-Cresol) | 994 | µg/kg | 33.0 | 1333 | | 74.6 | 54-103 | | | |
| 2-Nitroaniline | 963 | µg/kg | 33.0 | 1333 | | 72.2 | 57-103 | | | |
| 2-Nitrophenol | 976 | µg/kg | 33.0 | 1333 | | 73.2 | 52-102 | | | |
| 3&4-Methylphenol | 960 | µg/kg | 33.0 | 1333 | | 72.0 | 56-103 | | | |
| 3,3'-Dichlorobenzidine | 773 | µg/kg | 167 | 1333 | | 58.0 | 41-91 | | | |
| 3-Nitroaniline | 737 | µg/kg | 33.0 | 1333 | | 55.3 | 35-107 | | | |
| 4-Bromophenyl phenyl ether (BDE-3) | 987 | µg/kg | 33.0 | 1333 | | 74.0 | 63-104 | | | |
| 4-Chloro-3-methylphenol | 986 | µg/kg | 33.0 | 1333 | | 74.0 | 57-103 | | | |
| 4-Chloroaniline | 1000 | µg/kg | 67.0 | 1333 | | 75.0 | 32-99 | | | |
| 4-Chlorophenyl phenylether | 1010 | µg/kg | 33.0 | 1333 | | 75.7 | 62-100 | | | |
| 4-Nitroaniline | 689 | µg/kg | 167 | 1333 | | 51.7 | 19-124 | | | |
| 4-Nitrophenol | 1030 | µg/kg | 333 | 1333 | | 77.0 | 44-106 | | | |
| Acenaphthene | 972 | µg/kg | 6.67 | 1333 | | 72.9 | 60-101 | | | |
| Acenaphthylene | 999 | µg/kg | 6.67 | 1333 | | 75.0 | 59-101 | | | |
| Acetophenone | 948 | µg/kg | 33.0 | 1333 | | 71.1 | 54-102 | | | |
| Anthracene | 997 | µg/kg | 6.67 | 1333 | | 74.8 | 63-96 | | | |
| Atrazine | 1890 | µg/kg | 33.0 | 1333 | | 142 | 60-110 | | | S |
| Benzaldehyde | 371 | µg/kg | 67.0 | 1333 | | 27.8 | 10-143 | | | |
| Benzo(a)anthracene | 1030 | µg/kg | 6.67 | 1333 | | 77.3 | 66-102 | | | |
| Benzo(a)pyrene | 1040 | µg/kg | 6.67 | 1333 | | 78.3 | 66-105 | | | |
| Benzo(b)fluoranthene | 1030 | µg/kg | 6.67 | 1333 | | 77.5 | 67-105 | | | |
| Benzo(g,h,i)perylene | 1030 | µg/kg | 6.67 | 1333 | | 77.2 | 59-110 | | | |
| Benzo(k)fluoranthene | 1040 | µg/kg | 6.67 | 1333 | | 78.0 | 68-106 | | | |
| bis(2-Chloroethoxy)methane | 948 | µg/kg | 33.0 | 1333 | | 71.1 | 54-102 | | | |
| bis(2-Chloroethyl) ether | 953 | µg/kg | 33.0 | 1333 | | 71.5 | 51-101 | | | |
| Butyl benzyl phthalate | 1010 | µg/kg | 67.0 | 1333 | | 75.5 | 59-107 | | | |
| Caprolactam | 921 | µg/kg | 33.0 | 1333 | | 69.1 | 49-103 | | | |
| Carbazole | 989 | µg/kg | 33.0 | 1333 | | 74.2 | 63-103 | | | |
| Chrysene | 1000 | µg/kg | 6.67 | 1333 | | 75.2 | 66-105 | | | |
| Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP) | 1030 | µg/kg | 33.0 | 1333 | | 77.6 | 63-101 | | | |
| Dibenz(a,h) anthracene | 1040 | µg/kg | 33.0 | 1333 | | 78.2 | 61-109 | | | |
| Dibenzofuran | 1000 | µg/kg | 33.0 | 1333 | | 75.0 | 61-101 | | | |
| Diethyl phthalate | 1010 | µg/kg | 33.0 | 1333 | | 75.7 | 63-105 | | | |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

