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FILL MATERIAL SAMPLING REPORT

9615 CASCADE AVENUE
DETROIT, WAYNE COUNTY, MICHIGAN 48204



NOVEMBER 14, 2025
REVISED DECEMBER 12, 2025

PREPARED FOR:

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



FILL MATERIAL SAMPLING REPORT

9615 CASCADE AVENUE
DETROIT, WAYNE COUNTY, MICHIGAN 48204

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EXECUTIVE SUMMARY

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to perform sampling and analysis of fill materials at the property commonly addressed as 9615 Cascade 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); semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc (10 Michigan metals); chloride; herbicides; and pesticides. Analytical results were compared to the current generic residential cleanup criteria (GRCC) promulgated under Part 201 of the *Natural Resources and Environmental Protection Act* (NREPA), 1994 P.A. 451, as amended (Part 201).

Pursuant to a request by the COD, MSG has completed sampling and analysis of fill material at the Site. 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 9615 Cascade SB-1, 9615 Cascade SB-2, and 9615 Cascade SB-3 generally consisted of brown gravelly clay with lenses of sand to six feet below ground surface (bgs), the maximum depth explored for this investigation. Field photoionization detector (PID) readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, miscellaneous refuse, building materials, and organics were observed during the soil boring advancement of 9615 Cascade SB-1, 9615 Cascade SB-2, and/or 9615 Cascade SB-3.
- Concentrations of arsenic, mercury, and pentachlorophenol were detected in soil samples 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and/or 9615 Cascade SB-3 (5'-6') in excess of their respective Part 201 groundwater surface water interface protection criteria (GSIPT), drinking water protection criteria (DWPC), and/or direct contact criteria (DCC).
- Concentrations of mercury were detected in soil sample 9615 Cascade SB-1 (1'-2') in excess of its Part 201 soil volatilization to indoor air pathway (SVIAP).
- Concentrations of 1,1-biphenyl, 1-methylnaphthalene, 2-methylnaphthalene, 3- and 4- methylphenol (total), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, acenaphthylene, acetophenone, anthracene, barium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl), phthalate, cadmium, chloride, chromium (total), chrysene, copper, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, naphthalene, phenanthrene, pyrene, and zinc were detected in soil samples 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and/or 9615 Cascade SB-3 (5'-6') at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- Heptachlor was detected in 9615 Cascade SB-1 (1'-2') and 9615 Cascade SB-2 (3'-4') at concentrations that theoretically, could result in an exceedance of its RCRA limit. The TCLP analytical result from the composite sample indicates the concentrations of heptachlor were below its RCRA limit.
- VOCs and 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. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

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

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

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1.0 INTRODUCTION

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to conduct sampling and analysis of fill materials at the property commonly addressed as 9615 Cascade 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 October 14, 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 onsite soil borings to a maximum depth of six feet below ground surface (bgs) utilizing a direct push drill rig at the locations depicted on Figure 2.
- Collected one discrete soil sample for laboratory analysis from each soil boring at a depth of 1-2 feet bgs, 3-4 feet bgs, or 5-6 feet bgs, depending on the soil boring.
- Submitted soil samples to an independent analytical laboratory for chemical analysis.
- Prepared this report summarizing the activities and results of this work.

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

3.0 SITE ASSESSMENT METHODOLOGY

The following subsections describe the methodologies employed by MSG at the Site during sampling activities that were conducted on October 14, 2025. A daily field activity report prepared by MSG is presented in *Appendix B, Daily Field Report*.

3.1 Preliminary Site Work Activities

Prior to conducting subsurface soil sampling activities, MSG contacted the MISSDIG utility locating system to identify and physically mark underground utilities. If necessary, proposed soil boring locations were modified based on the results of the utility markings. Additionally, MSG reviewed readily available Site building records

or documents to ensure that this scope of work was conducted on the correct property and in the areas of the former Site structure(s).

3.2 Soil Sample Collection

The sampling plan for the Site was based on the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and modified in the field (if necessary) based on encountered conditions and professional judgment of MSG's field personnel. MSG advanced three (3) soil borings, designated 9615 Cascade SB-1, 9615 Cascade SB-2, and 9615 Cascade SB-3, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during completion of this work are provided in *Appendix C, Investigation Photographs*.

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

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

Soil samples were collected in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. The soil samples were placed into 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

One composite soil sample, designated 9615 Cascade (0'-6') Comp, was collected as part of this investigation. This composite soil sample was homogenized in a stainless-steel bowl (or equivalent) 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.

The composite soil sample was placed into an unpreserved laboratory-supplied sample container and placed on hold until receipt of total waste analytical results associated with the soil samples collected from soil borings designated 9615 Cascade SB01, 9615 Cascade SB02, and 9615 Cascade SB03.

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 that soil boring location and finished to match the original surface.

3.5 Analytical Methods

A total of three soil samples designated 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and 9615 Cascade SB-3 (5'-6') and one composite soil sample designated 9615 Cascade (0'-6') Comp 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 October 14, 2025.

4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 9615 Cascade SB-1, 9615 Cascade SB-2, and 9615 Cascade SB-3 generally consisted of brown gravelly clay with lenses of sand to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, miscellaneous refuse, building materials, and organics were observed during the soil boring advancement of 9615 Cascade SB-1, 9615 Cascade SB-2, and/or 9615 Cascade SB-3.

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

4.2 Soil Sample Analytical Results

Three soil samples, designated 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and 9615 Cascade SB-3 (5'-6'), were collected from the Site and submitted to ALS for laboratory analysis of VOCs, SVOCs, PCBs, Michigan 10 Metals, chloride, herbicides, and pesticides.

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

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

Chemical	CAS Number	Soil Sample (feet bgs)	Part 201 GRCC Exceeded / Concentration ($\mu\text{g}/\text{kg}^1$)	Maximum Detected Concentration ($\mu\text{g}/\text{kg}$)
Arsenic	7440-38-2	9615 Cascade SB-1 (1-2) 9615 Cascade SB-2 (3-4) 9615 Cascade SB-3 (5-6)	GSIPC ² / 4,600 DWPC ³ / 4,600 DCC ⁴ / 7,600	7,610
Mercury	7439-97-6	9615 Cascade SB-1 (1-2)	GSIPC / 50 (M;1.2)	191
Pentachlorophenol	87-86-5	9615 Cascade SB-2 (3-4)	DWPC / 22	93.5

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

²GSIPC – Groundwater Surface Water Interface Protection Criteria

³DWPC – Drinking Water Protection Criteria

⁴DCC – Direct Contact Criteria

4.3 TCLP Analytical Results

The analytical results are useful in determining if TCLP is necessary to definitively characterize a waste. Method 1311 allows for a total analysis in lieu of the TCLP when the constituents of concern are absent from the waste, or if are detected, are at such low concentration that the regulatory level could not be exceeded.

To evaluate the regulatory status, the total waste analytical results were converted using the 20x rule and then comparing the resulting maximum theoretical leachate concentration to the appropriate regulatory limit. If maximum theoretical leachate concentration is less than the applicable RCRA limits, the waste does not exhibit the toxicity characteristic. Conversely, if the total waste analytical results reveal a maximum theoretical leachate concentration that equals or exceeds the toxicity characteristic threshold, the analytical data cannot be used to conclusively demonstrate that the waste does not exceed the toxicity characteristic.

Using the 20x rule, maximum theoretical leachate concentrations for arsenic, mercury, and pentachlorophenol compared to the analytical results revealed concentrations below the applicable RCRA limits.

Heptachlor analytical results indicated a method detection limit (MDL) of $<170 \mu\text{g}/\text{kg}$ and $<164 \mu\text{g}/\text{kg}$, respectively, in soil samples 9615 Cascade SB-1 (1'-2') and 9615 Cascade SB-2 (3'-4'). Theoretically, heptachlor method detection limits could result in TCLP results of 0.0085 mg/L and 0.0082 mg/L, which is above the RCRA limit of 0.008 mg/L. Therefore, a representative sample was analyzed using TCLP 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. The TCLP analytical results for heptachlor were below the laboratory method detection limit.

A copy of the laboratory analytical data report and chain of custody form is 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. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the Site is residential, exceedances of direct contact criteria may merit further consideration.

5.0 FINDINGS

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

- The stratigraphy encountered during soil boring advancement of 9615 Cascade SB-1, 9615 Cascade SB-2, and 9615 Cascade SB-3 generally consisted of brown gravelly clay with lenses of sand to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores were below instrument detection limits. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, miscellaneous refuse, building materials, and organics were observed during the soil boring advancement of 9615 Cascade SB-1, 9615 Cascade SB-2, and/or 9615 Cascade SB-3.
- Concentrations of arsenic, mercury, and pentachlorophenol were detected in soil samples 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and/or 9615 Cascade SB-3 (5'-6') in excess of their respective Part 201 GSIPC, DWPC, and/or DCC.
- Concentrations of 1,1-biphenyl, 1-methylnaphthalene, 2-methylnaphthalene, 3- and 4- methylphenol (total), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, acenaphthylene, acetophenone, anthracene, barium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl), phthalate, cadmium, chloride, chromium (Total), chrysene, copper, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, lead, naphthalene, phenanthrene, pyrene, and zinc were detected in soil samples 9615 Cascade SB-1 (1'-2'), 9615 Cascade SB-2 (3'-4'), and/or 9615 Cascade SB-3 (5'-6') at concentrations above laboratory method detection limits; however, detected concentrations were below their respective Part 201 GRCC and/or Statewide Default Background Levels.
- Heptachlor was detected in 9615 Cascade SB-1 (1'-2') and 9615 Cascade SB-2 (3'-4') at concentrations that theoretically, could result in an exceedances of its RCRA limit. The TCLP analytical result indicates the concentrations of heptachlor were below its RCRA limit.
- VOCs and 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. Since the building on site has been razed, the soil volatilization to indoor air pathway is not currently complete, however, consideration may need to be given to this pathway if future construction is planned. Given that the site is residential, exceedances of direct contact criteria may merit further consideration.

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

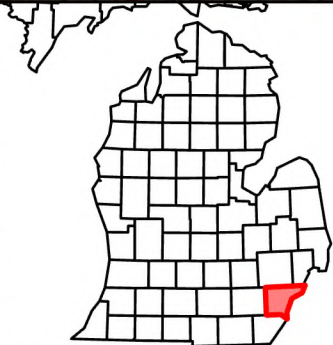
MSG warrants that no substantive information or documentation was deleted, omitted, or changed that would otherwise cause the MSG to reach a different conclusion. Furthermore, MSG understands that the COD and its agencies and

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

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FIGURES





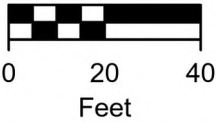
★ Site Location



FIGURE 1
SITE LOCATION

9615 Cascade, Detroit, MI

DATE 10/31/2025	DRAWN BY JWW	DESIGNED BY JWW	PROJECT NO. DETR0060
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-  Sample Locations
-  Parcels (Current)
-  Subject Property

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



FIGURE 2

Site Layout

9615 Cascade, Detroit, MI

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



Table 1
Soil Sample Analytical Detection Summary
9615 Cascade
Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024 Units: µg/kg	Inorganic Anions/Ions	Metals									Pesticides/Herbicides			Semivolatile Organic Compounds (SVOCs)								
	Chloride	Arsenic (B)	Barium (B)	Cadmium (B)	Chromium, Total (B)	Copper (B)	Lead (B)	Mercury (B)	Zinc (B)	4,4-DDT	4,4-DDD	4,4'-DDE	1,1-Biphenyl	1-Methylnaphthalene	2-Methylnaphthalene	3- And 4- Methylphenol (Total)	Acenaphthylene	Acetophenone	Anthracene	Benzo(A)Anthracene		
CAS Number	16887-00-6	7440-38-2	7440-39-3	7440-43-9	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-66-6	50-29-3	72-54-8	72-55-9	92-52-4	90-12-0	91-57-6	MEPH3MEPH4	208-96-8	98-86-2	120-12-7	56-55-3		
Statewide Default Background Levels	NC	5,800	75,000	1,200	18,000	32,000	21,000	130	47,000	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC		
Drinking Water Protection Criteria (DWPC)	5.00E+06	4,600	1.30E+06	6,000	30,000	5.80E+06	7.00E+05	1,700	2.40E+06	NLL	NLL	NLL	NC	NC	57,000	NC	5,900	30,000	41,000	NLL		
Groundwater Surface Water Interface Protection Criteria (GSI PC)	NC	4,600	4.40E+05 ^(G)	3,600 ^(G)	3,300	75,000 ^(G)	6.00E+06 ^(G)	50 ^(M,1,2)	1.60E+05	NLL	NLL	NLL	NC	NC	4,200	NC	ID	ID	ID	NLL		
Soil Volatilization to Indoor Air Inhalation (SVI IC)	NC	NLV	NLV	NLV	NLV	NLV	NLV	48,000	NC	NLV	NLV	NLV	NC	NC	2.70E+06	NC	1.60E+06	1.20E+08	1.00E+09	NLV		
Soil Volatilization to Indoor Air Pathway (SVI AP)	NC	NC	NC	NC	NC	NC	NC	22 ^(M)	NC	NC	NC	39,000	NC	NC	1,700	NC	NC	6.20E+05	1.30E+07	1.60E+05 ^(M)		
Infinite Source Volatile Soil Inhalation Criteria (VSIC)	NC	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NC	NLV	NLV	NLV	NC	NC	1.50E+06	NC	2.20E+06	4.40E+07	1.40E+09	NLV		
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)	NC	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NC	NLV	NLV	NLV	NC	NC	1.50E+06	NC	2.20E+06	4.40E+07	1.40E+09	NLV		
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)	NC	NLV	NLV	NLV	NC	NLV	NLV	52,000	NC	NLV	NLV	NLV	NC	NC	1.50E+06	NC	2.20E+06	4.40E+07	1.40E+09	NLV		
Particulate Soil Inhalation Criteria (PSIC)	NC	7.20E+05	3.30E+08	1.70E+06	2.60E+05	1.30E+08	2.00E+08	2.00E+07	NC	3.20E+07	4.40E+07	3.20E+07	NC	NC	6.70E+08	NC	2.30E+09	3.30E+10	6.70E+10	ID		
Direct Contact Criteria (DCC)	5.00E+05	7,600	3.70E+07	5.50E+05	2.50E+06	2.00E+07	4.00E+05	1.60E+05	1.70E+08	57,000	95,000	45,000	NC	NC	8.10E+06	NC	1.60E+06	4.70E+07	2.30E+08	20,000		
Soil Saturation Concentration Screening Levels (Csat)	NC	NA	NA	NA	NA	NA	NA	NA	NC	NA	NA	NA	NC	NC	NA	NC	NA	1.10E+06	NA	NA		
Sample ID	Sample Depth (ft)	Sample Date																				
9615 Cascade SB-1	1-2	10/14/2025	18,800	7,540	45,700	160 J	14,300	18,300	12,400	191	43,100	637	185 J	< 173	< 14.6	< 13	< 9.17	< 49.1	< 15.6	< 14.1	< 12.7	30.7
9615 Cascade SB-2	3-4	10/14/2025	60,900	6,320	24,600	60 J	9,580	12,000	6,430	52.6	29,800	< 169	< 163	222 J	15 J	15 J	23.4	58.5 J	15 J	18.4 J	58.5	217
9615 Cascade SB-3	5-6	10/14/2025	53,900	7,610	68,000	220 J	16,000	21,100	19,600	41.5	64,800	27.4 J	< 19.1	82	< 81.9	< 72.7	< 51.4	< 275	< 87.6	< 79.1	< 71.2	394

Notes
µg/kg = Micrograms per Kilogram.
Exceeds Generic Drinking Water Protection Criteria.
Exceeds Groundwater Surface Water Interface Protection Criteria.
Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.
Exceeds Two or More DWPC, GSI PC, and/or Applicable Soil Vapor Inhalation Criteria/Screening Levels.
Exceeds PSIC, DCC, and/or Csat, likely exceeds others.
Bold indicates concentration above laboratory reporting limits.
ND = Not Detected above laboratory reporting limits
NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.
J = Result detected above detection limit, but below reporting limit. Value is considered to be estimated.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, updated October 12, 2023.

Table 1
Soil Sample Analytical Detection Summary
9615 Cascade
Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 and Volatilization to Indoor Air Pathway Screening Levels Revised February 26, 2024 Units: µg/kg			Semivolatile Organic Compounds (SVOCs)														Polychlorinated Biphenyls (PCBs)	Volatile Organic Compounds (VOCs)			
			Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Bis(2-ethylhexyl) phthalate	Chrysene	Dibenzo(A,H)Anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Pentachlorophenol	Phenanthrene			Pyrene		
			CAS Number	50-32-8	205-99-2	191-24-2	207-08-9	117-81-7	218-01-9	53-70-3	132-64-9	206-44-0	86-73-7	193-39-5	91-20-3	87-86-5			85-01-8	129-00-0	
			Statewide Default Background Levels	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			NC	NC	
			Drinking Water Protection Criteria (DWPC)	NLL	NLL	NLL	NLL	NLL	NLL	NLL	ID	7.30E+05	3.90E+05	NLL	35,000	22			56,000	4.80E+05	
			Groundwater Surface Water Interface Protection Criteria (GSIPC)	NLL	NLL	NLL	NLL	NLL	NLL	NLL	1,700	5,500	5,300	NLL	730	1.70E+4 ^(G)			2,100	ID	
			Soil Volatilization to Indoor Air Inhalation (SVIIC)	NLV	ID	NLV	NLV	NLV	ID	NLV	2.00E+06	1.00E+09	5.80E+08	NLV	2.50E+05	NLV			2.80E+06	1.00E+09	
			Soil Volatilization to Indoor Air Pathway (SVIAP)	NC	NC	NC	NC	NC	NC	NC	7.10E+06	NC	4.70E+05	NC	67 ^(M)	NC			1,700	2.50E+07	
			Infinite Source Volatile Soil Inhalation Criteria (VSIC)	NLV	ID	NLV	NLV	NLV	ID	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	NLV			1.60E+05	6.50E+08	
			Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)	NLV	ID	NLV	NLV	NLV	ID	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	NLV			1.60E+05	6.50E+08	
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)	NLV	ID	NLV	NLV	NLV	ID	NLV	1.30E+05	7.40E+08	1.30E+08	NLV	3.00E+05	NLV	1.60E+05	6.50E+08						
Particulate Soil Inhalation Criteria (PSIC)	1.50E+06	ID	8.00E+08	ID	7.00E+08	ID	ID	6.70E+06	9.30E+09	9.30E+09	ID	2.00E+08	1.00E+08	6.70E+06	6.70E+09						
Direct Contact Criteria (DCC)	2,000	20,000	2.50E+06	2.00E+05	2.80E+06	2.00E+06	2,000	ID	4.60E+07	2.70E+07	20,000	1.60E+07	90,000	1.60E+06	2.90E+07						
Soil Saturation Concentration Screening Levels (Csat)			NA	NA	NA	NA	1.00E+07	NA	NA	NA	NA	NA	NA	NA	NA	NA					
Sample ID		Sample Depth (ft)	Sample Date																		
9615 Cascade SB-1		1-2	10/14/2025		30.7	45.1	36.1	21.6	92	16.2 J	< 9.74	< 13.3	45.1	< 13.1	37.9	< 11.5	< 71.6	18	37.9	ND	ND
9615 Cascade SB-2		3-4	10/14/2025		246	319	224	110	122	195	43.4 J	25.1 J	431	20	215	33.4	93.5	172	416	ND	ND
9615 Cascade SB-3		5-6	10/14/2025		485	555	545	212	< 418	212	172 J	< 74.2	576	< 73.3	555	< 64.5	< 401	202	545	ND	ND

Notes
µg/kg = Micrograms per Kilogram.
Exceeds Generic Drinking Water Protection Criteria.
Exceeds Groundwater Surface Water Interface Protection Criteria.
Exceeds Applicable Soil Vapor Inhalation Criteria/Screening Levels.
Exceeds Two or More DWPC, GSIPC, and/or Applicable Soil Vapor Inhalation Criteria/Screening Levels.
Exceeds PSIC, DCC, and/or Csat, likely exceeds others.
Bold indicates concentration above laboratory reporting limits.
ND = Not Detected above laboratory reporting limits
NC = No Criteria; NA = Not Applicable; NLV = Not Likely to Volatize; NLL = Not Likely to Leach.
J = Result detected above detection limit, but below reporting limit. Value is considered to be estimated.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, updated October 12, 2023.

Table 2
TCLP Analytical Detection Summary

Table 2
TCLP Analytical Detection Summary

Detroit Backfill Sampling
9615 Cascade, Detroit, Michigan

40 C.F.R. § 261.24 Code of Federal Regulations Title 40 - Protection of Environment Chapter I - Environmental Protection Agency Subchapter I - Solid Wastes Part 261- Identification and Listing of Hazardous Waste Subpart C - Characteristics of Hazardous Waste <i>Units: mg/L</i>	TCLP Herbicides/ Pesticides									
	2,4,5-TP (Silvex)	2,4-D	Chlordane, Technical	Endrin	Lindane	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	
Maximum Concentration of Contaminants for the Toxicity Characteristic	1.0	10.0	-	0.002	0.4	0.008	0.008	10.0	0.5	
SAMPLE ID	SAMPLE DATE									
9615 Cascade (0'-6") COMP	10/14/2025	<0.000393	<0.000673	<0.0000341	<0.00000851	<0.00000832	<0.0000076	<0.00000793	<0.00000989	<0.00011

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 will satisfy "due diligence", "all appropriate inquiry," or any other similar standard under any federal, state, or local law.

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

APPENDIX B
DAILY FIELD REPORT



**DAILY FIELD REPORT**

Client: City of Detroit Demolition Department
Project: Sampling and Analysis of Fill Material – 9615 Cascade

Report No.: 1
Job No.: DETR0060

Date: 10/14/2025	Day: Tuesday	Temp: -° F (AM) 70 ° F (PM)
MSG Personnel: EMB, BSM	Cloud Cover: 0% (AM) 50% (PM)	Precip.: None (AM) - (PM)
Personnel: MSG	Wind: - (AM) 7 mph NNE (PM)	
MSG Hours On-Site: ~1 hours		
Contractors Information		
Contractor: MSG	No. Men and Type: 2; Helper/Geologist/Driller	Equipment Type: Geoprobe 7822DT
Summary of Work Performed:		
- Advanced three (3) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs) - Collected soil samples from each soil borings (from the interval with the greatest potential to be impacted based on field indicators) and a composite of all three (3) borings.		
Field Notes:		
1315 – MSG onsite (9615 Cascade). 1350 – Collected 9615 Cascade SB-1 (1'-2'). 1355 - Collected 9615 Cascade SB-2 (3'-4'). 1400 - Collected 9615 Cascade SB-3 (5'-6'). 1405 - Collected 9615 Cascade (0'-6') Comp. - MSG GPS'd each SB location. 1310 – MSG off site.		

Supporting Documentation								
Photograph Taken	Yes ☒	No ☐	Samples Collected	Yes ☒	No ☐	Boring/MW Logs	Yes ☒	No ☐
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: View of the Site



Photo 2: Viewing advancement of 9615 Cascade SB-1

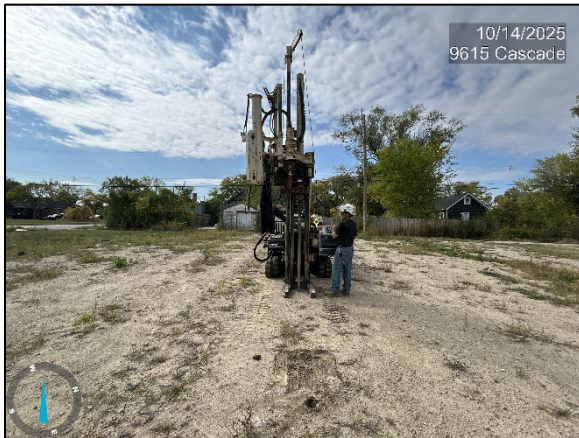


Photo 3: Viewing advancement of 9615 Cascade SB-2



Photo 4: Viewing advancement of 9615 Cascade SB-3



Photo 5: Viewing soil recovery from 9615 Cascade SB-1, SB-2, and SB-3



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

APPENDIX D

SOIL BORING LOGS





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

BOREHOLE NUMBER SB-1

Sheet 1 of 1

CLIENT City of Detroit
PROJECT NUMBER DETR0060.BFS29
DATE STARTED 10-14-2025 **COMPLETED** 10-14-2025
DRILLING CONTRACTOR MSG
DRILLING METHOD Direct Push
EQUIPMENT Geoprobe 7822DT **Operator** BM

PROJECT NAME Backfill Soil Sampling
PROJECT LOCATION 9615 Cascade, Detroit, MI
POSITION
SURFACE ELEVATION **FINAL DEPTH** 6.0 ft
LOGGED BY EMB **CHECKED BY** PDH
REMARKS

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown sandy CLAY, trace silt; moist	0	Collected soil sample 9615 Cascade SB-1 (1-2') at 13:50
					0	
	ES	67		3.0 Brown gravelly SAND, trace clay; moist	0	
				4.0 Brown sandy CLAY, trace silt; moist	0	
5				- Plastic bag and large gravel debris observed between 4 and 5.5' bgs	0	
				5.5 CONCRETE	0	
				6.0		
				Terminated at 6.00 ft.		
10						
15						

LEGEND:

- ▽ AT TIME OF DRILLING
▼ AT END OF DRILLING
▽ AFTER DRILLING



The Mannik & Smith Group, Inc.
2365 Haggerty Road South, Canton, MI 48188
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BOREHOLE NUMBER SB-2

Sheet 1 of 1

CLIENT City of Detroit
PROJECT NUMBER DETR0060.BFS29
DATE STARTED 10-14-2025 **COMPLETED** 10-14-2025
DRILLING CONTRACTOR MSG
DRILLING METHOD Direct Push
EQUIPMENT Geoprobe 7822DT **Operator** BM

PROJECT NAME Backfill Soil Sampling
PROJECT LOCATION 9615 Cascade, Detroit, MI
POSITION
SURFACE ELEVATION **FINAL DEPTH** 6.0 ft
LOGGED BY EMB **CHECKED BY** PDH
REMARKS

DEPTH (ft)	SAMPLE INTERVALS	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (PPM)	REMARKS
				Brown gravelly CLAY, trace sand; moist	0	
			2.0	Sandy TOPSOIL mix, some organic debris; moist	0	
	ES	67	3.0	Brown gravelly CLAY, trace sand; moist	0	Collected soil sample 9615 Cascade SB-2 (3-4') at 13:55
5					0	
			6.0	Terminated at 6.00 ft.	0	
10						
15						

LEGEND:

- ▽ AT TIME OF DRILLING
▼ AT END OF DRILLING
▽ AFTER DRILLING

APPENDIX E
LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS





right solutions.
right partner.

November 12, 2025

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

Re: **DETR0060**

Date Received: **10/15/2025**

Work Order: **HN2515341**

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

Kathy Jones-Gronda

/S/ KATHY JONES-GRONDA

Project Manager



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

Work Order: HN2515341
Date Received: 15-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

4 soil/solid samples were received for analysis at ALS Environmental on 15-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.

WorkOrder: HN2515341

Analytical report amended to include additional analysis. This replaces report dated 10/15/2025.

Organics

EPA 8270E-FULL HN-3546-S

Run ID: 3630819

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

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

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

The concentration in the Method Blank was greater than the Method Detection Limit. Positive results in the batch may be biased high for this analyte: Benzo(a)pyrene, Indeno(1,2,3-cd) pyrene

HN2515341-003: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

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



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

Work Order: HN2515341
Date Received: 15-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.

Run ID: 3607599

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: see QC report

The MS recovery was above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary: tetrachloroethylene

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: n-pentane

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

The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: see QC report

The MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte: see QC report

EPA 8151A-TCLP

Run ID: 3673053

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: Surrogate Spike DCAA.

HN2515341-004: Sample was analyzed outside of the holding time at the request of the client. Results should be considered estimated. 2,4-D, 2,4,5-TP (Silvex), and Surrogate Spike DCAA.

EPA 8081B-3546-S (High)

Run ID: 3613213

HN2515341-001: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

Run ID: 3605782

HN2515341-002: The reporting limit is elevated due to dilution for high concentrations of non-target analytes.

Run ID: 3613228

HN2515341-002: The reporting limit is elevated due to dilution needed to eliminate matrix-related interference.

EPA 8151A-S

Run ID: 3623707

HN2515341-001: Surrogate high due to matrix interference. DCAA.

HN2515341-002: Surrogate high due to matrix interference. DCAA.

HN2515341-003: Surrogate high due to matrix interference. DCAA.

EPA 8081B-FULL HN-3511-TCLP

Run ID: 3667390

HN2515341-004: Sample was analyzed outside of the holding time at the request of the client. Results should be considered estimated.

Metals

EPA 6010D-3050B-S

Run ID: 3613920

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:Pb batch 2288068

The MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte:Cr Cu batch 2288068

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: 9615 Cascade SB-1 (1'-2')	Lab ID: HN2515341-001
---	------------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	7.54		0.227	0.347	mg/kg	EPA 6010D
Barium	45.7		0.431	0.695	mg/kg	EPA 6010D
Benzo(a)anthracene	30.7		15.6	18.0	µg/kg	EPA 8270E
Benzo(a)pyrene	30.7		11.1	18.0	µg/kg	EPA 8270E
Benzo(b)fluoranthene	45.1		13.4	18.0	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	36.1		13.8	18.0	µg/kg	EPA 8270E
Benzo(k)fluoranthene	21.6		13.7	18.0	µg/kg	EPA 8270E
Cadmium	0.16	J	0.0570	0.695	mg/kg	EPA 6010D
Chloride	18.8		3.73	12.0	mg/kg	EPA 9056A
Chromium	14.3	S	0.208	0.347	mg/kg	EPA 6010D
Chrysene	16.2	J	14.6	18.0	µg/kg	EPA 8270E
Copper	18.3	S	0.514	0.695	mg/kg	EPA 6010D
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	92.0		74.6	89.3	µg/kg	EPA 8270E
Fluoranthene	45.1		8.66	18.0	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	37.9		12.6	18.0	µg/kg	EPA 8270E
Lead	12.4	S	0.278	0.347	mg/kg	EPA 6010D
Mercury	0.191		0.0144	0.0211	mg/kg	EPA 7471B
Percent Moisture	17.4		0.1	0.1	%	EPA 3550C
Phenanthrene	18.0		8.39	18.0	µg/kg	EPA 8270E
Pyrene	37.9		9.00	18.0	µg/kg	EPA 8270E
Zinc	43.1		0.667	0.695	mg/kg	EPA 6010D

CLIENT ID: 9615 Cascade SB-2 (3'-4')	Lab ID: HN2515341-002
---	------------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1'-Biphenyl (BZ-0)	15.0	J	13.6	82.7	µg/kg	EPA 8270E
1-Methylnaphthalene	15.0	J	12.0	16.7	µg/kg	EPA 8270E
2-Methylnaphthalene	23.4		8.49	16.7	µg/kg	EPA 8270E
3&4-Methylphenol	58.5	J	45.5	82.7	µg/kg	EPA 8270E
4,4'-DDE	222	J	168	255	µg/kg	EPA 8081B
Acenaphthylene	15.0	J	14.5	16.7	µg/kg	EPA 8270E
Acetophenone	18.4	J	13.1	82.7	µg/kg	EPA 8270E
Anthracene	58.5		11.8	16.7	µg/kg	EPA 8270E
Arsenic	6.32		0.232	0.355	mg/kg	EPA 6010D
Barium	24.6		0.440	0.710	mg/kg	EPA 6010D
Benzo(a)anthracene	217		14.4	16.7	µg/kg	EPA 8270E
Benzo(a)pyrene	246		10.2	16.7	µg/kg	EPA 8270E
Benzo(b)fluoranthene	319		12.5	16.7	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	224		12.8	16.7	µg/kg	EPA 8270E
Benzo(k)fluoranthene	110		12.7	16.7	µg/kg	EPA 8270E
Cadmium	0.06	J	0.0582	0.710	mg/kg	EPA 6010D

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

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



CLIENT ID: 9615 Cascade SB-2 (3'-4')				Lab ID: HN2515341-002		
Analyte	Results	Flag	MDL	MRL	Units	Method
Chloride	60.9		3.59	11.6	mg/kg	EPA 9056A
Chromium	9.58		0.213	0.355	mg/kg	EPA 6010D
Chrysene	195		13.5	16.7	µg/kg	EPA 8270E
Copper	12.0		0.526	0.710	mg/kg	EPA 6010D
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	122		69.1	82.7	µg/kg	EPA 8270E
Dibenz(a,h) anthracene	43.4	J	9.02	82.7	µg/kg	EPA 8270E
Dibenzofuran	25.1	J	12.3	82.7	µg/kg	EPA 8270E
Fluoranthene	431		8.02	16.7	µg/kg	EPA 8270E
Fluorene	20.0		12.1	16.7	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	215		11.6	16.7	µg/kg	EPA 8270E
Lead	6.43		0.284	0.355	mg/kg	EPA 6010D
Mercury	0.0526		0.0144	0.0212	mg/kg	EPA 7471B
Naphthalene	33.4		10.7	16.7	µg/kg	EPA 8270E
Pentachlorophenol	93.5		66.4	82.7	µg/kg	EPA 8270E
Percent Moisture	14.2		0.1	0.1	%	EPA 3550C
Phenanthrene	172		7.77	16.7	µg/kg	EPA 8270E
Pyrene	416		8.33	16.7	µg/kg	EPA 8270E
Zinc	29.8		0.682	0.710	mg/kg	EPA 6010D

CLIENT ID: 9615 Cascade SB-3 (5'-6')				Lab ID: HN2515341-003		
Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDE	82.0		19.7	29.9	µg/kg	EPA 8081B
4,4'-DDT	27.4	J	19.9	29.9	µg/kg	EPA 8081B
Arsenic	7.61		0.270	0.414	mg/kg	EPA 6010D
Barium	68.0		0.513	0.828	mg/kg	EPA 6010D
Benzo(a)anthracene	394		87.2	101	µg/kg	EPA 8270E
Benzo(a)pyrene	485		62.0	101	µg/kg	EPA 8270E
Benzo(b)fluoranthene	555		75.3	101	µg/kg	EPA 8270E
Benzo(g,h,i)perylene	545		77.4	101	µg/kg	EPA 8270E
Benzo(k)fluoranthene	212		76.5	101	µg/kg	EPA 8270E
Cadmium	0.22	J	0.0679	0.828	mg/kg	EPA 6010D
Chloride	53.9		4.21	13.6	mg/kg	EPA 9056A
Chromium	16.0		0.248	0.414	mg/kg	EPA 6010D
Chrysene	212		81.6	101	µg/kg	EPA 8270E
Copper	21.1		0.612	0.828	mg/kg	EPA 6010D
Dibenz(a,h) anthracene	172	J	54.5	500	µg/kg	EPA 8270E
Fluoranthene	576		48.5	101	µg/kg	EPA 8270E
Indeno(1,2,3-cd) pyrene	555		70.3	101	µg/kg	EPA 8270E
Lead	19.6		0.331	0.414	mg/kg	EPA 6010D
Mercury	0.0415		0.0161	0.0237	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: 9615 Cascade SB-3 (5'-6')			Lab ID: HN2515341-003			
Analyte	Results	Flag	MDL	MRL	Units	Method
Percent Moisture	26.3		0.1	0.1	%	EPA 3550C
Phenanthrene	202		47.0	101	µg/kg	EPA 8270E
Pyrene	545		50.4	101	µg/kg	EPA 8270E
Zinc	64.8		0.794	0.828	mg/kg	EPA 6010D

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Workorder: HN2515341

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2515341-001	9615 Cascade SB-1 (1'-2')	SOIL/SOLID	10/14/25 13:50	10/15/25 08:00
HN2515341-002	9615 Cascade SB-2 (3'-4')	SOIL/SOLID	10/14/25 13:55	10/15/25 08:00
HN2515341-003	9615 Cascade SB-3 (5'-6')	SOIL/SOLID	10/14/25 14:00	10/15/25 08:00
HN2515341-004	9615 Cascade (0'-6') COMP	SOIL/SOLID	10/14/25 14:05	10/15/25 08:00



ALS Environmental

Laboratory location:

Chain of Custody Form

Page 1 of 1

Customer Information		Project Information		Parameter/Method Request for Analysis																
Purchase Order		Project Name	9615 Cascade	A	VOCs (U.S. EPA Method 8260C (or Method 8260))															
Work Order	Quote ID - 11631	Project Number	DETR0060	B	SVOCs (U.S. EPA Method 8270D (or Method 8270))															
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group	C	PCBs (U.S. EPA Method 8082)															
Send Report To	Ryan Montri	Invoice Attn.		D	Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)															
Address	2365 Haggerty Rd South Suite 100	Address	2365 Haggerty Rd South Suite 100	E	Chlorides (U.S. EPA Method 9056A)															
				F	Pesticides (U.S. EPA Method 8081B (or Method 8081))															
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188	G	Herbicides (U.S. EPA Method 8151A (or Method 8151))															
Phone	734-397-3100	Phone	734-397-3100	H	Put on Hold, Pending Data															
Fax		Fax		I																
e-Mail Address	RMontri@manniksmithgroup.com	e-Mail Address		J																
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold			
1	9615 Cascade SB-1 (1'-2')	10-14-25	1350	Soil	7	4	X													
2	9615 Cascade SB-2 (3'-4')	↓	1355	Soil	7	4	X													
3	9615 Cascade SB-3 (5'-6')	↓	1400	Soil	7	4	X													
4	9615 Cascade (1'-6') COMP	↓	1405	Soil	-	2								X			X			
5																				
6																				
7																				
8																				
9																				
10																				
Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:																
Eddie Bosas / Edmund Bosas				☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other																
Relinquished by:	Date:	Time:	Received by:	Notes: Quote# HN-061825-M&S-MA																
Edmund Bosas	10-14-25	1518	Colin																	
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler Temp.																
Colin	10/14/25	1700	QS	2.4C/16h																
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	QC Package: (Check Box Below)																
AB	10/15/25	1352		☐ Level II: Standard QC ☐ TRRP-Checklist																
				☐ Level III: Std QC + Raw Data ☐ TRRP Level IV																
				☐ Level IV: SW846 CLP-Like																
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035				Other:																

Environmental Division
Holland
Work Order Reference
HN2515341

Telephone: +1 616 399 6070

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

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

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ALS Holland Sample Receiving Checklist

Received by:

Myra B

Date/Time:

10/15/25 0800

Carrier Name:

DS

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):

2.4c / 2.4c

Thermometer(s):

1R6

Sample(s) received on ice?