**LCS** | **CLIENT ID: Laboratory Control Sample** | **Lab ID: QC-2319451-002**

**Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 13:03 | **Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Dimethyl phthalate | 1000 | µg/kg | 33.0 | 1333 | | 75.0 | 64-104 | | | |
| Fluoranthene | 1010 | µg/kg | 6.67 | 1333 | | 75.7 | 66-105 | | | |
| Fluorene | 1000 | µg/kg | 6.67 | 1333 | | 75.1 | 62-101 | | | |
| Hexachlorobenzene | 989 | µg/kg | 33.0 | 1333 | | 74.2 | 61-104 | | | |
| Hexachlorobutadiene | 972 | µg/kg | 33.0 | 1333 | | 72.9 | 52-99 | | | |
| Hexachlorocyclopentadiene | 800 | µg/kg | 33.0 | 1333 | | 60.0 | 39-106 | | | |
| Hexachloroethane | 981 | µg/kg | 33.0 | 1333 | | 73.6 | 59-99 | | | |
| Indeno(1,2,3-cd) pyrene | 1150 | µg/kg | 6.67 | 1333 | | 86.0 | 57-114 | | | |
| Isophorone | 942 | µg/kg | 167 | 1333 | | 70.7 | 55-101 | | | |
| Methylphenol, Total | 1950 | µg/kg | 67.0 | 2667 | | 73.3 | 54-103 | | | |
| Naphthalene | 974 | µg/kg | 6.67 | 1333 | | 73.1 | 54-99 | | | |
| Nitrobenzene | 925 | µg/kg | 167 | 1333 | | 69.4 | 53-100 | | | |
| n-Nitrosodi-n-propylamine | 955 | µg/kg | 33.0 | 1333 | | 71.6 | 52-104 | | | |
| N-Nitrosodiphenylamine | 981 | µg/kg | 33.0 | 1333 | | 73.6 | 61-104 | | | |
| Pentachlorophenol | 993 | µg/kg | 33.0 | 1333 | | 74.5 | 35-100 | | | |
| Phenanthrene | 998 | µg/kg | 6.67 | 1333 | | 74.9 | 64-101 | | | |
| Phenol | 922 | µg/kg | 33.0 | 1333 | | 69.2 | 51-107 | | | |
| Pyrene | 1040 | µg/kg | 6.67 | 1333 | | 77.7 | 62-114 | | | |
| Pyridine | 797 | µg/kg | 167 | 1333 | | 59.8 | 40-84 | | | |
| *Surr: 2,4,6-Tribromophenol* | ***2480*** | *µg/kg* | | 3333 | | 74.4 | *48-94* | | | |
| *Surr: 2-Fluorobiphenyl* | ***2320*** | *µg/kg* | | 3333 | | 69.7 | *50-103* | | | |
| *Surr: 2-Fluorophenol* | ***2330*** | *µg/kg* | | 3333 | | 69.8 | *43-105* | | | |
| *Surr: 4-Terphenyl-d14* | ***2410*** | *µg/kg* | | 3333 | | 72.2 | *55-111* | | | |
| *Surr: Nitrobenzene-d5* | ***2120*** | *µg/kg* | | 3333 | | 63.7 | *47-100* | | | |
| *Surr: Phenol-d6* | ***2300*** | *µg/kg* | | 3333 | | 69.1 | *49-110* | | | |

**MS** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-005**

**Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 14:06 | **Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl (BZ-0) | 995 | µg/kg | 34.4 | 1308.5 | <5.41 | 75.7 | 57-101 | | | |
| 1,2,4,5-Tetrachlorobenzene | 1010 | µg/kg | 347 | 1308.5 | <7.69 | 76.8 | 54-98 | | | |
| 1-Methylnaphthalene | 1020 | µg/kg | 6.94 | 1308.5 | <4.80 | 77.7 | 56-100 | | | |
| 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether | 967 | µg/kg | 34.4 | 1308.5 | <7.81 | 73.9 | 50-101 | | | |
| 2,3,4,6-Tetrachlorophenol | 1050 | µg/kg | 69.4 | 1308.5 | <24.4 | 80.1 | 48-103 | | | |
| 2,4,5-Trichlorophenol | 1030 | µg/kg | 34.4 | 1308.5 | <19.8 | 79.0 | 54-98 | | | |
| 2,4,6-Trichlorophenol | 1110 | µg/kg | 34.4 | 1308.5 | <8.87 | 84.9 | 56-97 | | | |
| 2,4-Dichlorophenol | 971 | µg/kg | 34.4 | 1308.5 | <17.9 | 74.2 | 54-99 | | | |
| 2,4-Dimethylphenol | 1020 | µg/kg | 34.4 | 1308.5 | <17.1 | 77.9 | 47-102 | | | |
| 2,4-Dinitrophenol | 382 | µg/kg | 347 | 1308.5 | <244 | 29.2 | 10-100 | | | |
| 2,4-Dinitrotoluene (2,4-DNT) | 1060 | µg/kg | 34.4 | 1308.5 | <21.6 | 81.3 | 62-105 | | | |
| 2,6-Dinitrotoluene (2,6-DNT) | 1050 | µg/kg | 34.4 | 1308.5 | <8.51 | 80.1 | 62-103 | | | |
| 2-Chloronaphthalene | 1020 | µg/kg | 6.94 | 1308.5 | <4.66 | 77.9 | 57-101 | | | |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

| **MS** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-005** |
|---|---|---|