☒ Yes / No

Matrix/Matrices:

Soil

Cooler(s)/Kit(s):

-

Date/Time sample(s) sent to storage:

10/15/25 1352

Water – VOA vials have zero headspace?

Yes / No / ☒ No Vials

Water – pH acceptable upon receipt?

Yes / No / ☒ N/ApH strip lot #:

< 2

> 12

Other

pH adjusted (note adjustments below)?

Yes / No / ☒ N/ApH 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 Certifications¹

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

¹ - Scope available upon request

ANALYST SUMMARY



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

Work Order: HN2515341

Sample Name: 9615 Cascade SB-1 (1'-2') **Date Collected:** 10/14/25
Laboratory Code: HN2515341-001 **Date Received:** 10/15/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		001-AB	2277718		3591101	Jessica Bacon
EPA 6010D	EPA 3050B	001-AA	2288068	Weston Kotecki	3613920	Denise Coffey
EPA 7471B	Method	001-AA	2283800	Maxx Richey	3604481	Maxx Richey
EPA 8081B	EPA 3546	001-AA	2281829	Rachel Plantinga	3613213	Madison VandenBer
EPA 8082A	EPA 3546	001-AA	2279037	Rachel Plantinga	3605127	Nathaniel Dietlin
EPA 8151A	Method	001-AA	2293135	Rachel Plantinga	3623707	Kathy Malmyga
EPA 8260D	EPA 5035A	001-AC	2279131	Jonathan Vazquez	3607599	Ali Cook
EPA 8270E	EPA 3546	001-AA	2291398	Willow Julien	3630819	Sam Bruzan
EPA 9056A	EPA 9056A	001-AA	2285104	Quoc Nguyen	3604290	Sage Hansen

Sample Name: 9615 Cascade SB-2 (3'-4') **Date Collected:** 10/14/25
Laboratory Code: HN2515341-002 **Date Received:** 10/15/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		002-AB	2277718		3591101	Jessica Bacon
EPA 6010D	EPA 3050B	002-AA	2288068	Weston Kotecki	3613920	Denise Coffey
EPA 7471B	Method	002-AA	2283800	Maxx Richey	3604481	Maxx Richey
EPA 8081B	EPA 3546	002-AA	2281829	Rachel Plantinga	3613228	Madison VandenBer
EPA 8082A	EPA 3546	002-AA	2279037	Rachel Plantinga	3605127	Nathaniel Dietlin
EPA 8151A	Method	002-AA	2293135	Rachel Plantinga	3623707	Kathy Malmyga
EPA 8260D	EPA 5035A	002-AC	2279131	Jonathan Vazquez	3607599	Ali Cook
EPA 8270E	EPA 3546	002-AA	2291398	Willow Julien	3630819	Sam Bruzan
EPA 9056A	EPA 9056A	002-AA	2285104	Quoc Nguyen	3604290	Sage Hansen

Sample Name: 9615 Cascade SB-3 (5'-6') **Date Collected:** 10/14/25
Laboratory Code: HN2515341-003 **Date Received:** 10/15/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		003-AB	2277718		3591101	Jessica Bacon

ANALYST SUMMARY



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

Work Order: HN2515341

Sample Name: 9615 Cascade SB-3 (5'-6') **Date Collected:** 10/14/25
Laboratory Code: HN2515341-003 **Date Received:** 10/15/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6010D	EPA 3050B	003-AA	2288068	Weston Kotecki	3613920	Denise Coffey
EPA 7471B	Method	003-AA	2283800	Maxx Richey	3604481	Maxx Richey
EPA 8081B	EPA 3546	003-AA	2281829	Rachel Plantinga	3613213	Madison VandenBer
EPA 8082A	EPA 3546	003-AA	2279037	Rachel Plantinga	3605127	Nathaniel Dietlin
EPA 8151A	Method	003-AA	2293135	Rachel Plantinga	3623707	Kathy Malmyga
EPA 8260D	EPA 5035A	003-AC	2279131	Jonathan Vazquez	3607599	Ali Cook
EPA 8270E	EPA 3546	003-AA	2291398	Willow Julien	3630819	Sam Bruzan
EPA 9056A	EPA 9056A	003-AA	2285104	Quoc Nguyen	3604290	Sage Hansen

Sample Name: 9615 Cascade (0'-6') COMP **Date Collected:** 10/14/25
Laboratory Code: HN2515341-004 **Date Received:** 10/15/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 8081B	EPA 3511	004-AD	2322497	Sam Bruzan	3667390	Sam Bruzan
EPA 8151A	Method	004-AC	2324365	Danielle Maleski	3673053	Kathy Malmyga

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2') **Lab ID:** HN2515341-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD									
2,4,5-T	EPA 8151A	<2.64	U	µg/kg	2.64	14.3	1	10/24/25 11:12	10/23/25 07:55
2,4,5-TP (Silvex)	EPA 8151A	<4.70	U	µg/kg	4.70	14.3	1	10/24/25 11:12	10/23/25 07:55
2,4-D	EPA 8151A	<7.66	U	µg/kg	7.66	28.7	1	10/24/25 11:12	10/23/25 07:55
<i>Surr: DCAA</i>	<i>EPA 8151A</i>	252	<i>S</i>	<i>%REC</i>		<i>10-116</i>	<i>1</i>	<i>10/24/25 11:12</i>	<i>10/23/25 07:55</i>
General Chemistry Parameters									
Percent Moisture	EPA 3550C	17.4		%	0.1	0.1	1	10/15/25 19:27	NA
Chloride	EPA 9056A	18.8		mg/kg	3.73	12.0	1	10/19/25 22:27	10/19/25 13:54
Metals									
Arsenic	EPA 6010D	7.54		mg/kg	0.227	0.347	1	10/22/25 14:46	10/21/25 10:23
Barium	EPA 6010D	45.7		mg/kg	0.431	0.695	1	10/22/25 14:46	10/21/25 10:23
Cadmium	EPA 6010D	0.16	J	mg/kg	0.0570	0.695	1	10/22/25 14:46	10/21/25 10:23
Chromium	EPA 6010D	14.3	S	mg/kg	0.208	0.347	1	10/22/25 14:46	10/21/25 10:23
Copper	EPA 6010D	18.3	S	mg/kg	0.514	0.695	1	10/22/25 14:46	10/21/25 10:23
Lead	EPA 6010D	12.4	S	mg/kg	0.278	0.347	1	10/22/25 14:46	10/21/25 10:23
Selenium	EPA 6010D	<0.195	U	mg/kg	0.195	0.695	1	10/22/25 14:46	10/21/25 10:23
Silver	EPA 6010D	<0.167	U	mg/kg	0.167	0.347	1	10/22/25 14:46	10/21/25 10:23
Zinc	EPA 6010D	43.1		mg/kg	0.667	0.695	1	10/22/25 14:46	10/21/25 10:23
Mercury	EPA 7471B	0.191		mg/kg	0.0144	0.0211	1	10/20/25 17:45	10/20/25 10:44
Organochlorine Pesticides by GC/ECD									
Chlordane, Technical	EPA 8081B	<261	U	µg/kg	261	658	10	10/20/25 20:56	10/17/25 11:28
Endrin	EPA 8081B	<213	U	µg/kg	213	263	10	10/20/25 20:56	10/17/25 11:28
gamma-BHC (Lindane)	EPA 8081B	<173	U	µg/kg	173	263	10	10/20/25 20:56	10/17/25 11:28
Heptachlor	EPA 8081B	<170	U	µg/kg	170	263	10	10/20/25 20:56	10/17/25 11:28
Heptachlor epoxide	EPA 8081B	<174	U	µg/kg	174	263	10	10/20/25 20:56	10/17/25 11:28
Methoxychlor	EPA 8081B	<176	U	µg/kg	176	263	10	10/20/25 20:56	10/17/25 11:28
Toxaphene	EPA 8081B	<284	U	µg/kg	284	1580	10	10/20/25 20:56	10/17/25 11:28
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	137		<i>%REC</i>		<i>53-151</i>	<i>10</i>	<i>10/20/25 20:56</i>	<i>10/17/25 11:28</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	97.0		<i>%REC</i>		<i>67-127</i>	<i>10</i>	<i>10/20/25 20:56</i>	<i>10/17/25 11:28</i>
Polychlorinated Biphenyls (PCBs) by GC/ECD									

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: HN2515341-001
---	------------------------------

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Aroclor 1016	EPA 8082A	<67.7	U	µg/kg	67.7	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1221	EPA 8082A	<67.7	U	µg/kg	67.7	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1232	EPA 8082A	<67.7	U	µg/kg	67.7	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1242	EPA 8082A	<67.7	U	µg/kg	67.7	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1248	EPA 8082A	<67.7	U	µg/kg	67.7	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1254	EPA 8082A	<55.1	U	µg/kg	55.1	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1260	EPA 8082A	<55.1	U	µg/kg	55.1	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1262	EPA 8082A	<55.1	U	µg/kg	55.1	197	1	10/18/25 11:14	10/17/25 13:38
Aroclor 1268	EPA 8082A	<55.1	U	µg/kg	55.1	197	1	10/18/25 11:14	10/17/25 13:38
Total PCB	EPA 8082A	<55.1	U	µg/kg	55.1	197	1	10/18/25 11:14	10/17/25 13:38
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	113		%REC		54-146	1	10/18/25 11:14	10/17/25 13:38
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	102		%REC		58-140	1	10/18/25 11:14	10/17/25 13:38

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<14.6	U	µg/kg	14.6	89.3	1	10/27/25 16:45	10/23/25 16:35
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<20.8	U	µg/kg	20.8	901	1	10/27/25 16:45	10/23/25 16:35
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<64.6	U	µg/kg	64.6	451	1	10/27/25 16:45	10/23/25 16:35
1-Methylnaphthalene	EPA 8270E	<13.0	U	µg/kg	13.0	18.0	1	10/27/25 16:45	10/23/25 16:35
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<21.1	U	µg/kg	21.1	89.3	1	10/27/25 16:45	10/23/25 16:35
2,3,4,6-Tetrachlorophenol	EPA 8270E	<66.0	U	µg/kg	66.0	180	1	10/27/25 16:45	10/23/25 16:35
2,4,5-Trichlorophenol	EPA 8270E	<53.4	U	µg/kg	53.4	89.3	1	10/27/25 16:45	10/23/25 16:35
2,4,6-Trichlorophenol	EPA 8270E	<24.0	U	µg/kg	24.0	89.3	1	10/27/25 16:45	10/23/25 16:35
2,4-Dichlorophenol	EPA 8270E	<48.5	U	µg/kg	48.5	89.3	1	10/27/25 16:45	10/23/25 16:35
2,4-Dimethylphenol	EPA 8270E	<46.4	U	µg/kg	46.4	89.3	1	10/27/25 16:45	10/23/25 16:35
2,4-Dinitrophenol	EPA 8270E	<659	U	µg/kg	659	901	1	10/27/25 16:45	10/23/25 16:35
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<58.6	U	µg/kg	58.6	89.3	1	10/27/25 16:45	10/23/25 16:35
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<23.0	U	µg/kg	23.0	89.3	1	10/27/25 16:45	10/23/25 16:35
2-Chloronaphthalene	EPA 8270E	<12.6	U	µg/kg	12.6	18.0	1	10/27/25 16:45	10/23/25 16:35
2-Chlorophenol	EPA 8270E	<59.0	U	µg/kg	59.0	89.3	1	10/27/25 16:45	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2') **Lab ID: HN2515341-001**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<75.3	U	µg/kg	75.3	89.3	1	10/27/25 16:45	10/23/25 16:35
2-Methylnaphthalene	EPA 8270E	<9.17	U	µg/kg	9.17	18.0	1	10/27/25 16:45	10/23/25 16:35
2-Methylphenol (o-Cresol)	EPA 8270E	<24.4	U	µg/kg	24.4	89.3	1	10/27/25 16:45	10/23/25 16:35
2-Nitroaniline	EPA 8270E	<50.1	U	µg/kg	50.1	89.3	1	10/27/25 16:45	10/23/25 16:35
2-Nitrophenol	EPA 8270E	<25.7	U	µg/kg	25.7	89.3	1	10/27/25 16:45	10/23/25 16:35
3&4-Methylphenol	EPA 8270E	<49.1	U	µg/kg	49.1	89.3	1	10/27/25 16:45	10/23/25 16:35
3,3'-Dichlorobenzidine	EPA 8270E	<42.1	U	µg/kg	42.1	451	1	10/27/25 16:45	10/23/25 16:35
3-Nitroaniline	EPA 8270E	<52.3	U	µg/kg	52.3	89.3	1	10/27/25 16:45	10/23/25 16:35
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<49.4	U	µg/kg	49.4	89.3	1	10/27/25 16:45	10/23/25 16:35
4-Chloro-3-methylphenol	EPA 8270E	<25.7	U	µg/kg	25.7	89.3	1	10/27/25 16:45	10/23/25 16:35
4-Chloroaniline	EPA 8270E	<45.8	U	µg/kg	45.8	180	1	10/27/25 16:45	10/23/25 16:35
4-Chlorophenyl phenylether	EPA 8270E	<24.9	U	µg/kg	24.9	89.3	1	10/27/25 16:45	10/23/25 16:35
4-Nitroaniline	EPA 8270E	<140	U	µg/kg	140	451	1	10/27/25 16:45	10/23/25 16:35
4-Nitrophenol	EPA 8270E	<211	U	µg/kg	211	901	1	10/27/25 16:45	10/23/25 16:35
Acenaphthene	EPA 8270E	<13.0	U	µg/kg	13.0	18.0	1	10/27/25 16:45	10/23/25 16:35
Acenaphthylene	EPA 8270E	<15.6	U	µg/kg	15.6	18.0	1	10/27/25 16:45	10/23/25 16:35
Acetophenone	EPA 8270E	<14.1	U	µg/kg	14.1	89.3	1	10/27/25 16:45	10/23/25 16:35
Anthracene	EPA 8270E	<12.7	U	µg/kg	12.7	18.0	1	10/27/25 16:45	10/23/25 16:35
Atrazine	EPA 8270E	<52.8	SU	µg/kg	52.8	89.3	1	10/27/25 16:45	10/23/25 16:35
Benzaldehyde	EPA 8270E	<138	U	µg/kg	138	180	1	10/27/25 16:45	10/23/25 16:35
Benzo(a)anthracene	EPA 8270E	30.7		µg/kg	15.6	18.0	1	10/27/25 16:45	10/23/25 16:35
Benzo(a)pyrene	EPA 8270E	30.7		µg/kg	11.1	18.0	1	10/27/25 16:45	10/23/25 16:35
Benzo(b)fluoranthene	EPA 8270E	45.1		µg/kg	13.4	18.0	1	10/27/25 16:45	10/23/25 16:35
Benzo(g,h,i)perylene	EPA 8270E	36.1		µg/kg	13.8	18.0	1	10/27/25 16:45	10/23/25 16:35
Benzo(k)fluoranthene	EPA 8270E	21.6		µg/kg	13.7	18.0	1	10/27/25 16:45	10/23/25 16:35
bis(2-Chloroethoxy) methane	EPA 8270E	<57.1	U	µg/kg	57.1	89.3	1	10/27/25 16:45	10/23/25 16:35
bis(2-Chloroethyl) ether	EPA 8270E	<25.5	U	µg/kg	25.5	89.3	1	10/27/25 16:45	10/23/25 16:35
Butyl benzyl phthalate	EPA 8270E	<113	U	µg/kg	113	180	1	10/27/25 16:45	10/23/25 16:35
Caprolactam	EPA 8270E	<81.4	U	µg/kg	81.4	89.3	1	10/27/25 16:45	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2') **Lab ID: HN2515341-001**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Carbazole	EPA 8270E	<26.6	U	µg/kg	26.6	89.3	1	10/27/25 16:45	10/23/25 16:35
Chrysene	EPA 8270E	16.2	J	µg/kg	14.6	18.0	1	10/27/25 16:45	10/23/25 16:35
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	92.0		µg/kg	74.6	89.3	1	10/27/25 16:45	10/23/25 16:35
Dibenz(a,h) anthracene	EPA 8270E	<9.74	U	µg/kg	9.74	89.3	1	10/27/25 16:45	10/23/25 16:35
Dibenzofuran	EPA 8270E	<13.3	U	µg/kg	13.3	89.3	1	10/27/25 16:45	10/23/25 16:35
Diethyl phthalate	EPA 8270E	<30.7	U	µg/kg	30.7	89.3	1	10/27/25 16:45	10/23/25 16:35
Dimethyl phthalate	EPA 8270E	<17.6	U	µg/kg	17.6	89.3	1	10/27/25 16:45	10/23/25 16:35
Fluoranthene	EPA 8270E	45.1		µg/kg	8.66	18.0	1	10/27/25 16:45	10/23/25 16:35
Fluorene	EPA 8270E	<13.1	U	µg/kg	13.1	18.0	1	10/27/25 16:45	10/23/25 16:35
Hexachlorobenzene	EPA 8270E	<26.2	U	µg/kg	26.2	89.3	1	10/27/25 16:45	10/23/25 16:35
Hexachlorobutadiene	EPA 8270E	<21.2	U	µg/kg	21.2	89.3	1	10/27/25 16:45	10/23/25 16:35
Hexachlorocyclopentadiene	EPA 8270E	<85.5	U	µg/kg	85.5	89.3	1	10/27/25 16:45	10/23/25 16:35
Hexachloroethane	EPA 8270E	<37.3	U	µg/kg	37.3	89.3	1	10/27/25 16:45	10/23/25 16:35
Indeno(1,2,3-cd) pyrene	EPA 8270E	37.9		µg/kg	12.6	18.0	1	10/27/25 16:45	10/23/25 16:35
Isophorone	EPA 8270E	<17.6	U	µg/kg	17.6	451	1	10/27/25 16:45	10/23/25 16:35
Methylphenol, Total	EPA 8270E	<24.4	U	µg/kg	24.4	89.3	1	10/27/25 16:45	10/23/25 16:35
Naphthalene	EPA 8270E	<11.5	U	µg/kg	11.5	18.0	1	10/27/25 16:45	10/23/25 16:35
Nitrobenzene	EPA 8270E	<30.3	U	µg/kg	30.3	451	1	10/27/25 16:45	10/23/25 16:35
n-Nitrosodi-n-propylamine	EPA 8270E	<14.9	U	µg/kg	14.9	89.3	1	10/27/25 16:45	10/23/25 16:35
N-Nitrosodiphenylamine	EPA 8270E	<52.2	U	µg/kg	52.2	89.3	1	10/27/25 16:45	10/23/25 16:35
Pentachlorophenol	EPA 8270E	<71.6	U	µg/kg	71.6	89.3	1	10/27/25 16:45	10/23/25 16:35
Phenanthrene	EPA 8270E	18.0		µg/kg	8.39	18.0	1	10/27/25 16:45	10/23/25 16:35
Phenol	EPA 8270E	<45.3	U	µg/kg	45.3	89.3	1	10/27/25 16:45	10/23/25 16:35
Pyrene	EPA 8270E	37.9		µg/kg	9.00	18.0	1	10/27/25 16:45	10/23/25 16:35
Pyridine	EPA 8270E	<177	U	µg/kg	177	451	1	10/27/25 16:45	10/23/25 16:35

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.4	U	µg/kg	17.4	38.4	1	10/20/25 23:32	10/16/25 12:58
1,1,2,2-Tetrachloroethane	EPA 8260D	<16.9	SU	µg/kg	16.9	38.4	1	10/20/25 23:32	10/16/25 12:58
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<24.3	U	µg/kg	24.3	38.4	1	10/20/25 23:32	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: HN2515341-001
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,1,2-Trichloroethane	EPA 8260D	<16.3	U	µg/kg	16.3	38.4	1	10/20/25 23:32	10/16/25 12:58
1,1-Dichloroethane	EPA 8260D	<14.0	U	µg/kg	14.0	38.4	1	10/20/25 23:32	10/16/25 12:58
1,1-Dichloroethylene	EPA 8260D	<12.4	U	µg/kg	12.4	38.4	1	10/20/25 23:32	10/16/25 12:58
1,2,3-Trichlorobenzene	EPA 8260D	<46.1	SU	µg/kg	46.1	128	1	10/20/25 23:32	10/16/25 12:58
1,2,3-Trichloropropane	EPA 8260D	<16.1	U	µg/kg	16.1	38.4	1	10/20/25 23:32	10/16/25 12:58
1,2,4-Trichlorobenzene	EPA 8260D	<43.5	SU	µg/kg	43.5	128	1	10/20/25 23:32	10/16/25 12:58
1,2,4-Trimethylbenzene	EPA 8260D	<28.2	U	µg/kg	28.2	38.4	1	10/20/25 23:32	10/16/25 12:58
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<35.3	SU	µg/kg	35.3	128	1	10/20/25 23:32	10/16/25 12:58
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<22.6	U	µg/kg	22.6	38.4	1	10/20/25 23:32	10/16/25 12:58
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.6	U	µg/kg	14.6	38.4	1	10/20/25 23:32	10/16/25 12:58
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<22.6	U	µg/kg	22.6	128	1	10/20/25 23:32	10/16/25 12:58
1,2-Dichloropropane	EPA 8260D	<28.3	U	µg/kg	28.3	38.4	1	10/20/25 23:32	10/16/25 12:58
1,3,5-Trimethylbenzene	EPA 8260D	<27.1	U	µg/kg	27.1	128	1	10/20/25 23:32	10/16/25 12:58
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<26.5	U	µg/kg	26.5	38.4	1	10/20/25 23:32	10/16/25 12:58
1,3-Dichloropropene	EPA 8260D	<21.4	U	µg/kg	21.4	76.8	1	10/20/25 23:32	10/16/25 12:58
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<31.2	U	µg/kg	31.2	38.4	1	10/20/25 23:32	10/16/25 12:58
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<91.4	U	µg/kg	91.4	256	1	10/20/25 23:32	10/16/25 12:58
2-Hexanone	EPA 8260D	<19.0	U	µg/kg	19.0	38.4	1	10/20/25 23:32	10/16/25 12:58
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<35.8	U	µg/kg	35.8	38.4	1	10/20/25 23:32	10/16/25 12:58
Acetone	EPA 8260D	<114	U	µg/kg	114	128	1	10/20/25 23:32	10/16/25 12:58
Benzene	EPA 8260D	<18.6	U	µg/kg	18.6	38.4	1	10/20/25 23:32	10/16/25 12:58
Bromochloromethane	EPA 8260D	<19.5	U	µg/kg	19.5	38.4	1	10/20/25 23:32	10/16/25 12:58
Bromodichloromethane	EPA 8260D	<21.5	U	µg/kg	21.5	38.4	1	10/20/25 23:32	10/16/25 12:58
Bromoform	EPA 8260D	<16.2	U	µg/kg	16.2	38.4	1	10/20/25 23:32	10/16/25 12:58
Carbon disulfide	EPA 8260D	<19.9	U	µg/kg	19.9	38.4	1	10/20/25 23:32	10/16/25 12:58
Carbon tetrachloride	EPA 8260D	<15.0	U	µg/kg	15.0	38.4	1	10/20/25 23:32	10/16/25 12:58
Chlorobenzene	EPA 8260D	<12.7	U	µg/kg	12.7	38.4	1	10/20/25 23:32	10/16/25 12:58
Chlorodibromomethane	EPA 8260D	<21.6	U	µg/kg	21.6	38.4	1	10/20/25 23:32	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: HN2515341-001
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chloroethane (Ethyl chloride)	EPA 8260D	<107	U	µg/kg	107	128	1	10/20/25 23:32	10/16/25 12:58
Chloroform	EPA 8260D	<14.1	U	µg/kg	14.1	38.4	1	10/20/25 23:32	10/16/25 12:58
cis-1,2-Dichloroethylene	EPA 8260D	<24.7	U	µg/kg	24.7	38.4	1	10/20/25 23:32	10/16/25 12:58
cis-1,3-Dichloropropene	EPA 8260D	<28.9	U	µg/kg	28.9	38.4	1	10/20/25 23:32	10/16/25 12:58
Cyclohexane	EPA 8260D	<29.4	U	µg/kg	29.4	128	1	10/20/25 23:32	10/16/25 12:58
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<46.5	U	µg/kg	46.5	128	1	10/20/25 23:32	10/16/25 12:58
Ethylbenzene	EPA 8260D	<27.2	U	µg/kg	27.2	38.4	1	10/20/25 23:32	10/16/25 12:58
Isopropylbenzene	EPA 8260D	<24.2	U	µg/kg	24.2	38.4	1	10/20/25 23:32	10/16/25 12:58
m+p-Xylene	EPA 8260D	<51.2	U	µg/kg	51.2	76.8	1	10/20/25 23:32	10/16/25 12:58
Methyl bromide (Bromomethane)	EPA 8260D	<73.4	U	µg/kg	73.4	128	1	10/20/25 23:32	10/16/25 12:58
Methyl chloride (Chloromethane)	EPA 8260D	<105	U	µg/kg	105	128	1	10/20/25 23:32	10/16/25 12:58
Methyl tert-butyl ether (MTBE)	EPA 8260D	<28.0	U	µg/kg	28.0	38.4	1	10/20/25 23:32	10/16/25 12:58
Methylcyclohexane	EPA 8260D	<14.6	U	µg/kg	14.6	38.4	1	10/20/25 23:32	10/16/25 12:58
Methylene chloride (Dichloromethane)	EPA 8260D	<102	U	µg/kg	102	320	1	10/20/25 23:32	10/16/25 12:58
o-Xylene	EPA 8260D	<14.8	U	µg/kg	14.8	38.4	1	10/20/25 23:32	10/16/25 12:58
Styrene	EPA 8260D	<15.2	U	µg/kg	15.2	38.4	1	10/20/25 23:32	10/16/25 12:58
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<23.1	SU	µg/kg	23.1	38.4	1	10/20/25 23:32	10/16/25 12:58
Toluene	EPA 8260D	<31.6	U	µg/kg	31.6	38.4	1	10/20/25 23:32	10/16/25 12:58
Total Xylene	EPA 8260D	<14.8	U	µg/kg	14.8	115	1	10/20/25 23:32	10/16/25 12:58
trans-1,2-Dichloroethylene	EPA 8260D	<31.7	U	µg/kg	31.7	38.4	1	10/20/25 23:32	10/16/25 12:58
trans-1,3-Dichloropropylene	EPA 8260D	<21.4	U	µg/kg	21.4	38.4	1	10/20/25 23:32	10/16/25 12:58
Trichloroethene (Trichloroethylene)	EPA 8260D	<17.2	U	µg/kg	17.2	38.4	1	10/20/25 23:32	10/16/25 12:58
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<19.6	SU	µg/kg	19.6	38.4	1	10/20/25 23:32	10/16/25 12:58
Vinyl chloride (Chloroethene)	EPA 8260D	<25.5	U	µg/kg	25.5	38.4	1	10/20/25 23:32	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4') **Lab ID:** HN2515341-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD									
2,4,5-T	EPA 8151A	<2.67	U	µg/kg	2.67	14.5	1	10/24/25 11:51	10/23/25 07:55
2,4,5-TP (Silvex)	EPA 8151A	<4.76	U	µg/kg	4.76	14.5	1	10/24/25 11:51	10/23/25 07:55
2,4-D	EPA 8151A	<7.75	U	µg/kg	7.75	29.0	1	10/24/25 11:51	10/23/25 07:55
Surr: DCAA	EPA 8151A	150	S	%REC		10-116	1	10/24/25 11:51	10/23/25 07:55
General Chemistry Parameters									
Percent Moisture	EPA 3550C	14.2		%	0.1	0.1	1	10/15/25 19:27	NA
Chloride	EPA 9056A	60.9		mg/kg	3.59	11.6	1	10/19/25 22:37	10/19/25 13:54
Metals									
Arsenic	EPA 6010D	6.32		mg/kg	0.232	0.355	1	10/22/25 15:14	10/21/25 10:23
Barium	EPA 6010D	24.6		mg/kg	0.440	0.710	1	10/22/25 15:14	10/21/25 10:23
Cadmium	EPA 6010D	0.06	J	mg/kg	0.0582	0.710	1	10/22/25 15:14	10/21/25 10:23
Chromium	EPA 6010D	9.58		mg/kg	0.213	0.355	1	10/22/25 15:14	10/21/25 10:23
Copper	EPA 6010D	12.0		mg/kg	0.526	0.710	1	10/22/25 15:14	10/21/25 10:23
Lead	EPA 6010D	6.43		mg/kg	0.284	0.355	1	10/22/25 15:14	10/21/25 10:23
Selenium	EPA 6010D	<0.199	U	mg/kg	0.199	0.710	1	10/22/25 15:14	10/21/25 10:23
Silver	EPA 6010D	<0.170	U	mg/kg	0.170	0.355	1	10/22/25 15:14	10/21/25 10:23
Zinc	EPA 6010D	29.8		mg/kg	0.682	0.710	1	10/22/25 15:14	10/21/25 10:23
Mercury	EPA 7471B	0.0526		mg/kg	0.0144	0.0212	1	10/20/25 17:46	10/20/25 10:44
Organochlorine Pesticides by GC/ECD									
4,4'-DDD	EPA 8081B	<163	U	µg/kg	163	255	10	10/21/25 16:47	10/17/25 11:28
4,4'-DDE	EPA 8081B	222	J	µg/kg	168	255	10	10/21/25 16:47	10/17/25 11:28
4,4'-DDT	EPA 8081B	<169	U	µg/kg	169	255	10	10/21/25 16:47	10/17/25 11:28
Aldrin	EPA 8081B	<165	U	µg/kg	165	255	10	10/21/25 16:47	10/17/25 11:28
alpha-BHC	EPA 8081B	<168	U	µg/kg	168	255	10	10/21/25 16:47	10/17/25 11:28
beta-BHC	EPA 8081B	<167	U	µg/kg	167	255	10	10/21/25 16:47	10/17/25 11:28
Chlordane, Technical	EPA 8081B	<252	U	µg/kg	252	637	10	10/21/25 16:47	10/17/25 11:28
cis-Chlordane	EPA 8081B	<170	U	µg/kg	170	255	10	10/21/25 16:47	10/17/25 11:28
delta-BHC	EPA 8081B	<167	U	µg/kg	167	255	10	10/21/25 16:47	10/17/25 11:28
Dieldrin	EPA 8081B	<178	U	µg/kg	178	255	10	10/21/25 16:47	10/17/25 11:28

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4') **Lab ID:** HN2515341-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<171	U	µg/kg	171	255	10	10/21/25 16:47	10/17/25 11:28
Endosulfan II	EPA 8081B	<169	U	µg/kg	169	255	10	10/21/25 16:47	10/17/25 11:28
Endosulfan sulfate	EPA 8081B	<157	U	µg/kg	157	255	10	10/21/25 16:47	10/17/25 11:28
Endrin	EPA 8081B	<206	U	µg/kg	206	255	10	10/21/25 16:47	10/17/25 11:28
Endrin aldehyde	EPA 8081B	<161	U	µg/kg	161	255	10	10/21/25 16:47	10/17/25 11:28
Endrin ketone	EPA 8081B	<155	U	µg/kg	155	255	10	10/21/25 16:47	10/17/25 11:28
gamma-BHC (Lindane)	EPA 8081B	<167	U	µg/kg	167	255	10	10/21/25 16:47	10/17/25 11:28
Heptachlor	EPA 8081B	<164	U	µg/kg	164	255	10	10/21/25 16:47	10/17/25 11:28
Heptachlor epoxide	EPA 8081B	<168	U	µg/kg	168	255	10	10/21/25 16:47	10/17/25 11:28
Methoxychlor	EPA 8081B	<170	U	µg/kg	170	255	10	10/21/25 16:47	10/17/25 11:28
Toxaphene	EPA 8081B	<275	U	µg/kg	275	1530	10	10/21/25 16:47	10/17/25 11:28
trans-Chlordane	EPA 8081B	<169	U	µg/kg	169	255	10	10/21/25 16:47	10/17/25 11:28
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	141		%REC		53-151	10	10/21/25 16:47	10/17/25 11:28
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	96.5		%REC		67-127	10	10/21/25 16:47	10/17/25 11:28

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<66.4	U	µg/kg	66.4	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1221	EPA 8082A	<66.4	U	µg/kg	66.4	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1232	EPA 8082A	<66.4	U	µg/kg	66.4	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1242	EPA 8082A	<66.4	U	µg/kg	66.4	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1248	EPA 8082A	<66.4	U	µg/kg	66.4	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1254	EPA 8082A	<54.0	U	µg/kg	54.0	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1260	EPA 8082A	<54.0	U	µg/kg	54.0	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1262	EPA 8082A	<54.0	U	µg/kg	54.0	194	1	10/18/25 11:25	10/17/25 13:38
Aroclor 1268	EPA 8082A	<54.0	U	µg/kg	54.0	194	1	10/18/25 11:25	10/17/25 13:38
Total PCB	EPA 8082A	<54.0	U	µg/kg	54.0	194	1	10/18/25 11:25	10/17/25 13:38
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	116		%REC		54-146	1	10/18/25 11:25	10/17/25 13:38
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	96.4		%REC		58-140	1	10/18/25 11:25	10/17/25 13:38