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 11/06/25 14:06

**Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-Chlorophenol | 971 | µg/kg | 34.4 | 1308.5 | <21.8 | 74.2 | 52-102 | | | |
| 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) | 917 | µg/kg | 34.4 | 1308.5 | <27.8 | 70.1 | 42-104 | | | |
| 2-Methylnaphthalene | 974 | µg/kg | 6.94 | 1308.5 | <3.39 | 74.4 | 55-102 | | | |
| 2-Methylphenol (o-Cresol) | 995 | µg/kg | 34.4 | 1308.5 | <9.01 | 76.1 | 54-103 | | | |
| 2-Nitroaniline | 1010 | µg/kg | 34.4 | 1308.5 | <18.5 | 77.2 | 57-103 | | | |
| 2-Nitrophenol | 1020 | µg/kg | 34.4 | 1308.5 | <9.50 | 77.6 | 52-102 | | | |
| 3&4-Methylphenol | 978 | µg/kg | 34.4 | 1308.5 | <18.2 | 74.8 | 56-103 | | | |
| 3,3'-Dichlorobenzidine | 861 | µg/kg | 174 | 1308.5 | <15.6 | 65.8 | 41-91 | | | |
| 3-Nitroaniline | 739 | µg/kg | 34.4 | 1308.5 | <19.4 | 56.5 | 35-107 | | | |
| 4-Bromophenyl phenyl ether (BDE-3) | 1020 | µg/kg | 34.4 | 1308.5 | <18.3 | 78.3 | 63-104 | | | |
| 4-Chloro-3-methylphenol | 1000 | µg/kg | 34.4 | 1308.5 | <9.50 | 76.6 | 57-103 | | | |
| 4-Chloroaniline | 1010 | µg/kg | 69.4 | 1308.5 | <16.9 | 76.9 | 32-99 | | | |
| 4-Chlorophenyl phenylether | 1050 | µg/kg | 34.4 | 1308.5 | <9.21 | 80.5 | 62-100 | | | |
| 4-Nitroaniline | 589 | µg/kg | 174 | 1308.5 | <51.7 | 45.0 | 19-124 | | | |
| 4-Nitrophenol | 1090 | µg/kg | 347 | 1308.5 | <78.1 | 83.0 | 44-106 | | | |
| Acenaphthene | 1020 | µg/kg | 6.94 | 1308.5 | <4.82 | 77.8 | 60-101 | | | |
| Acenaphthylene | 1030 | µg/kg | 6.94 | 1308.5 | <5.78 | 79.0 | 59-101 | | | |
| Acetophenone | 946 | µg/kg | 34.4 | 1308.5 | <5.22 | 72.3 | 54-102 | | | |
| Anthracene | 1030 | µg/kg | 6.94 | 1308.5 | <4.70 | 78.9 | 63-96 | | | |
| Atrazine | <19.5 | µg/kg | 34.4 | 1308.5 | <19.5 | 0.00 | 60-110 | | | SU |
| Benzaldehyde | 350 | µg/kg | 69.4 | 1308.5 | <51.2 | 26.8 | 10-143 | | | |
| Benzo(a)anthracene | 1050 | µg/kg | 6.94 | 1308.5 | <5.76 | 80.2 | 66-102 | | | |
| Benzo(a)pyrene | 1080 | µg/kg | 6.94 | 1308.5 | <4.09 | 82.9 | 66-105 | | | |
| Benzo(b)fluoranthene | 1090 | µg/kg | 6.94 | 1308.5 | <4.97 | 83.1 | 67-105 | | | |
| Benzo(g,h,i)perylene | 1070 | µg/kg | 6.94 | 1308.5 | <5.11 | 82.0 | 59-110 | | | |
| Benzo(k)fluoranthene | 1080 | µg/kg | 6.94 | 1308.5 | <5.05 | 82.2 | 68-106 | | | |
| bis(2-Chloroethoxy)methane | 967 | µg/kg | 34.4 | 1308.5 | <21.1 | 73.9 | 54-102 | | | |
| bis(2-Chloroethyl) ether | 965 | µg/kg | 34.4 | 1308.5 | <9.44 | 73.7 | 51-101 | | | |
| Butyl benzyl phthalate | 1050 | µg/kg | 69.4 | 1308.5 | <41.7 | 80.3 | 59-107 | | | |
| Caprolactam | 973 | µg/kg | 34.4 | 1308.5 | <30.1 | 74.4 | 49-103 | | | |
| Carbazole | 1020 | µg/kg | 34.4 | 1308.5 | <9.82 | 78.1 | 63-103 | | | |
| Chrysene | 1050 | µg/kg | 6.94 | 1308.5 | <5.69 | 80.6 | 66-105 | | | |
| Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP) | 1070 | µg/kg | 34.4 | 1308.5 | 32.5 | 79.7 | 63-101 | | | |
| Dibenz(a,h) anthracene | 1070 | µg/kg | 34.4 | 1308.5 | <3.60 | 82.1 | 61-109 | | | |
| Dibenzofuran | 1040 | µg/kg | 34.4 | 1308.5 | <4.90 | 79.5 | 61-101 | | | |
| Diethyl phthalate | 1030 | µg/kg | 34.4 | 1308.5 | <11.3 | 78.7 | 63-105 | | | |
| Dimethyl phthalate | 1030 | µg/kg | 34.4 | 1308.5 | <6.50 | 78.8 | 64-104 | | | |
| Fluoranthene | 1050 | µg/kg | 6.94 | 1308.5 | <3.20 | 80.2 | 66-105 | | | |
| Fluorene | 1040 | µg/kg | 6.94 | 1308.5 | <4.84 | 79.6 | 62-101 | | | |
| Hexachlorobenzene | 1020 | µg/kg | 34.4 | 1308.5 | <9.70 | 77.8 | 61-104 | | | |
| Hexachlorobutadiene | 987 | µg/kg | 34.4 | 1308.5 | <7.85 | 75.4 | 52-99 | | | |
| Hexachlorocyclopentadiene | 887 | µg/kg | 34.4 | 1308.5 | <32.6 | 67.8 | 39-106 | | | |
| Hexachloroethane | 969 | µg/kg | 34.4 | 1308.5 | <13.8 | 74.1 | 59-99 | | | |
| Indeno(1,2,3-cd) pyrene | 1180 | µg/kg | 6.94 | 1308.5 | <4.64 | 90.5 | 57-114 | | | |

# QA/QC Report

**Client:** The Mannik & Smith Group, Inc.
**Project:** DETR0060 - 8070 Wisner
**Matrix:** SOIL/SOLID
**QC Lot:** 2319451

**Work Order:** HN2516145
**Date Collected:** NA
**Date Received:** NA
**Run ID:** 3667671

**MS** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-005**

**Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 14:06 | **Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Isophorone | 965 | µg/kg | 174 | 1308.5 | <6.51 | 73.8 | 55-101 | | | |
| Methylphenol, Total | 1970 | µg/kg | 67.0 | 2618 | <9.01 | 75.4 | 54-103 | | | |
| Naphthalene | 995 | µg/kg | 6.94 | 1308.5 | <4.26 | 76.0 | 54-99 | | | |
| Nitrobenzene | 961 | µg/kg | 174 | 1308.5 | <11.2 | 73.5 | 53-100 | | | |
| n-Nitrosodi-n-propylamine | 963 | µg/kg | 34.4 | 1308.5 | <5.50 | 73.6 | 52-104 | | | |
| N-Nitrosodiphenylamine | 1030 | µg/kg | 34.4 | 1308.5 | <19.3 | 78.5 | 61-104 | | | |
| Pentachlorophenol | 1090 | µg/kg | 34.4 | 1308.5 | <26.5 | 83.1 | 35-100 | | | |
| Phenanthrene | 1020 | µg/kg | 6.94 | 1308.5 | <3.10 | 77.9 | 64-101 | | | |
| Phenol | 934 | µg/kg | 34.4 | 1308.5 | <16.7 | 71.4 | 51-107 | | | |
| Pyrene | 1090 | µg/kg | 6.94 | 1308.5 | <3.33 | 83.0 | 52-114 | | | |
| Pyridine | 834 | µg/kg | 174 | 1308.5 | <65.6 | 63.8 | 40-84 | | | |
| *Surr: 2,4,6-Tribromophenol* | ***2570*** | *µg/kg* | | 3271.7 | | 78.6 | *48-94* | | | |
| *Surr: 2-Fluorobiphenyl* | ***2420*** | *µg/kg* | | 3271.7 | | 74.1 | *50-103* | | | |
| *Surr: 2-Fluorophenol* | ***2380*** | *µg/kg* | | 3271.7 | | 72.7 | *43-105* | | | |
| *Surr: 4-Terphenyl-d14* | ***2490*** | *µg/kg* | | 3271.7 | | 76.1 | *55-111* | | | |
| *Surr: Nitrobenzene-d5* | ***2180*** | *µg/kg* | | 3271.7 | | 66.7 | *47-100* | | | |
| *Surr: Phenol-d6* | ***2360*** | *µg/kg* | | 3271.7 | | 72.2 | *49-110* | | | |