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	15.0	J	µg/kg	13.6	82.7	1	10/27/25 17:06	10/23/25 16:35
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<19.3	U	µg/kg	19.3	834	1	10/27/25 17:06	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4')	Lab ID: HN2515341-002
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<59.9	U	µg/kg	59.9	418	1	10/27/25 17:06	10/23/25 16:35
1-Methylnaphthalene	EPA 8270E	15.0	J	µg/kg	12.0	16.7	1	10/27/25 17:06	10/23/25 16:35
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<19.6	U	µg/kg	19.6	82.7	1	10/27/25 17:06	10/23/25 16:35
2,3,4,6-Tetrachlorophenol	EPA 8270E	<61.2	U	µg/kg	61.2	167	1	10/27/25 17:06	10/23/25 16:35
2,4,5-Trichlorophenol	EPA 8270E	<49.5	U	µg/kg	49.5	82.7	1	10/27/25 17:06	10/23/25 16:35
2,4,6-Trichlorophenol	EPA 8270E	<22.2	U	µg/kg	22.2	82.7	1	10/27/25 17:06	10/23/25 16:35
2,4-Dichlorophenol	EPA 8270E	<45.0	U	µg/kg	45.0	82.7	1	10/27/25 17:06	10/23/25 16:35
2,4-Dimethylphenol	EPA 8270E	<42.9	U	µg/kg	42.9	82.7	1	10/27/25 17:06	10/23/25 16:35
2,4-Dinitrophenol	EPA 8270E	<611	U	µg/kg	611	834	1	10/27/25 17:06	10/23/25 16:35
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<54.3	U	µg/kg	54.3	82.7	1	10/27/25 17:06	10/23/25 16:35
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<21.3	U	µg/kg	21.3	82.7	1	10/27/25 17:06	10/23/25 16:35
2-Chloronaphthalene	EPA 8270E	<11.7	U	µg/kg	11.7	16.7	1	10/27/25 17:06	10/23/25 16:35
2-Chlorophenol	EPA 8270E	<54.7	U	µg/kg	54.7	82.7	1	10/27/25 17:06	10/23/25 16:35
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<69.8	U	µg/kg	69.8	82.7	1	10/27/25 17:06	10/23/25 16:35
2-Methylnaphthalene	EPA 8270E	23.4		µg/kg	8.49	16.7	1	10/27/25 17:06	10/23/25 16:35
2-Methylphenol (o-Cresol)	EPA 8270E	<22.6	U	µg/kg	22.6	82.7	1	10/27/25 17:06	10/23/25 16:35
2-Nitroaniline	EPA 8270E	<46.4	U	µg/kg	46.4	82.7	1	10/27/25 17:06	10/23/25 16:35
2-Nitrophenol	EPA 8270E	<23.8	U	µg/kg	23.8	82.7	1	10/27/25 17:06	10/23/25 16:35
3&4-Methylphenol	EPA 8270E	58.5	J	µg/kg	45.5	82.7	1	10/27/25 17:06	10/23/25 16:35
3,3'-Dichlorobenzidine	EPA 8270E	<39.0	U	µg/kg	39.0	418	1	10/27/25 17:06	10/23/25 16:35
3-Nitroaniline	EPA 8270E	<48.5	U	µg/kg	48.5	82.7	1	10/27/25 17:06	10/23/25 16:35
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<45.8	U	µg/kg	45.8	82.7	1	10/27/25 17:06	10/23/25 16:35
4-Chloro-3-methylphenol	EPA 8270E	<23.8	U	µg/kg	23.8	82.7	1	10/27/25 17:06	10/23/25 16:35
4-Chloroaniline	EPA 8270E	<42.4	U	µg/kg	42.4	167	1	10/27/25 17:06	10/23/25 16:35
4-Chlorophenyl phenylether	EPA 8270E	<23.1	U	µg/kg	23.1	82.7	1	10/27/25 17:06	10/23/25 16:35
4-Nitroaniline	EPA 8270E	<130	U	µg/kg	130	418	1	10/27/25 17:06	10/23/25 16:35
4-Nitrophenol	EPA 8270E	<196	U	µg/kg	196	834	1	10/27/25 17:06	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4') **Lab ID:** HN2515341-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthene	EPA 8270E	<12.1	U	µg/kg	12.1	16.7	1	10/27/25 17:06	10/23/25 16:35
Acenaphthylene	EPA 8270E	15.0	J	µg/kg	14.5	16.7	1	10/27/25 17:06	10/23/25 16:35
Acetophenone	EPA 8270E	18.4	J	µg/kg	13.1	82.7	1	10/27/25 17:06	10/23/25 16:35
Anthracene	EPA 8270E	58.5		µg/kg	11.8	16.7	1	10/27/25 17:06	10/23/25 16:35
Atrazine	EPA 8270E	<48.9	SU	µg/kg	48.9	82.7	1	10/27/25 17:06	10/23/25 16:35
Benzaldehyde	EPA 8270E	<128	U	µg/kg	128	167	1	10/27/25 17:06	10/23/25 16:35
Benzo(a)anthracene	EPA 8270E	217		µg/kg	14.4	16.7	1	10/27/25 17:06	10/23/25 16:35
Benzo(a)pyrene	EPA 8270E	246		µg/kg	10.2	16.7	1	10/27/25 17:06	10/23/25 16:35
Benzo(b)fluoranthene	EPA 8270E	319		µg/kg	12.5	16.7	1	10/27/25 17:06	10/23/25 16:35
Benzo(g,h,i)perylene	EPA 8270E	224		µg/kg	12.8	16.7	1	10/27/25 17:06	10/23/25 16:35
Benzo(k)fluoranthene	EPA 8270E	110		µg/kg	12.7	16.7	1	10/27/25 17:06	10/23/25 16:35
bis(2-Chloroethoxy) methane	EPA 8270E	<52.9	U	µg/kg	52.9	82.7	1	10/27/25 17:06	10/23/25 16:35
bis(2-Chloroethyl) ether	EPA 8270E	<23.7	U	µg/kg	23.7	82.7	1	10/27/25 17:06	10/23/25 16:35
Butyl benzyl phthalate	EPA 8270E	<105	U	µg/kg	105	167	1	10/27/25 17:06	10/23/25 16:35
Caprolactam	EPA 8270E	<75.4	U	µg/kg	75.4	82.7	1	10/27/25 17:06	10/23/25 16:35
Carbazole	EPA 8270E	<24.6	U	µg/kg	24.6	82.7	1	10/27/25 17:06	10/23/25 16:35
Chrysene	EPA 8270E	195		µg/kg	13.5	16.7	1	10/27/25 17:06	10/23/25 16:35
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	122		µg/kg	69.1	82.7	1	10/27/25 17:06	10/23/25 16:35
Dibenz(a,h) anthracene	EPA 8270E	43.4	J	µg/kg	9.02	82.7	1	10/27/25 17:06	10/23/25 16:35
Dibenzofuran	EPA 8270E	25.1	J	µg/kg	12.3	82.7	1	10/27/25 17:06	10/23/25 16:35
Diethyl phthalate	EPA 8270E	<28.4	U	µg/kg	28.4	82.7	1	10/27/25 17:06	10/23/25 16:35
Dimethyl phthalate	EPA 8270E	<16.3	U	µg/kg	16.3	82.7	1	10/27/25 17:06	10/23/25 16:35
Fluoranthene	EPA 8270E	431		µg/kg	8.02	16.7	1	10/27/25 17:06	10/23/25 16:35
Fluorene	EPA 8270E	20.0		µg/kg	12.1	16.7	1	10/27/25 17:06	10/23/25 16:35
Hexachlorobenzene	EPA 8270E	<24.3	U	µg/kg	24.3	82.7	1	10/27/25 17:06	10/23/25 16:35
Hexachlorobutadiene	EPA 8270E	<19.7	U	µg/kg	19.7	82.7	1	10/27/25 17:06	10/23/25 16:35
Hexachlorocyclopentadiene	EPA 8270E	<79.2	U	µg/kg	79.2	82.7	1	10/27/25 17:06	10/23/25 16:35
Hexachloroethane	EPA 8270E	<34.6	U	µg/kg	34.6	82.7	1	10/27/25 17:06	10/23/25 16:35
Indeno(1,2,3-cd) pyrene	EPA 8270E	215		µg/kg	11.6	16.7	1	10/27/25 17:06	10/23/25 16:35
Isophorone	EPA 8270E	<16.3	U	µg/kg	16.3	418	1	10/27/25 17:06	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4') **Lab ID:** HN2515341-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methylphenol, Total	EPA 8270E	<22.6	U	µg/kg	22.6	82.7	1	10/27/25 17:06	10/23/25 16:35
Naphthalene	EPA 8270E	33.4		µg/kg	10.7	16.7	1	10/27/25 17:06	10/23/25 16:35
Nitrobenzene	EPA 8270E	<28.1	U	µg/kg	28.1	418	1	10/27/25 17:06	10/23/25 16:35
n-Nitrosodi-n-propylamine	EPA 8270E	<13.8	U	µg/kg	13.8	82.7	1	10/27/25 17:06	10/23/25 16:35
N-Nitrosodiphenylamine	EPA 8270E	<48.4	U	µg/kg	48.4	82.7	1	10/27/25 17:06	10/23/25 16:35
Pentachlorophenol	EPA 8270E	93.5		µg/kg	66.4	82.7	1	10/27/25 17:06	10/23/25 16:35
Phenanthrene	EPA 8270E	172		µg/kg	7.77	16.7	1	10/27/25 17:06	10/23/25 16:35
Phenol	EPA 8270E	<41.9	U	µg/kg	41.9	82.7	1	10/27/25 17:06	10/23/25 16:35
Pyrene	EPA 8270E	416		µg/kg	8.33	16.7	1	10/27/25 17:06	10/23/25 16:35
Pyridine	EPA 8270E	<164	U	µg/kg	164	418	1	10/27/25 17:06	10/23/25 16:35

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<17.0	U	µg/kg	17.0	37.4	1	10/20/25 23:51	10/16/25 12:58
1,1,2,2-Tetrachloroethane	EPA 8260D	<16.5	U	µg/kg	16.5	37.4	1	10/20/25 23:51	10/16/25 12:58
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<23.7	U	µg/kg	23.7	37.4	1	10/20/25 23:51	10/16/25 12:58
1,1,2-Trichloroethane	EPA 8260D	<15.9	U	µg/kg	15.9	37.4	1	10/20/25 23:51	10/16/25 12:58
1,1-Dichloroethane	EPA 8260D	<13.6	U	µg/kg	13.6	37.4	1	10/20/25 23:51	10/16/25 12:58
1,1-Dichloroethylene	EPA 8260D	<12.1	U	µg/kg	12.1	37.4	1	10/20/25 23:51	10/16/25 12:58
1,2,3-Trichlorobenzene	EPA 8260D	<44.9	U	µg/kg	44.9	125	1	10/20/25 23:51	10/16/25 12:58
1,2,3-Trichloropropane	EPA 8260D	<15.7	U	µg/kg	15.7	37.4	1	10/20/25 23:51	10/16/25 12:58
1,2,4-Trichlorobenzene	EPA 8260D	<42.4	U	µg/kg	42.4	125	1	10/20/25 23:51	10/16/25 12:58
1,2,4-Trimethylbenzene	EPA 8260D	<27.4	U	µg/kg	27.4	37.4	1	10/20/25 23:51	10/16/25 12:58
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<34.4	U	µg/kg	34.4	125	1	10/20/25 23:51	10/16/25 12:58
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<22.0	U	µg/kg	22.0	37.4	1	10/20/25 23:51	10/16/25 12:58
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<14.2	U	µg/kg	14.2	37.4	1	10/20/25 23:51	10/16/25 12:58
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<22.0	U	µg/kg	22.0	125	1	10/20/25 23:51	10/16/25 12:58
1,2-Dichloropropane	EPA 8260D	<27.6	U	µg/kg	27.6	37.4	1	10/20/25 23:51	10/16/25 12:58
1,3,5-Trimethylbenzene	EPA 8260D	<26.4	U	µg/kg	26.4	125	1	10/20/25 23:51	10/16/25 12:58
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<25.8	U	µg/kg	25.8	37.4	1	10/20/25 23:51	10/16/25 12:58
1,3-Dichloropropene	EPA 8260D	<20.9	U	µg/kg	20.9	74.8	1	10/20/25 23:51	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4')	Lab ID: HN2515341-002
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<30.4	U	µg/kg	30.4	37.4	1	10/20/25 23:51	10/16/25 12:58
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<89.0	U	µg/kg	89.0	249	1	10/20/25 23:51	10/16/25 12:58
2-Hexanone	EPA 8260D	<18.6	U	µg/kg	18.6	37.4	1	10/20/25 23:51	10/16/25 12:58
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<34.9	U	µg/kg	34.9	37.4	1	10/20/25 23:51	10/16/25 12:58
Acetone	EPA 8260D	<111	U	µg/kg	111	125	1	10/20/25 23:51	10/16/25 12:58
Benzene	EPA 8260D	<18.1	U	µg/kg	18.1	37.4	1	10/20/25 23:51	10/16/25 12:58
Bromochloromethane	EPA 8260D	<19.0	U	µg/kg	19.0	37.4	1	10/20/25 23:51	10/16/25 12:58
Bromodichloromethane	EPA 8260D	<20.9	U	µg/kg	20.9	37.4	1	10/20/25 23:51	10/16/25 12:58
Bromoform	EPA 8260D	<15.7	U	µg/kg	15.7	37.4	1	10/20/25 23:51	10/16/25 12:58
Carbon disulfide	EPA 8260D	<19.4	U	µg/kg	19.4	37.4	1	10/20/25 23:51	10/16/25 12:58
Carbon tetrachloride	EPA 8260D	<14.6	U	µg/kg	14.6	37.4	1	10/20/25 23:51	10/16/25 12:58
Chlorobenzene	EPA 8260D	<12.4	U	µg/kg	12.4	37.4	1	10/20/25 23:51	10/16/25 12:58
Chlorodibromomethane	EPA 8260D	<21.0	U	µg/kg	21.0	37.4	1	10/20/25 23:51	10/16/25 12:58
Chloroethane (Ethyl chloride)	EPA 8260D	<105	U	µg/kg	105	125	1	10/20/25 23:51	10/16/25 12:58
Chloroform	EPA 8260D	<13.7	U	µg/kg	13.7	37.4	1	10/20/25 23:51	10/16/25 12:58
cis-1,2-Dichloroethylene	EPA 8260D	<24.1	U	µg/kg	24.1	37.4	1	10/20/25 23:51	10/16/25 12:58
cis-1,3-Dichloropropene	EPA 8260D	<28.2	U	µg/kg	28.2	37.4	1	10/20/25 23:51	10/16/25 12:58
Cyclohexane	EPA 8260D	<28.6	U	µg/kg	28.6	125	1	10/20/25 23:51	10/16/25 12:58
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<45.3	U	µg/kg	45.3	125	1	10/20/25 23:51	10/16/25 12:58
Ethylbenzene	EPA 8260D	<26.5	U	µg/kg	26.5	37.4	1	10/20/25 23:51	10/16/25 12:58
Isopropylbenzene	EPA 8260D	<23.6	U	µg/kg	23.6	37.4	1	10/20/25 23:51	10/16/25 12:58
m+p-Xylene	EPA 8260D	<49.9	U	µg/kg	49.9	74.8	1	10/20/25 23:51	10/16/25 12:58
Methyl bromide (Bromomethane)	EPA 8260D	<71.6	U	µg/kg	71.6	125	1	10/20/25 23:51	10/16/25 12:58
Methyl chloride (Chloromethane)	EPA 8260D	<102	U	µg/kg	102	125	1	10/20/25 23:51	10/16/25 12:58
Methyl tert-butyl ether (MTBE)	EPA 8260D	<27.3	U	µg/kg	27.3	37.4	1	10/20/25 23:51	10/16/25 12:58
Methylcyclohexane	EPA 8260D	<14.3	U	µg/kg	14.3	37.4	1	10/20/25 23:51	10/16/25 12:58
Methylene chloride (Dichloromethane)	EPA 8260D	<99.3	U	µg/kg	99.3	312	1	10/20/25 23:51	10/16/25 12:58
o-Xylene	EPA 8260D	<14.5	U	µg/kg	14.5	37.4	1	10/20/25 23:51	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 13:55
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-2 (3'-4') **Lab ID: HN2515341-002**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Styrene	EPA 8260D	<14.8	U	µg/kg	14.8	37.4	1	10/20/25 23:51	10/16/25 12:58
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<22.5	U	µg/kg	22.5	37.4	1	10/20/25 23:51	10/16/25 12:58
Toluene	EPA 8260D	<30.8	U	µg/kg	30.8	37.4	1	10/20/25 23:51	10/16/25 12:58
Total Xylene	EPA 8260D	<14.5	U	µg/kg	14.5	112	1	10/20/25 23:51	10/16/25 12:58
trans-1,2-Dichloroethylene	EPA 8260D	<30.9	U	µg/kg	30.9	37.4	1	10/20/25 23:51	10/16/25 12:58
trans-1,3- Dichloropropylene	EPA 8260D	<20.9	U	µg/kg	20.9	37.4	1	10/20/25 23:51	10/16/25 12:58
Trichloroethene (Trichloroethylene)	EPA 8260D	<16.8	U	µg/kg	16.8	37.4	1	10/20/25 23:51	10/16/25 12:58
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<19.1	U	µg/kg	19.1	37.4	1	10/20/25 23:51	10/16/25 12:58
Vinyl chloride (Chloroethene)	EPA 8260D	<24.9	U	µg/kg	24.9	37.4	1	10/20/25 23:51	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')

Lab ID: HN2515341-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Chlorinated Herbicides by GC/ECD									
2,4,5-T	EPA 8151A	<3.02	U	µg/kg	3.02	16.4	1	10/24/25 16:33	10/23/25 07:55
2,4,5-TP (Silvex)	EPA 8151A	<5.39	U	µg/kg	5.39	16.4	1	10/24/25 16:33	10/23/25 07:55
2,4-D	EPA 8151A	<8.77	U	µg/kg	8.77	32.9	1	10/24/25 16:33	10/23/25 07:55
Surr: DCAA	EPA 8151A	144	S	%REC		10-116	1	10/24/25 16:33	10/23/25 07:55
General Chemistry Parameters									
Percent Moisture	EPA 3550C	26.3		%	0.1	0.1	1	10/15/25 19:27	NA
Chloride	EPA 9056A	53.9		mg/kg	4.21	13.6	1	10/19/25 22:46	10/19/25 13:54
Metals									
Arsenic	EPA 6010D	7.61		mg/kg	0.270	0.414	1	10/22/25 15:19	10/21/25 10:23
Barium	EPA 6010D	68.0		mg/kg	0.513	0.828	1	10/22/25 15:19	10/21/25 10:23
Cadmium	EPA 6010D	0.22	J	mg/kg	0.0679	0.828	1	10/22/25 15:19	10/21/25 10:23
Chromium	EPA 6010D	16.0		mg/kg	0.248	0.414	1	10/22/25 15:19	10/21/25 10:23
Copper	EPA 6010D	21.1		mg/kg	0.612	0.828	1	10/22/25 15:19	10/21/25 10:23
Lead	EPA 6010D	19.6		mg/kg	0.331	0.414	1	10/22/25 15:19	10/21/25 10:23
Selenium	EPA 6010D	<0.232	U	mg/kg	0.232	0.828	1	10/22/25 15:19	10/21/25 10:23
Silver	EPA 6010D	<0.199	U	mg/kg	0.199	0.414	1	10/22/25 15:19	10/21/25 10:23
Zinc	EPA 6010D	64.8		mg/kg	0.794	0.828	1	10/22/25 15:19	10/21/25 10:23
Mercury	EPA 7471B	0.0415		mg/kg	0.0161	0.0237	1	10/20/25 17:48	10/20/25 10:44
Organochlorine Pesticides by GC/ECD									
4,4'-DDD	EPA 8081B	<19.1	U	µg/kg	19.1	29.9	1	10/20/25 21:19	10/17/25 11:28
4,4'-DDE	EPA 8081B	82.0		µg/kg	19.7	29.9	1	10/20/25 21:19	10/17/25 11:28
4,4'-DDT	EPA 8081B	27.4	J	µg/kg	19.9	29.9	1	10/20/25 21:19	10/17/25 11:28
Aldrin	EPA 8081B	<19.5	U	µg/kg	19.5	29.9	1	10/20/25 21:19	10/17/25 11:28
alpha-BHC	EPA 8081B	<19.7	U	µg/kg	19.7	29.9	1	10/20/25 21:19	10/17/25 11:28
beta-BHC	EPA 8081B	<19.7	U	µg/kg	19.7	29.9	1	10/20/25 21:19	10/17/25 11:28
Chlordane, Technical	EPA 8081B	<29.7	U	µg/kg	29.7	74.8	1	10/20/25 21:19	10/17/25 11:28
cis-Chlordane	EPA 8081B	<20.0	U	µg/kg	20.0	29.9	1	10/20/25 21:19	10/17/25 11:28
delta-BHC	EPA 8081B	<19.6	U	µg/kg	19.6	29.9	1	10/20/25 21:19	10/17/25 11:28
Dieldrin	EPA 8081B	<20.9	U	µg/kg	20.9	29.9	1	10/20/25 21:19	10/17/25 11:28