**MSD** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-006**

**Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 14:27 | **Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl (BZ-0) | 1020 | µg/kg | 34.5 | 1312.7 | <5.41 | 77.2 | 57-101 | 2.21 | 30 | |
| 1,2,4,5-Tetrachlorobenzene | 1010 | µg/kg | 348 | 1312.7 | <7.69 | 77.0 | 54-98 | 0.580 | 30 | |
| 1-Methylnaphthalene | 1030 | µg/kg | 6.96 | 1312.7 | <4.80 | 78.1 | 56-100 | 0.898 | 30 | |
| 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether | 962 | µg/kg | 34.5 | 1312.7 | <7.81 | 73.3 | 50-101 | 0.428 | 30 | |
| 2,3,4,6-Tetrachlorophenol | 1040 | µg/kg | 69.6 | 1312.7 | <24.4 | 79.4 | 48-103 | 0.495 | 30 | |
| 2,4,5-Trichlorophenol | 1060 | µg/kg | 34.5 | 1312.7 | <19.8 | 80.6 | 54-98 | 2.26 | 30 | |
| 2,4,6-Trichlorophenol | 1060 | µg/kg | 34.5 | 1312.7 | <8.87 | 80.9 | 56-97 | 4.51 | 30 | |
| 2,4-Dichlorophenol | 973 | µg/kg | 34.5 | 1312.7 | <17.9 | 74.1 | 54-99 | 0.185 | 30 | |
| 2,4-Dimethylphenol | 1020 | µg/kg | 34.5 | 1312.7 | <17.1 | 77.7 | 47-102 | 0.0626 | 30 | |
| 2,4-Dinitrophenol | <244 | µg/kg | 348 | 1312.7 | <244 | 26.4 | 10-100 | NC | | U |
| 2,4-Dinitrotoluene (2,4-DNT) | 1060 | µg/kg | 34.5 | 1312.7 | <21.6 | 81.0 | 62-105 | 0.112 | 30 | |
| 2,6-Dinitrotoluene (2,6-DNT) | 1050 | µg/kg | 34.5 | 1312.7 | <8.51 | 80.1 | 62-103 | 0.320 | 30 | |
| 2-Chloronaphthalene | 1010 | µg/kg | 6.96 | 1312.7 | <4.66 | 76.9 | 57-101 | 0.972 | 30 | |
| 2-Chlorophenol | 966 | µg/kg | 34.5 | 1312.7 | <21.8 | 73.6 | 52-102 | 0.560 | 30 | |
| 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) | 844 | µg/kg | 34.5 | 1312.7 | <27.8 | 64.3 | 42-104 | 8.32 | 30 | |
| 2-Methylnaphthalene | 1010 | µg/kg | 6.96 | 1312.7 | <3.39 | 76.6 | 55-102 | 3.23 | 30 | |
| 2-Methylphenol (o-Cresol) | 1000 | µg/kg | 34.5 | 1312.7 | <9.01 | 76.3 | 54-103 | 0.582 | 30 | |
| 2-Nitroaniline | 1000 | µg/kg | 34.5 | 1312.7 | <18.5 | 76.4 | 57-103 | 0.657 | 30 | |
| 2-Nitrophenol | 1030 | µg/kg | 34.5 | 1312.7 | <9.50 | 78.7 | 52-102 | 1.66 | 30 | |
| 3&4-Methylphenol | 999 | µg/kg | 34.5 | 1312.7 | <18.2 | 76.1 | 56-103 | 2.04 | 30 | |
| 3,3'-Dichlorobenzidine | 846 | µg/kg | 174 | 1312.7 | <15.6 | 64.5 | 41-91 | 1.75 | 30 | |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

| **MSD** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-006** |
|---|---|---|
| **Method:** EPA 8270E | **Dilution:** 1 | **Analysis Date:** 11/06/25 14:27 |
| | | **Prep Date:** 11/05/25 12:26 |