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')	Lab ID: HN2515341-003
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Endosulfan I	EPA 8081B	<20.1	U	µg/kg	20.1	29.9	1	10/20/25 21:19	10/17/25 11:28
Endosulfan II	EPA 8081B	<19.8	U	µg/kg	19.8	29.9	1	10/20/25 21:19	10/17/25 11:28
Endosulfan sulfate	EPA 8081B	<18.4	U	µg/kg	18.4	29.9	1	10/20/25 21:19	10/17/25 11:28
Endrin	EPA 8081B	<24.2	U	µg/kg	24.2	29.9	1	10/20/25 21:19	10/17/25 11:28
Endrin aldehyde	EPA 8081B	<19.0	U	µg/kg	19.0	29.9	1	10/20/25 21:19	10/17/25 11:28
Endrin ketone	EPA 8081B	<18.2	U	µg/kg	18.2	29.9	1	10/20/25 21:19	10/17/25 11:28
gamma-BHC (Lindane)	EPA 8081B	<19.6	U	µg/kg	19.6	29.9	1	10/20/25 21:19	10/17/25 11:28
Heptachlor	EPA 8081B	<19.3	U	µg/kg	19.3	29.9	1	10/20/25 21:19	10/17/25 11:28
Heptachlor epoxide	EPA 8081B	<19.8	U	µg/kg	19.8	29.9	1	10/20/25 21:19	10/17/25 11:28
Methoxychlor	EPA 8081B	<20.0	U	µg/kg	20.0	29.9	1	10/20/25 21:19	10/17/25 11:28
Toxaphene	EPA 8081B	<32.3	U	µg/kg	32.3	180	1	10/20/25 21:19	10/17/25 11:28
trans-Chlordane	EPA 8081B	<19.9	U	µg/kg	19.9	29.9	1	10/20/25 21:19	10/17/25 11:28
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8081B</i>	120		%REC		53-151	1	10/20/25 21:19	10/17/25 11:28
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8081B</i>	93.0		%REC		67-127	1	10/20/25 21:19	10/17/25 11:28

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	EPA 8082A	<76.3	U	µg/kg	76.3	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1221	EPA 8082A	<76.3	U	µg/kg	76.3	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1232	EPA 8082A	<76.3	U	µg/kg	76.3	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1242	EPA 8082A	<76.3	U	µg/kg	76.3	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1248	EPA 8082A	<76.3	U	µg/kg	76.3	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1254	EPA 8082A	<62.2	U	µg/kg	62.2	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1260	EPA 8082A	<62.2	U	µg/kg	62.2	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1262	EPA 8082A	<62.2	U	µg/kg	62.2	223	1	10/18/25 12:01	10/17/25 13:38
Aroclor 1268	EPA 8082A	<62.2	U	µg/kg	62.2	223	1	10/18/25 12:01	10/17/25 13:38
Total PCB	EPA 8082A	<62.2	U	µg/kg	62.2	223	1	10/18/25 12:01	10/17/25 13:38
<i>Surr: Decachlorobiphenyl</i>	<i>EPA 8082A</i>	110		%REC		54-146	1	10/18/25 12:01	10/17/25 13:38
<i>Surr: Tetrachloro-m-xylene</i>	<i>EPA 8082A</i>	104		%REC		58-140	1	10/18/25 12:01	10/17/25 13:38

Semivolatile Organic Compounds by GC-MS

1,1'-Biphenyl (BZ-0)	EPA 8270E	<81.9	U	µg/kg	81.9	500	5	10/27/25 21:18	10/23/25 16:35
1,2,4,5-Tetrachlorobenzene	EPA 8270E	<116	U	µg/kg	116	5040	5	10/27/25 21:18	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')	Lab ID: HN2515341-003
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	<362	U	µg/kg	362	2520	5	10/27/25 21:18	10/23/25 16:35
1-Methylnaphthalene	EPA 8270E	<72.7	U	µg/kg	72.7	101	5	10/27/25 21:18	10/23/25 16:35
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl) ether	EPA 8270E	<118	U	µg/kg	118	500	5	10/27/25 21:18	10/23/25 16:35
2,3,4,6-Tetrachlorophenol	EPA 8270E	<370	U	µg/kg	370	1010	5	10/27/25 21:18	10/23/25 16:35
2,4,5-Trichlorophenol	EPA 8270E	<299	U	µg/kg	299	500	5	10/27/25 21:18	10/23/25 16:35
2,4,6-Trichlorophenol	EPA 8270E	<134	U	µg/kg	134	500	5	10/27/25 21:18	10/23/25 16:35
2,4-Dichlorophenol	EPA 8270E	<272	U	µg/kg	272	500	5	10/27/25 21:18	10/23/25 16:35
2,4-Dimethylphenol	EPA 8270E	<260	U	µg/kg	260	500	5	10/27/25 21:18	10/23/25 16:35
2,4-Dinitrophenol	EPA 8270E	<3690	U	µg/kg	3690	5040	5	10/27/25 21:18	10/23/25 16:35
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	<328	U	µg/kg	328	500	5	10/27/25 21:18	10/23/25 16:35
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	<129	U	µg/kg	129	500	5	10/27/25 21:18	10/23/25 16:35
2-Chloronaphthalene	EPA 8270E	<70.6	U	µg/kg	70.6	101	5	10/27/25 21:18	10/23/25 16:35
2-Chlorophenol	EPA 8270E	<330	U	µg/kg	330	500	5	10/27/25 21:18	10/23/25 16:35
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	<422	U	µg/kg	422	500	5	10/27/25 21:18	10/23/25 16:35
2-Methylnaphthalene	EPA 8270E	<51.4	U	µg/kg	51.4	101	5	10/27/25 21:18	10/23/25 16:35
2-Methylphenol (o-Cresol)	EPA 8270E	<136	U	µg/kg	136	500	5	10/27/25 21:18	10/23/25 16:35
2-Nitroaniline	EPA 8270E	<280	U	µg/kg	280	500	5	10/27/25 21:18	10/23/25 16:35
2-Nitrophenol	EPA 8270E	<144	U	µg/kg	144	500	5	10/27/25 21:18	10/23/25 16:35
3&4-Methylphenol	EPA 8270E	<275	U	µg/kg	275	500	5	10/27/25 21:18	10/23/25 16:35
3,3'-Dichlorobenzidine	EPA 8270E	<236	U	µg/kg	236	2520	5	10/27/25 21:18	10/23/25 16:35
3-Nitroaniline	EPA 8270E	<293	U	µg/kg	293	500	5	10/27/25 21:18	10/23/25 16:35
4-Bromophenyl phenyl ether (BDE-3)	EPA 8270E	<277	U	µg/kg	277	500	5	10/27/25 21:18	10/23/25 16:35
4-Chloro-3-methylphenol	EPA 8270E	<144	U	µg/kg	144	500	5	10/27/25 21:18	10/23/25 16:35
4-Chloroaniline	EPA 8270E	<257	U	µg/kg	257	1010	5	10/27/25 21:18	10/23/25 16:35
4-Chlorophenyl phenylether	EPA 8270E	<140	U	µg/kg	140	500	5	10/27/25 21:18	10/23/25 16:35
4-Nitroaniline	EPA 8270E	<783	U	µg/kg	783	2520	5	10/27/25 21:18	10/23/25 16:35
4-Nitrophenol	EPA 8270E	<1180	U	µg/kg	1180	5040	5	10/27/25 21:18	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')	Lab ID: HN2515341-003
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Acenaphthene	EPA 8270E	<73.0	U	µg/kg	73.0	101	5	10/27/25 21:18	10/23/25 16:35
Acenaphthylene	EPA 8270E	<87.6	U	µg/kg	87.6	101	5	10/27/25 21:18	10/23/25 16:35
Acetophenone	EPA 8270E	<79.1	U	µg/kg	79.1	500	5	10/27/25 21:18	10/23/25 16:35
Anthracene	EPA 8270E	<71.2	U	µg/kg	71.2	101	5	10/27/25 21:18	10/23/25 16:35
Atrazine	EPA 8270E	<296	SU	µg/kg	296	500	5	10/27/25 21:18	10/23/25 16:35
Benzaldehyde	EPA 8270E	<776	U	µg/kg	776	1010	5	10/27/25 21:18	10/23/25 16:35
Benzo(a)anthracene	EPA 8270E	394		µg/kg	87.2	101	5	10/27/25 21:18	10/23/25 16:35
Benzo(a)pyrene	EPA 8270E	485		µg/kg	62.0	101	5	10/27/25 21:18	10/23/25 16:35
Benzo(b)fluoranthene	EPA 8270E	555		µg/kg	75.3	101	5	10/27/25 21:18	10/23/25 16:35
Benzo(g,h,i)perylene	EPA 8270E	545		µg/kg	77.4	101	5	10/27/25 21:18	10/23/25 16:35
Benzo(k)fluoranthene	EPA 8270E	212		µg/kg	76.5	101	5	10/27/25 21:18	10/23/25 16:35
bis(2-Chloroethoxy) methane	EPA 8270E	<320	U	µg/kg	320	500	5	10/27/25 21:18	10/23/25 16:35
bis(2-Chloroethyl) ether	EPA 8270E	<143	U	µg/kg	143	500	5	10/27/25 21:18	10/23/25 16:35
Butyl benzyl phthalate	EPA 8270E	<632	U	µg/kg	632	1010	5	10/27/25 21:18	10/23/25 16:35
Caprolactam	EPA 8270E	<456	U	µg/kg	456	500	5	10/27/25 21:18	10/23/25 16:35
Carbazole	EPA 8270E	<149	U	µg/kg	149	500	5	10/27/25 21:18	10/23/25 16:35
Chrysene	EPA 8270E	212		µg/kg	81.6	101	5	10/27/25 21:18	10/23/25 16:35
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	EPA 8270E	<418	U	µg/kg	418	500	5	10/27/25 21:18	10/23/25 16:35
Dibenz(a,h) anthracene	EPA 8270E	172	J	µg/kg	54.5	500	5	10/27/25 21:18	10/23/25 16:35
Dibenzofuran	EPA 8270E	<74.2	U	µg/kg	74.2	500	5	10/27/25 21:18	10/23/25 16:35
Diethyl phthalate	EPA 8270E	<172	U	µg/kg	172	500	5	10/27/25 21:18	10/23/25 16:35
Dimethyl phthalate	EPA 8270E	<98.5	U	µg/kg	98.5	500	5	10/27/25 21:18	10/23/25 16:35
Fluoranthene	EPA 8270E	576		µg/kg	48.5	101	5	10/27/25 21:18	10/23/25 16:35
Fluorene	EPA 8270E	<73.3	U	µg/kg	73.3	101	5	10/27/25 21:18	10/23/25 16:35
Hexachlorobenzene	EPA 8270E	<147	U	µg/kg	147	500	5	10/27/25 21:18	10/23/25 16:35
Hexachlorobutadiene	EPA 8270E	<119	U	µg/kg	119	500	5	10/27/25 21:18	10/23/25 16:35
Hexachlorocyclopentadiene	EPA 8270E	<479	U	µg/kg	479	500	5	10/27/25 21:18	10/23/25 16:35
Hexachloroethane	EPA 8270E	<209	U	µg/kg	209	500	5	10/27/25 21:18	10/23/25 16:35
Indeno(1,2,3-cd) pyrene	EPA 8270E	555		µg/kg	70.3	101	5	10/27/25 21:18	10/23/25 16:35
Isophorone	EPA 8270E	<98.6	U	µg/kg	98.6	2520	5	10/27/25 21:18	10/23/25 16:35

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6') **Lab ID:** HN2515341-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Methylphenol, Total	EPA 8270E	<136	U	µg/kg	136	500	5	10/27/25 21:18	10/23/25 16:35
Naphthalene	EPA 8270E	<64.5	U	µg/kg	64.5	101	5	10/27/25 21:18	10/23/25 16:35
Nitrobenzene	EPA 8270E	<170	U	µg/kg	170	2520	5	10/27/25 21:18	10/23/25 16:35
n-Nitrosodi-n-propylamine	EPA 8270E	<83.3	U	µg/kg	83.3	500	5	10/27/25 21:18	10/23/25 16:35
N-Nitrosodiphenylamine	EPA 8270E	<292	U	µg/kg	292	500	5	10/27/25 21:18	10/23/25 16:35
Pentachlorophenol	EPA 8270E	<401	U	µg/kg	401	500	5	10/27/25 21:18	10/23/25 16:35
Phenanthrene	EPA 8270E	202		µg/kg	47.0	101	5	10/27/25 21:18	10/23/25 16:35
Phenol	EPA 8270E	<254	U	µg/kg	254	500	5	10/27/25 21:18	10/23/25 16:35
Pyrene	EPA 8270E	545		µg/kg	50.4	101	5	10/27/25 21:18	10/23/25 16:35
Pyridine	EPA 8270E	<994	U	µg/kg	994	2520	5	10/27/25 21:18	10/23/25 16:35

Volatile Organic Compounds by GC-MS

1,1,1-Trichloroethane	EPA 8260D	<21.6	U	µg/kg	21.6	47.6	1	10/21/25 00:09	10/16/25 12:58
1,1,2,2-Tetrachloroethane	EPA 8260D	<21.0	U	µg/kg	21.0	47.6	1	10/21/25 00:09	10/16/25 12:58
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	<30.2	U	µg/kg	30.2	47.6	1	10/21/25 00:09	10/16/25 12:58
1,1,2-Trichloroethane	EPA 8260D	<20.2	U	µg/kg	20.2	47.6	1	10/21/25 00:09	10/16/25 12:58
1,1-Dichloroethane	EPA 8260D	<17.4	U	µg/kg	17.4	47.6	1	10/21/25 00:09	10/16/25 12:58
1,1-Dichloroethylene	EPA 8260D	<15.4	U	µg/kg	15.4	47.6	1	10/21/25 00:09	10/16/25 12:58
1,2,3-Trichlorobenzene	EPA 8260D	<57.2	U	µg/kg	57.2	159	1	10/21/25 00:09	10/16/25 12:58
1,2,3-Trichloropropane	EPA 8260D	<19.9	U	µg/kg	19.9	47.6	1	10/21/25 00:09	10/16/25 12:58
1,2,4-Trichlorobenzene	EPA 8260D	<54.0	U	µg/kg	54.0	159	1	10/21/25 00:09	10/16/25 12:58
1,2,4-Trimethylbenzene	EPA 8260D	<34.9	U	µg/kg	34.9	47.6	1	10/21/25 00:09	10/16/25 12:58
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	<43.9	U	µg/kg	43.9	159	1	10/21/25 00:09	10/16/25 12:58
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	<28.0	U	µg/kg	28.0	47.6	1	10/21/25 00:09	10/16/25 12:58
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	<18.1	U	µg/kg	18.1	47.6	1	10/21/25 00:09	10/16/25 12:58
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	<28.0	U	µg/kg	28.0	159	1	10/21/25 00:09	10/16/25 12:58
1,2-Dichloropropane	EPA 8260D	<35.1	U	µg/kg	35.1	47.6	1	10/21/25 00:09	10/16/25 12:58
1,3,5-Trimethylbenzene	EPA 8260D	<33.6	U	µg/kg	33.6	159	1	10/21/25 00:09	10/16/25 12:58
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	<32.9	U	µg/kg	32.9	47.6	1	10/21/25 00:09	10/16/25 12:58
1,3-Dichloropropene	EPA 8260D	<26.6	U	µg/kg	26.6	95.3	1	10/21/25 00:09	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')	Lab ID: HN2515341-003
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	<38.7	U	µg/kg	38.7	47.6	1	10/21/25 00:09	10/16/25 12:58
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	<113	U	µg/kg	113	318	1	10/21/25 00:09	10/16/25 12:58
2-Hexanone	EPA 8260D	<23.6	U	µg/kg	23.6	47.6	1	10/21/25 00:09	10/16/25 12:58
4-Methyl-2-pentanone (MIBK)	EPA 8260D	<44.4	U	µg/kg	44.4	47.6	1	10/21/25 00:09	10/16/25 12:58
Acetone	EPA 8260D	<141	U	µg/kg	141	159	1	10/21/25 00:09	10/16/25 12:58
Benzene	EPA 8260D	<23.1	U	µg/kg	23.1	47.6	1	10/21/25 00:09	10/16/25 12:58
Bromochloromethane	EPA 8260D	<24.2	U	µg/kg	24.2	47.6	1	10/21/25 00:09	10/16/25 12:58
Bromodichloromethane	EPA 8260D	<26.7	U	µg/kg	26.7	47.6	1	10/21/25 00:09	10/16/25 12:58
Bromoform	EPA 8260D	<20.1	U	µg/kg	20.1	47.6	1	10/21/25 00:09	10/16/25 12:58
Carbon disulfide	EPA 8260D	<24.7	U	µg/kg	24.7	47.6	1	10/21/25 00:09	10/16/25 12:58
Carbon tetrachloride	EPA 8260D	<18.6	U	µg/kg	18.6	47.6	1	10/21/25 00:09	10/16/25 12:58
Chlorobenzene	EPA 8260D	<15.8	U	µg/kg	15.8	47.6	1	10/21/25 00:09	10/16/25 12:58
Chlorodibromomethane	EPA 8260D	<26.8	U	µg/kg	26.8	47.6	1	10/21/25 00:09	10/16/25 12:58
Chloroethane (Ethyl chloride)	EPA 8260D	<133	U	µg/kg	133	159	1	10/21/25 00:09	10/16/25 12:58
Chloroform	EPA 8260D	<17.4	U	µg/kg	17.4	47.6	1	10/21/25 00:09	10/16/25 12:58
cis-1,2-Dichloroethylene	EPA 8260D	<30.6	U	µg/kg	30.6	47.6	1	10/21/25 00:09	10/16/25 12:58
cis-1,3-Dichloropropene	EPA 8260D	<35.9	U	µg/kg	35.9	47.6	1	10/21/25 00:09	10/16/25 12:58
Cyclohexane	EPA 8260D	<36.5	U	µg/kg	36.5	159	1	10/21/25 00:09	10/16/25 12:58
Dichlorodifluoromethane (Freon-12)	EPA 8260D	<57.6	U	µg/kg	57.6	159	1	10/21/25 00:09	10/16/25 12:58
Ethylbenzene	EPA 8260D	<33.8	U	µg/kg	33.8	47.6	1	10/21/25 00:09	10/16/25 12:58
Isopropylbenzene	EPA 8260D	<30.1	U	µg/kg	30.1	47.6	1	10/21/25 00:09	10/16/25 12:58
m+p-Xylene	EPA 8260D	<63.5	U	µg/kg	63.5	95.3	1	10/21/25 00:09	10/16/25 12:58
Methyl bromide (Bromomethane)	EPA 8260D	<91.1	U	µg/kg	91.1	159	1	10/21/25 00:09	10/16/25 12:58
Methyl chloride (Chloromethane)	EPA 8260D	<130	U	µg/kg	130	159	1	10/21/25 00:09	10/16/25 12:58
Methyl tert-butyl ether (MTBE)	EPA 8260D	<34.7	U	µg/kg	34.7	47.6	1	10/21/25 00:09	10/16/25 12:58
Methylcyclohexane	EPA 8260D	<18.2	U	µg/kg	18.2	47.6	1	10/21/25 00:09	10/16/25 12:58
Methylene chloride (Dichloromethane)	EPA 8260D	<126	U	µg/kg	126	397	1	10/21/25 00:09	10/16/25 12:58
o-Xylene	EPA 8260D	<18.4	U	µg/kg	18.4	47.6	1	10/21/25 00:09	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:00
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade SB-3 (5'-6')