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 3-Nitroaniline | 690 | µg/kg | 34.5 | 1312.7 | <19.4 | 52.6 | 35-107 | 6.92 | 30 | |
| 4-Bromophenyl phenyl ether (BDE-3) | 1020 | µg/kg | 34.5 | 1312.7 | <18.3 | 77.8 | 63-104 | 0.321 | 30 | |
| 4-Chloro-3-methylphenol | 1020 | µg/kg | 34.5 | 1312.7 | <9.50 | 77.5 | 57-103 | 1.49 | 30 | |
| 4-Chloroaniline | 1030 | µg/kg | 69.6 | 1312.7 | <16.9 | 78.2 | 32-99 | 1.93 | 30 | |
| 4-Chlorophenyl phenylether | 1060 | µg/kg | 34.5 | 1312.7 | <9.21 | 80.4 | 62-100 | 0.258 | 30 | |
| 4-Nitroaniline | 571 | µg/kg | 174 | 1312.7 | <51.7 | 43.5 | 19-124 | 3.19 | 30 | |
| 4-Nitrophenol | 1100 | µg/kg | 348 | 1312.7 | <78.1 | 83.5 | 44-106 | 0.981 | 30 | |
| Acenaphthene | 1010 | µg/kg | 6.96 | 1312.7 | <4.82 | 77.3 | 60-101 | 0.390 | 30 | |
| Acenaphthylene | 1050 | µg/kg | 6.96 | 1312.7 | <5.78 | 80.1 | 59-101 | 1.64 | 30 | |
| Acetophenone | 980 | µg/kg | 34.5 | 1312.7 | <5.22 | 74.7 | 54-102 | 3.52 | 30 | |
| Anthracene | 1060 | µg/kg | 6.96 | 1312.7 | <4.70 | 81.0 | 63-96 | 2.95 | 30 | |
| Atrazine | <19.5 | µg/kg | 34.5 | 1312.7 | <19.5 | 0.00 | 60-110 | | | SU |
| Benzaldehyde | 320 | µg/kg | 69.6 | 1312.7 | <51.2 | 24.4 | 10-143 | 9.07 | 30 | |
| Benzo(a)anthracene | 1050 | µg/kg | 6.96 | 1312.7 | <5.76 | 79.9 | 66-102 | 0.0551 | 30 | |
| Benzo(a)pyrene | 1100 | µg/kg | 6.96 | 1312.7 | <4.09 | 84.2 | 66-105 | 1.88 | 30 | |
| Benzo(b)fluoranthene | 1070 | µg/kg | 6.96 | 1312.7 | <4.97 | 81.9 | 67-105 | 1.20 | 30 | |
| Benzo(g,h,i)perylene | 1080 | µg/kg | 6.96 | 1312.7 | <5.11 | 82.0 | 59-110 | 0.259 | 30 | |
| Benzo(k)fluoranthene | 1120 | µg/kg | 6.96 | 1312.7 | <5.05 | 85.4 | 68-106 | 4.14 | 30 | |
| bis(2-Chloroethoxy)methane | 962 | µg/kg | 34.5 | 1312.7 | <21.1 | 73.3 | 54-102 | 0.428 | 30 | |
| bis(2-Chloroethyl) ether | 993 | µg/kg | 34.5 | 1312.7 | <9.44 | 75.6 | 51-101 | 2.87 | 30 | |
| Butyl benzyl phthalate | 1050 | µg/kg | 69.6 | 1312.7 | <41.7 | 79.7 | 59-107 | 0.368 | 30 | |
| Caprolactam | 1010 | µg/kg | 34.5 | 1312.7 | <30.1 | 76.6 | 49-103 | 3.24 | 30 | |
| Carbazole | 1030 | µg/kg | 34.5 | 1312.7 | <9.82 | 78.4 | 63-103 | 0.703 | 30 | |
| Chrysene | 1070 | µg/kg | 6.96 | 1312.7 | <5.69 | 81.2 | 66-105 | 1.06 | 30 | |
| Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP) | 1090 | µg/kg | 34.5 | 1312.7 | 32.5 | 80.7 | 63-101 | 1.47 | 30 | |
| Dibenz(a,h) anthracene | 1080 | µg/kg | 34.5 | 1312.7 | <3.60 | 82.4 | 61-109 | 0.685 | 30 | |
| Dibenzofuran | 1040 | µg/kg | 34.5 | 1312.7 | <4.90 | 79.4 | 61-101 | 0.194 | 30 | |
| Diethyl phthalate | 1050 | µg/kg | 34.5 | 1312.7 | <11.3 | 80.2 | 63-105 | 2.15 | 30 | |
| Dimethyl phthalate | 1050 | µg/kg | 34.5 | 1312.7 | <6.50 | 80.3 | 64-104 | 2.14 | 30 | |
| Fluoranthene | 1060 | µg/kg | 6.96 | 1312.7 | <3.20 | 81.1 | 66-105 | 1.50 | 30 | |
| Fluorene | 1040 | µg/kg | 6.96 | 1312.7 | <4.84 | 79.2 | 62-101 | 0.184 | 30 | |
| Hexachlorobenzene | 1000 | µg/kg | 34.5 | 1312.7 | <9.70 | 76.2 | 61-104 | 1.82 | 30 | |
| Hexachlorobutadiene | 970 | µg/kg | 34.5 | 1312.7 | <7.85 | 73.9 | 52-99 | 1.76 | 30 | |
| Hexachlorocyclopentadiene | 850 | µg/kg | 34.5 | 1312.7 | <32.6 | 64.7 | 39-106 | 4.36 | 30 | |
| Hexachloroethane | 959 | µg/kg | 34.5 | 1312.7 | <13.8 | 73.1 | 59-99 | 1.04 | 30 | |
| Indeno(1,2,3-cd) pyrene | 1200 | µg/kg | 6.96 | 1312.7 | <4.64 | 91.2 | 57-114 | 1.09 | 30 | |
| Isophorone | 989 | µg/kg | 174 | 1312.7 | <6.51 | 75.3 | 55-101 | 2.40 | 30 | |
| Methylphenol, Total | 2000 | µg/kg | 67.0 | 2626.3 | <9.01 | 76.1 | 54-103 | 1.31 | 30 | |
| Naphthalene | 967 | µg/kg | 6.96 | 1312.7 | <4.26 | 73.7 | 54-99 | 2.82 | 30 | |
| Nitrobenzene | 945 | µg/kg | 174 | 1312.7 | <11.2 | 72.0 | 53-100 | 1.74 | 30 | |
| n-Nitrosodi-n-propylamine | 1010 | µg/kg | 34.5 | 1312.7 | <5.50 | 77.3 | 52-104 | 5.22 | 30 | |
| N-Nitrosodiphenylamine | 1020 | µg/kg | 34.5 | 1312.7 | <19.3 | 77.5 | 61-104 | 0.963 | 30 | |
| Pentachlorophenol | 1040 | µg/kg | 34.5 | 1312.7 | <26.5 | 79.4 | 35-100 | 4.30 | 30 | |
| Phenanthrene | 1010 | µg/kg | 6.96 | 1312.7 | <3.10 | 76.7 | 64-101 | 1.17 | 30 | |
| Phenol | 999 | µg/kg | 34.5 | 1312.7 | <16.7 | 76.1 | 51-107 | 6.69 | 30 | |

# QA/QC Report

| | | | |
|---|---|---|---|
| **Client:** | The Mannik & Smith Group, Inc. | **Work Order:** | HN2516145 |
| **Project:** | DETR0060 - 8070 Wisner | **Date Collected:** | NA |
| **Matrix:** | SOIL/SOLID | **Date Received:** | NA |
| **QC Lot:** | 2319451 | **Run ID:** | 3667671 |

| **MSD** | **CLIENT ID: Batch QC** | **Lab ID: QC-2319451-006** |
|---|---|---|

**Method:** EPA 8270E **Dilution:** 1 **Analysis Date:** 11/06/25 14:27

**Prep Date:** 11/05/25 12:26

| Analyte | Result | Units | MRL | Spike Amount | Spike Ref. Amount | % Rec | % Rec Limits | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Pyrene | 1070 | µg/kg | 6.96 | 1312.7 | <3.33 | 81.8 | 52-114 | 1.14 | 30 | |
| Pyridine | 809 | µg/kg | 174 | 1312.7 | <65.6 | 61.6 | 40-84 | 3.11 | 30 | |
| *Surr: 2,4,6-Tribromophenol* | ***2520*** | *µg/kg* | | 3282.2 | | 76.8 | *48-94* | 2.05 | 30 | |
| *Surr: 2-Fluorobiphenyl* | ***2370*** | *µg/kg* | | 3282.2 | | 72.2 | *50-103* | 2.17 | 30 | |
| *Surr: 2-Fluorophenol* | ***2330*** | *µg/kg* | | 3282.2 | | 71.0 | *43-105* | 2.05 | 30 | |
| *Surr: 4-Terphenyl-d14* | ***2520*** | *µg/kg* | | 3282.2 | | 76.9 | *55-111* | 1.34 | 30 | |
| *Surr: Nitrobenzene-d5* | ***2160*** | *µg/kg* | | 3282.2 | | 65.8 | *47-100* | 1.10 | 30 | |
| *Surr: Phenol-d6* | ***2380*** | *µg/kg* | | 3282.2 | | 72.6 | *49-110* | 0.872 | 30 | |

**The following samples were analyzed in this batch:** HN2516145-001