Lab ID: HN2515341-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Styrene	EPA 8260D	<18.9	U	µg/kg	18.9	47.6	1	10/21/25 00:09	10/16/25 12:58
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	<28.7	U	µg/kg	28.7	47.6	1	10/21/25 00:09	10/16/25 12:58
Toluene	EPA 8260D	<39.3	U	µg/kg	39.3	47.6	1	10/21/25 00:09	10/16/25 12:58
Total Xylene	EPA 8260D	<18.4	U	µg/kg	18.4	143	1	10/21/25 00:09	10/16/25 12:58
trans-1,2-Dichloroethylene	EPA 8260D	<39.3	U	µg/kg	39.3	47.6	1	10/21/25 00:09	10/16/25 12:58
Trichloroethene (Trichloroethylene)	EPA 8260D	<21.4	U	µg/kg	21.4	47.6	1	10/21/25 00:09	10/16/25 12:58
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	<24.4	U	µg/kg	24.4	47.6	1	10/21/25 00:09	10/16/25 12:58
Vinyl chloride (Chloroethene)	EPA 8260D	<31.7	U	µg/kg	31.7	47.6	1	10/21/25 00:09	10/16/25 12:58

Analytical Report



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

Work Order: HN2515341
Date Collected: 10/14/25 14:05
Date Received: 10/15/25 08:00

CLIENT ID: 9615 Cascade (0'-6') COMP

Lab ID: HN2515341-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
TCLP Chlorinated Herbicides by GC/ECD									
2,4,5-TP (Silvex)	EPA 8151A	<0.393	HU	µg/L	0.393	2.05	1	11/10/25 16:01	11/07/25 09:30
2,4-D	EPA 8151A	<0.673	HU	µg/L	0.673	2.05	1	11/10/25 16:01	11/07/25 09:30
Surr: DCAA	EPA 8151A	101	H	%REC		10-147	1	11/10/25 16:01	11/07/25 09:30
TCLP Organochlorine Pesticides by GC/ECD									
Chlordane, Technical	EPA 8081B	<0.0340	HU	µg/L	0.0340	0.500	1	11/07/25 04:28	11/06/25 13:53
Endrin	EPA 8081B	<0.00851	HU	µg/L	0.00851	0.0100	1	11/07/25 04:28	11/06/25 13:53
gamma-BHC (Lindane)	EPA 8081B	<0.00832	HU	µg/L	0.00832	0.0100	1	11/07/25 04:28	11/06/25 13:53
Heptachlor	EPA 8081B	<0.00760	HU	µg/L	0.00760	0.0100	1	11/07/25 04:28	11/06/25 13:53
Heptachlor epoxide	EPA 8081B	<0.00793	HU	µg/L	0.00793	0.0100	1	11/07/25 04:28	11/06/25 13:53
Methoxychlor	EPA 8081B	<0.00989	HU	µg/L	0.00989	0.0100	1	11/07/25 04:28	11/06/25 13:53
Toxaphene	EPA 8081B	<0.110	HU	µg/L	0.110	2.00	1	11/07/25 04:28	11/06/25 13:53
Surr: Decachlorobiphenyl	EPA 8081B	121	H	%REC		42-148	1	11/07/25 04:28	11/06/25 13:53
Surr: Tetrachloro-m-xylene	EPA 8081B	97.8	H	%REC		57-141	1	11/07/25 04:28	11/06/25 13:53



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2293135

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3623707

Chlorinated Herbicides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2293135-001
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 10:44
Prep Date: 10/23/25 07:56

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	<0.920	µg/kg	0.920	5.00							U
2,4,5-TP (Silvex)	<1.64	µg/kg	1.64	5.00							U
2,4-D	<2.67	µg/kg	2.67	10.0							U
Surr: DCAA	266	µg/kg			50		532	10-116			S

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2293135-002
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 10:59
Prep Date: 10/23/25 07:56

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	31.0	µg/kg	0.920	5.00	50		62.0	10-119			
2,4,5-TP (Silvex)	33.0	µg/kg	1.64	5.00	50		66.0	10-101			
2,4-D	36.0	µg/kg	2.67	10.0	50		72.0	10-128			
Surr: DCAA	99.0	µg/kg			50		198	10-116			S

MS	CLIENT ID: Batch QC	Lab ID: QC-2293135-005
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 11:25
Prep Date: 10/23/25 07:56

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	64.0	µg/kg	1.96	11.4	106.61	<1.96	60.0	10-119			
2,4,5-TP (Silvex)	61.8	µg/kg	3.50	11.4	106.61	<3.50	58.0	10-101			
2,4-D	104	µg/kg	5.69	22.8	106.61	<5.69	98.0	10-128			
Surr: DCAA	203	µg/kg			106.61		190	10-116			S

MSD	CLIENT ID: Batch QC	Lab ID: QC-2293135-006
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Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 10/24/25 11:38
Prep Date: 10/23/25 07:56

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-T	62.3	µg/kg	1.98	11.5	107.41	<1.98	58.0	10-119	2.64	30	
2,4,5-TP (Silvex)	64.4	µg/kg	3.52	11.5	107.41	<3.52	60.0	10-101	4.14	30	
2,4-D	85.9	µg/kg	5.74	22.9	107.41	<5.74	80.0	10-128	19.5	30	
Surr: DCAA	90.2	µg/kg			107.41		84.0	10-116	76.7	30	R

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2277718

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3591101

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2277718-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/15/25 19:27
Prep Date: NA

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2277718-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/15/25 19:27
Prep Date: NA

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

DUP	CLIENT ID: Batch QC	Lab ID: QC-2277718-004
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 10/15/25 19:27
Prep Date: NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	18.8	%	0.1	0.1		19.4			2.98	10	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2277718

Work Order: HN2515341
Date Collected: 10/14/25 13:50
Date Received: 10/15/25 08:00
Run ID: 3595774

General Chemistry Parameters

DUP	CLIENT ID: Batch QC	Lab ID: QC-2277718-015
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Method: EPA 3550C**Dilution:** 1**Analysis Date:** 10/16/25 20:46**Prep Date:** NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	8.0	%	0.1	0.1		<0.1			15.4	10	R

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2285104

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3604290

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2285104-001
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/19/25 21:19
Prep Date: 10/19/25 13:55

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	<3.10	mg/kg	3.10	10.0							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2285104-002
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/19/25 21:28
Prep Date: 10/19/25 13:55

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	95.8	mg/kg	3.10	10.0	100		95.8	87-110			

MS	CLIENT ID: Batch QC	Lab ID: QC-2285104-004
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/19/25 21:48
Prep Date: 10/19/25 13:55

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	494	mg/kg	15.8	51.0	510.2	<15.8	94.3	87-110			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2285104-005
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 10/19/25 21:58
Prep Date: 10/19/25 13:55

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	494	mg/kg	15.8	51.0	510.2	<15.8	94.3	87-110	0.0898	15	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2283800

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3604481

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2283800-001
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/20/25 17:22
Prep Date: 10/20/25 10:45

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2283800-002
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/20/25 17:23
Prep Date: 10/20/25 10:45

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.173	mg/kg	0.0136	0.0200	0.1665		104	80-120			

MS	CLIENT ID: Batch QC	Lab ID: QC-2283800-004
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/20/25 17:27
Prep Date: 10/20/25 10:45

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.158	mg/kg	0.0136	0.0200	0.12629	<0.0136	116	75-125			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2283800-005
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 10/20/25 17:29
Prep Date: 10/20/25 10:45

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.147	mg/kg	0.0136	0.0200	0.13355	<0.0136	102	75-125	7.19	35	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288068

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3613920

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2288068-001
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Method: EPA 6010D **Dilution:** 1 **Analysis Date:** 10/22/25 14:29
Prep Date: 10/21/25 10:24

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2288068-002
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Method: EPA 6010D **Dilution:** 1 **Analysis Date:** 10/22/25 14:35
Prep Date: 10/21/25 10:24

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.83	mg/kg	0.163	0.250	5		96.7	80-120			
Barium	5.24	mg/kg	0.310	0.500	5		105	80-120			
Cadmium	4.92	mg/kg	0.0410	0.500	5		98.4	80-120			
Chromium	5.19	mg/kg	0.150	0.250	5		104	80-120			
Copper	5.06	mg/kg	0.370	0.500	5		101	80-120			
Lead	4.74	mg/kg	0.200	0.250	5		94.8	80-120			
Selenium	4.76	mg/kg	0.140	0.500	5		95.3	80-120			
Silver	5.03	mg/kg	0.120	0.250	5		101	80-120			
Zinc	5.13	mg/kg	0.480	0.500	5		103	80-120			

MS	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2288068-004
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Method: EPA 6010D **Dilution:** 1 **Analysis Date:** 10/22/25 14:52
Prep Date: 10/21/25 10:24

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	11.2	mg/kg	0.193	0.359	5.9242	7.54	83.7	75-125			
Barium	42.3	mg/kg	0.367	0.717	5	45.7	NC	75-125			O
Cadmium	5.46	mg/kg	0.0486	0.717	5.9242	0.16	89.9	75-125			
Chromium	17.0	mg/kg	0.178	0.359	5.9242	14.3	87.8	75-125			
Copper	20.9	mg/kg	0.438	0.717	5.9242	18.3	97.7	75-125			
Lead	18.2	mg/kg	0.237	0.359	5.9242	12.4	135	75-125			S
Selenium	4.39	mg/kg	0.166	0.717	5.9242	<0.166	80.3	75-125			
Silver	6.00	mg/kg	0.142	0.359	5.9242	<0.142	102	75-125			
Zinc	42.4	mg/kg	0.569	0.717	5	43.1	NC	75-125			O

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2288068

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3613920

MSD	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2288068-005
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Method: EPA 6010D

Dilution: 1

Analysis Date: 10/22/25 14:57

Prep Date: 10/21/25 10:24

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	11.1	mg/kg	0.186	0.345	5.7012	7.54	84.6	75-125	1.18	20	
Barium	56.7	mg/kg	0.353	0.690	5	45.7	NC	75-125	29.1	20	OR
Cadmium	4.98	mg/kg	0.0468	0.690	5.7012	0.16	85.0	75-125	9.14	20	
Chromium	20.7	mg/kg	0.171	0.345	5.7012	14.3	155	75-125	19.2	20	S
Copper	24.6	mg/kg	0.422	0.690	5.7012	18.3	166	75-125	16.1	20	S
Lead	17.1	mg/kg	0.228	0.345	5.7012	12.4	120	75-125	6.51	20	
Selenium	4.06	mg/kg	0.160	0.690	5.7012	<0.160	77.6	75-125	7.82	20	
Silver	5.58	mg/kg	0.137	0.345	5.7012	<0.137	98.6	75-125	7.18	20	
Zinc	46.2	mg/kg	0.547	0.690	5	43.1	NC	75-125	8.67	20	O

PDS	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2288068-006
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Method: EPA 6010D

Dilution: 1

Analysis Date: 10/22/25 15:03

Prep Date: 10/21/25 10:24

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	11.5	mg/kg	0.187	0.347	5.7405	7.54	92.1	75-125			
Barium	41.0	mg/kg	0.356	0.695	5	45.7	NC	75-125			O
Cadmium	5.57	mg/kg	0.0471	0.695	5.7405	0.16	94.8	75-125			
Chromium	17.5	mg/kg	0.172	0.347	5.7405	14.3	97.8	75-125			
Copper	21.2	mg/kg	0.425	0.695	5.7405	18.3	105	75-125			
Lead	14.8	mg/kg	0.230	0.347	5.7405	12.4	79.0	75-125			
Selenium	4.55	mg/kg	0.161	0.695	5.7405	<0.161	85.6	75-125			
Silver	6.07	mg/kg	0.138	0.347	5.7405	<0.138	106	75-125			
Zinc	40.2	mg/kg	0.551	0.695	5	43.1	NC	75-125			O

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2281829

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3605782

Organochlorine Pesticides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-2281829-001
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Method: EPA 8081B**Dilution:** 1**Analysis Date:** 10/17/25 23:33**Prep Date:** 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	<6.39	µg/kg	6.39	10.0							U
4,4'-DDE	<6.59	µg/kg	6.59	10.0							U
4,4'-DDT	<6.65	µg/kg	6.65	10.0							U
Aldrin	<6.50	µg/kg	6.50	10.0							U
alpha-BHC	<6.58	µg/kg	6.58	10.0							U
beta-BHC	<6.57	µg/kg	6.57	10.0							U
Chlordane, Technical	<9.92	µg/kg	9.92	25.0							U
cis-Chlordane	<6.68	µg/kg	6.68	10.0							U
delta-BHC	<6.55	µg/kg	6.55	10.0							U
Dieldrin	<6.99	µg/kg	6.99	10.0							U
Endosulfan I	<6.72	µg/kg	6.72	10.0							U
Endosulfan II	<6.62	µg/kg	6.62	10.0							U
Endosulfan sulfate	<6.15	µg/kg	6.15	10.0							U
Endrin	<8.09	µg/kg	8.09	10.0							U
Endrin aldehyde	<6.34	µg/kg	6.34	10.0							U
Endrin ketone	<6.08	µg/kg	6.08	10.0							U
gamma-BHC (Lindane)	<6.56	µg/kg	6.56	10.0							U
Heptachlor	<6.45	µg/kg	6.45	10.0							U
Heptachlor epoxide	<6.62	µg/kg	6.62	10.0							U
Methoxychlor	<6.69	µg/kg	6.69	10.0							U
Toxaphene	<10.8	µg/kg	10.8	60.0							U
trans-Chlordane	<6.64	µg/kg	6.64	10.0							U
Surr: Decachlorobiphenyl	44.9	µg/kg			33.33		135	53-151			
Surr: Tetrachloro-m-xylene	35.7	µg/kg			33.33		107	67-127			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2281829-002
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Method: EPA 8081B**Dilution:** 1**Analysis Date:** 10/17/25 23:45**Prep Date:** 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	28.6	µg/kg	6.39	10.0	33.33		85.8	55-141			
4,4'-DDE	31.4	µg/kg	6.59	10.0	33.33		94.0	55-143			
4,4'-DDT	30.3	µg/kg	6.65	10.0	33.33		90.8	50-144			
Aldrin	30.5	µg/kg	6.50	10.0	33.33		91.6	57-141			
alpha-BHC	28.9	µg/kg	6.58	10.0	33.33		86.6	58-144			
beta-BHC	28.3	µg/kg	6.57	10.0	33.33		85.0	55-147			
cis-Chlordane	30.0	µg/kg	6.68	10.0	33.33		90.0	58-142			
delta-BHC	24.4	µg/kg	6.55	10.0	33.33		73.1	59-142			
Dieldrin	31.1	µg/kg	6.99	10.0	33.33		93.3	59-142			
Endosulfan I	29.1	µg/kg	6.72	10.0	33.33		87.2	57-145			
Endosulfan II	29.5	µg/kg	6.62	10.0	33.33		88.4	58-138			
Endosulfan sulfate	30.0	µg/kg	6.15	10.0	33.33		90.0	54-136			
Endrin	28.3	µg/kg	8.09	10.0	33.33		85.0	45-150			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2281829

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3605782

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2281829-002
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/17/25 23:45

Prep Date: 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin aldehyde	34.4	µg/kg	6.34	10.0	33.33		103	41-147			
Endrin ketone	29.8	µg/kg	6.08	10.0	33.33		89.2	54-146			
gamma-BHC (Lindane)	28.2	µg/kg	6.56	10.0	33.33		84.7	58-145			
Heptachlor	28.3	µg/kg	6.45	10.0	33.33		84.9	51-145			
Heptachlor epoxide	29.2	µg/kg	6.62	10.0	33.33		87.6	59-143			
Methoxychlor	30.2	µg/kg	6.69	10.0	33.33		90.7	43-144			
trans-Chlordane	29.6	µg/kg	6.64	10.0	33.33		88.8	56-145			
Surr: Decachlorobiphenyl	42.4	µg/kg			33.33		127	51-151			
Surr: Tetrachloro-m-xylene	31.5	µg/kg			33.33		94.4	67-127			

MS	CLIENT ID: Batch QC	Lab ID: QC-2281829-005
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/18/25 09:29

Prep Date: 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	90.7	µg/kg	15.6	26.2	81.293	<15.6	112	55-141			
4,4'-DDE	85.2	µg/kg	16.1	26.2	81.293	<16.1	105	55-143			
4,4'-DDT	88.0	µg/kg	16.2	26.2	81.293	<16.2	108	50-144			
Aldrin	87.4	µg/kg	15.8	26.2	81.293	<15.8	108	57-141			
alpha-BHC	84.1	µg/kg	16.0	26.2	81.293	<16.0	103	58-144			
beta-BHC	85.6	µg/kg	16.0	26.2	81.293	<16.0	105	55-147			
cis-Chlordane	89.3	µg/kg	16.3	26.2	81.293	<16.3	102	58-142			
delta-BHC	72.0	µg/kg	16.0	26.2	81.293	<16.0	88.6	59-142			
Dieldrin	94.3	µg/kg	17.0	26.2	81.293	<17.0	116	59-142			
Endosulfan I	88.2	µg/kg	16.4	26.2	81.293	<16.4	108	57-145			
Endosulfan II	90.4	µg/kg	16.2	26.2	81.293	<16.2	111	58-138			
Endosulfan sulfate	92.0	µg/kg	15.0	26.2	81.293	<15.0	113	54-135			
Endrin	86.2	µg/kg	19.7	26.2	81.293	<19.7	106	45-150			
Endrin aldehyde	110	µg/kg	15.4	26.2	81.293	<15.4	135	41-147			
Endrin ketone	92.8	µg/kg	14.8	26.2	81.293	<14.8	114	54-146			
gamma-BHC (Lindane)	85.8	µg/kg	16.0	26.2	81.293	<16.0	106	58-145			
Heptachlor	82.3	µg/kg	15.7	26.2	81.293	<15.7	101	51-145			
Heptachlor epoxide	90.0	µg/kg	16.1	26.2	81.293	<16.1	111	59-143			
Methoxychlor	89.9	µg/kg	16.3	26.2	81.293	<16.3	110	43-144			
trans-Chlordane	90.1	µg/kg	16.2	26.2	81.293	<16.2	106	56-145			
Surr: Decachlorobiphenyl	108	µg/kg			81.293		133	53-151			
Surr: Tetrachloro-m-xylene	76.1	µg/kg			81.293		93.6	67-127			

MSD	CLIENT ID: Batch QC	Lab ID: QC-2281829-006
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/18/25 09:41

Prep Date: 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDD	89.0	µg/kg	15.5	26.1	80.898	<15.5	110	55-141	1.98	20	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2281829

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3605782

MSD	CLIENT ID: Batch QC	Lab ID: QC-2281829-006
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Method: EPA 8081B

Dilution: 1

Analysis Date: 10/18/25 09:41

Prep Date: 10/17/25 11:29

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,4'-DDE	83.7	µg/kg	16.0	26.1	80.898	<16.0	103	55-143	1.78	20	
4,4'-DDT	84.0	µg/kg	16.1	26.1	80.898	<16.1	104	50-144	4.68	20	
Aldrin	85.7	µg/kg	15.8	26.1	80.898	<15.8	106	57-141	1.98	20	
alpha-BHC	81.6	µg/kg	16.0	26.1	80.898	<16.0	101	58-144	3.03	20	
beta-BHC	83.4	µg/kg	15.9	26.1	80.898	<15.9	103	55-147	2.64	20	
cis-Chlordane	87.4	µg/kg	16.2	26.1	80.898	<16.2	100	58-142	2.18	20	
delta-BHC	70.2	µg/kg	15.9	26.1	80.898	<15.9	86.8	59-142	2.54	20	
Dieldrin	91.7	µg/kg	17.0	26.1	80.898	<17.0	113	59-142	2.75	20	
Endosulfan I	86.4	µg/kg	16.3	26.1	80.898	<16.3	107	57-145	2.11	20	
Endosulfan II	88.7	µg/kg	16.1	26.1	80.898	<16.1	110	58-138	1.89	20	
Endosulfan sulfate	89.4	µg/kg	14.9	26.1	80.898	<14.9	110	54-135	2.90	20	
Endrin	84.1	µg/kg	19.6	26.1	80.898	<19.6	104	45-150	2.49	20	
Endrin aldehyde	107	µg/kg	15.4	26.1	80.898	<15.4	132	41-147	2.77	20	
Endrin ketone	90.6	µg/kg	14.8	26.1	80.898	<14.8	112	54-146	2.39	20	
gamma-BHC (Lindane)	83.0	µg/kg	15.9	26.1	80.898	<15.9	102	58-145	3.42	20	
Heptachlor	79.8	µg/kg	15.7	26.1	80.898	<15.7	98.6	51-145	3.09	20	
Heptachlor epoxide	87.9	µg/kg	16.0	26.1	80.898	<16.0	109	59-143	2.36	20	
Methoxychlor	84.7	µg/kg	16.2	26.1	80.898	<16.2	105	43-144	5.97	20	
trans-Chlordane	88.1	µg/kg	16.1	26.1	80.898	<16.1	104	56-145	2.17	20	
Surr: Decachlorobiphenyl	107	µg/kg			80.898		132	53-151	1.66	30	
Surr: Tetrachloro-m-xylene	74.5	µg/kg			80.898		92.0	67-127	2.16	30	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279037

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3605127

Polychlorinated Biphenyls (PCBs) by GC/ECD

MB		CLIENT ID: Method Blank					Lab ID: QC-2279037-001				
Method:		EPA 8082A		Dilution:		1		Analysis Date:		10/18/25 09:39	
								Prep Date:		10/17/25 13:39	
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	<22.9	µg/kg	22.9	66.7							U
Aroclor 1221	<22.9	µg/kg	22.9	66.7							U
Aroclor 1232	<22.9	µg/kg	22.9	66.7							U
Aroclor 1242	<22.9	µg/kg	22.9	66.7							U
Aroclor 1248	<22.9	µg/kg	22.9	66.7							U
Aroclor 1254	<18.6	µg/kg	18.6	66.7							U
Aroclor 1260	<18.6	µg/kg	18.6	66.7							U
Aroclor 1262	<18.6	µg/kg	18.6	66.7							U
Aroclor 1268	<18.6	µg/kg	18.6	66.7							U
Total PCB	<18.6	µg/kg	18.6	66.7							U
Surr: Decachlorobiphenyl	37.0	µg/kg			33.3		111	54-146			
Surr: Tetrachloro-m-xylene	38.5	µg/kg			33.3		116	58-140			

LCS		CLIENT ID: Laboratory Control Sample					Lab ID: QC-2279037-002				
Method:		EPA 8082A		Dilution:		1		Analysis Date:		10/18/25 09:51	
								Prep Date:		10/17/25 13:39	
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	907	µg/kg	22.9	66.7	833		109	71-135			
Aroclor 1260	928	µg/kg	18.6	66.7	833		111	67-135			
Surr: Decachlorobiphenyl	37.3	µg/kg			33.3		112	54-146			
Surr: Tetrachloro-m-xylene	36.0	µg/kg			33.3		108	58-140			

MS		CLIENT ID: Batch QC					Lab ID: QC-2279037-005				
Method:		EPA 8082A		Dilution:		1		Analysis Date:		10/18/25 10:03	
								Prep Date:		10/17/25 13:39	
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	1910	µg/kg	56.7	237	2067.8	<56.7	92.5	71-135			
Aroclor 1260	2000	µg/kg	46.2	237	2067.8	<46.2	96.6	67-135			
Surr: Decachlorobiphenyl	80.0	µg/kg			82.662		96.8	54-146			
Surr: Tetrachloro-m-xylene	72.3	µg/kg			82.662		87.5	58-140			

MSD		CLIENT ID: Batch QC					Lab ID: QC-2279037-006				
Method:		EPA 8082A		Dilution:		1		Analysis Date:		10/18/25 10:14	
								Prep Date:		10/17/25 13:39	
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Aroclor 1016	2150	µg/kg	56.7	237	2065.4	<56.7	104	71-135	11.6	20	
Aroclor 1260	2290	µg/kg	46.2	237	2065.4	<46.2	111	67-135	13.6	20	
Surr: Decachlorobiphenyl	96.3	µg/kg			82.565		117	54-146	18.5	30	
Surr: Tetrachloro-m-xylene	82.0	µg/kg			82.565		99.3	58-140	12.6	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279037

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3605127

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279010

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3608651

Semivolatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2279010-001
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Method: EPA 8270E**Dilution:** 1**Analysis Date:** 10/20/25 14:50**Prep Date:** 10/16/25 15:06

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

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279010

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3608651

MB	CLIENT ID: Method Blank	Lab ID: QC-2279010-001
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Method: EPA 8270E**Dilution:** 1**Analysis Date:** 10/20/25 14:50**Prep Date:** 10/16/25 15:06

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Butyl benzyl phthalate	<41.7	µg/kg	41.7	67.0							U
Caprolactam	<30.1	µg/kg	30.1	33.0							U
Carbazole	<9.82	µg/kg	9.82	33.0							U
Chrysene	<5.39	µg/kg	5.39	6.67							U
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	<27.6	µg/kg	27.6	33.0							U
Dibenz(a,h) anthracene	<3.60	µg/kg	3.60	33.0							U
Dibenzofuran	<4.90	µg/kg	4.90	33.0							U
Diethyl phthalate	<11.3	µg/kg	11.3	33.0							U
Dimethyl phthalate	<6.50	µg/kg	6.50	33.0							U
Fluoranthene	<3.20	µg/kg	3.20	6.67							U
Fluorene	<4.84	µg/kg	4.84	6.67							U
Hexachlorobenzene	<9.70	µg/kg	9.70	33.0							U
Hexachlorobutadiene	<7.85	µg/kg	7.85	33.0							U
Hexachlorocyclopentadiene	<31.6	µg/kg	31.6	33.0							U
Hexachloroethane	<13.8	µg/kg	13.8	33.0							U
Indeno(1,2,3-cd) pyrene	<4.64	µg/kg	4.64	6.67							U
Isophorone	<6.51	µg/kg	6.51	167							U
Methylphenol, Total	<9.01	µg/kg	9.01	67.0							U
Naphthalene	<4.26	µg/kg	4.26	6.67							U
Nitrobenzene	<11.2	µg/kg	11.2	167							U
n-Nitrosodi-n-propylamine	<5.50	µg/kg	5.50	33.0							U
N-Nitrosodiphenylamine	<19.3	µg/kg	19.3	33.0							U
Pentachlorophenol	<26.5	µg/kg	26.5	33.0							U
Phenanthrene	<3.10	µg/kg	3.10	6.67							U
Phenol	<16.7	µg/kg	16.7	33.0							U
Pyrene	<3.33	µg/kg	3.33	6.67							U
Pyridine	<65.6	µg/kg	65.6	167							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279010-002
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Method: EPA 8270E**Dilution:** 1**Analysis Date:** 10/20/25 15:15**Prep Date:** 10/16/25 15:06

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	790	µg/kg	5.41	33.0	1333		59.3	57-101			
1,2,4,5-Tetrachlorobenzene	793	µg/kg	7.69	333	1333		59.5	54-98			
1-Methylnaphthalene	799	µg/kg	4.80	6.67	1333		59.9	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	718	µg/kg	7.81	33.0	1333		53.9	50-101			
2,3,4,6-Tetrachlorophenol	767	µg/kg	24.4	67.0	1333		57.6	48-103			
2,4,5-Trichlorophenol	897	µg/kg	19.8	33.0	1333		67.3	54-98			
2,4,6-Trichlorophenol	851	µg/kg	8.87	33.0	1333		63.8	56-97			
2,4-Dichlorophenol	841	µg/kg	17.9	33.0	1333		63.1	54-99			
2,4-Dimethylphenol	814	µg/kg	17.1	33.0	1333		61.1	47-102			
2,4-Dinitrophenol	755	µg/kg	244	333	1333		56.6	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1080	µg/kg	21.6	33.0	1333		81.0	62-105			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279010

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3608651

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279010-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/20/25 15:15

Prep Date: 10/16/25 15:06

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,6-Dinitrotoluene (2,6-DNT)	1050	µg/kg	8.51	33.0	1333		78.5	62-103			
2-Chloronaphthalene	843	µg/kg	4.66	6.67	1333		63.3	57-101			
2-Chlorophenol	831	µg/kg	21.8	33.0	1333		62.3	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1060	µg/kg	27.8	33.0	1333		79.8	42-104			
2-Methylnaphthalene	779	µg/kg	3.39	6.67	1333		58.5	55-102			
2-Methylphenol (o-Cresol)	781	µg/kg	9.01	33.0	1333		58.6	54-103			
2-Nitroaniline	1130	µg/kg	18.5	33.0	1333		84.4	57-103			
2-Nitrophenol	1180	µg/kg	9.50	33.0	1333		88.3	52-102			
3&4-Methylphenol	806	µg/kg	18.2	33.0	1333		60.5	56-103			
3,3'-Dichlorobenzidine	727	µg/kg	15.6	167	1333		54.6	41-91			
3-Nitroaniline	861	µg/kg	19.4	33.0	1333		64.6	35-107			
4-Bromophenyl phenyl ether (BDE-3)	835	µg/kg	18.3	33.0	1333		62.7	63-104			S
4-Chloro-3-methylphenol	839	µg/kg	9.50	33.0	1333		63.0	57-103			
4-Chloroaniline	734	µg/kg	16.9	67.0	1333		55.1	32-99			
4-Chlorophenyl phenylether	851	µg/kg	9.21	33.0	1333		63.8	62-100			
4-Nitroaniline	606	µg/kg	51.7	167	1333		45.5	19-124			
4-Nitrophenol	926	µg/kg	78.1	333	1333		69.5	44-106			
Acenaphthene	851	µg/kg	4.82	6.67	1333		63.9	60-101			
Acenaphthylene	854	µg/kg	5.78	6.67	1333		64.1	59-101			
Acetophenone	771	µg/kg	5.22	33.0	1333		57.9	54-102			
Anthracene	817	µg/kg	4.70	6.67	1333		61.3	63-96			S
Atrazine	969	µg/kg	19.5	33.0	1333		72.7	60-110			
Benzaldehyde	346	µg/kg	51.2	67.0	1333		26.0	10-143			
Benzo(a)anthracene	834	µg/kg	5.76	6.67	1333		62.6	66-102			S
Benzo(a)pyrene	873	µg/kg	4.09	6.67	1333		65.5	66-105			S
Benzo(b)fluoranthene	848	µg/kg	4.97	6.67	1333		63.6	67-105			S
Benzo(g,h,i)perylene	897	µg/kg	5.11	6.67	1333		67.3	59-110			
Benzo(k)fluoranthene	818	µg/kg	5.05	6.67	1333		61.4	68-106			S
bis(2-Chloroethoxy)methane	718	µg/kg	21.1	33.0	1333		53.9	54-102			S
bis(2-Chloroethyl) ether	749	µg/kg	9.44	33.0	1333		56.2	51-101			
Butyl benzyl phthalate	899	µg/kg	41.7	67.0	1333		67.4	59-107			
Caprolactam	828	µg/kg	30.1	33.0	1333		62.1	49-103			
Carbazole	815	µg/kg	9.82	33.0	1333		61.2	63-103			S
Chrysene	842	µg/kg	5.39	6.67	1333		63.2	66-105			S
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	895	µg/kg	27.6	33.0	1333		67.1	63-101			
Dibenz(a,h) anthracene	893	µg/kg	3.60	33.0	1333		67.0	61-109			
Dibenzofuran	869	µg/kg	4.90	33.0	1333		65.2	61-101			
Diethyl phthalate	854	µg/kg	11.3	33.0	1333		64.1	63-105			
Dimethyl phthalate	868	µg/kg	6.50	33.0	1333		65.1	64-104			
Fluoranthene	825	µg/kg	3.20	6.67	1333		61.9	66-105			S
Fluorene	855	µg/kg	4.84	6.67	1333		64.2	62-101			
Hexachlorobenzene	793	µg/kg	9.70	33.0	1333		59.5	61-104			S
Hexachlorobutadiene	827	µg/kg	7.85	33.0	1333		62.0	52-99			
Hexachlorocyclopentadiene	850	µg/kg	31.6	33.0	1333		63.8	39-106			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279010

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3608651

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279010-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/20/25 15:15

Prep Date: 10/16/25 15:06

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Hexachloroethane	789	µg/kg	13.8	33.0	1333		59.2	59-99			
Indeno(1,2,3-cd) pyrene	978	µg/kg	4.64	6.67	1333		73.4	57-114			
Isophorone	783	µg/kg	6.51	167	1333		58.8	55-101			
Methylphenol, Total	1590	µg/kg	9.01	67.0	2667		59.5	54-103			
Naphthalene	784	µg/kg	4.26	6.67	1333		58.8	54-99			
Nitrobenzene	943	µg/kg	11.2	167	1333		70.7	53-100			
n-Nitrosodi-n-propylamine	755	µg/kg	5.50	33.0	1333		56.6	52-104			
N-Nitrosodiphenylamine	804	µg/kg	19.3	33.0	1333		60.3	61-104			S
Pentachlorophenol	709	µg/kg	26.5	33.0	1333		53.2	35-100			
Phenanthrene	831	µg/kg	3.10	6.67	1333		62.3	64-101			S
Phenol	807	µg/kg	16.7	33.0	1333		60.5	51-107			
Pyrene	834	µg/kg	3.33	6.67	1333		62.6	62-114			
Pyridine	743	µg/kg	65.6	167	1333		55.7	40-84			

The following samples were analyzed in this batch:



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

Semivolatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2291398-001
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 13:57

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	<5.41	µg/kg	5.41	33.0							U
1,2,4,5-Tetrachlorobenzene	<7.69	µg/kg	7.69	333							U
1,4-Dioxane (1,4- Diethyleneoxide)	<23.9	µg/kg	23.9	167							U
1-Methylnaphthalene	<4.80	µg/kg	4.80	6.67							U
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	<7.81	µg/kg	7.81	33.0							U
2,3,4,6-Tetrachlorophenol	<24.4	µg/kg	24.4	67.0							U
2,4,5-Trichlorophenol	<19.8	µg/kg	19.8	33.0							U
2,4,6-Trichlorophenol	<8.87	µg/kg	8.87	33.0							U
2,4-Dichlorophenol	<17.9	µg/kg	17.9	33.0							U
2,4-Dimethylphenol	<17.1	µg/kg	17.1	33.0							U
2,4-Dinitrophenol	<244	µg/kg	244	333							U
2,4-Dinitrotoluene (2,4-DNT)	<21.6	µg/kg	21.6	33.0							U
2,6-Dinitrotoluene (2,6-DNT)	<8.51	µg/kg	8.51	33.0							U
2-Chloronaphthalene	<4.66	µg/kg	4.66	6.67							U
2-Chlorophenol	<21.8	µg/kg	21.8	33.0							U
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	<27.8	µg/kg	27.8	33.0							U
2-Methylnaphthalene	<3.39	µg/kg	3.39	6.67							U
2-Methylphenol (o-Cresol)	<9.01	µg/kg	9.01	33.0							U
2-Nitroaniline	<18.5	µg/kg	18.5	33.0							U
2-Nitrophenol	<9.50	µg/kg	9.50	33.0							U
3&4-Methylphenol	<18.2	µg/kg	18.2	33.0							U
3,3'-Dichlorobenzidine	<15.6	µg/kg	15.6	167							U
3-Nitroaniline	<19.4	µg/kg	19.4	33.0							U
4-Bromophenyl phenyl ether (BDE-3)	<18.3	µg/kg	18.3	33.0							U
4-Chloro-3-methylphenol	<9.50	µg/kg	9.50	33.0							U
4-Chloroaniline	<16.9	µg/kg	16.9	67.0							U
4-Chlorophenyl phenylether	<9.21	µg/kg	9.21	33.0							U
4-Nitroaniline	<51.7	µg/kg	51.7	167							U
4-Nitrophenol	<78.1	µg/kg	78.1	333							U
Acenaphthene	<4.82	µg/kg	4.82	6.67							U
Acenaphthylene	<5.78	µg/kg	5.78	6.67							U
Acetophenone	<5.22	µg/kg	5.22	33.0							U
Anthracene	<4.70	µg/kg	4.70	6.67							U
Atrazine	<19.5	µg/kg	19.5	33.0							U
Benzaldehyde	<51.2	µg/kg	51.2	67.0							U
Benzo(a)anthracene	<5.76	µg/kg	5.76	6.67							U
Benzo(a)pyrene	4.67	µg/kg	4.09	6.67							J
Benzo(b)fluoranthene	<4.97	µg/kg	4.97	6.67							U
Benzo(g,h,i)perylene	<5.11	µg/kg	5.11	6.67							U
Benzo(k)fluoranthene	<5.05	µg/kg	5.05	6.67							U
bis(2-Chloroethoxy)methane	<21.1	µg/kg	21.1	33.0							U
bis(2-Chloroethyl) ether	<9.44	µg/kg	9.44	33.0							U

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

MB	CLIENT ID: Method Blank	Lab ID: QC-2291398-001
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Method: EPA 8270E**Dilution:** 1**Analysis Date:** 10/27/25 13:57**Prep Date:** 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Butyl benzyl phthalate	<41.7	µg/kg	41.7	67.0							U
Caprolactam	<30.1	µg/kg	30.1	33.0							U
Carbazole	<9.82	µg/kg	9.82	33.0							U
Chrysene	<5.39	µg/kg	5.39	6.67							U
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	<27.6	µg/kg	27.6	33.0							U
Dibenz(a,h) anthracene	<3.60	µg/kg	3.60	33.0							U
Dibenzofuran	<4.90	µg/kg	4.90	33.0							U
Diethyl phthalate	<11.3	µg/kg	11.3	33.0							U
Dimethyl phthalate	<6.50	µg/kg	6.50	33.0							U
Fluoranthene	<3.20	µg/kg	3.20	6.67							U
Fluorene	<4.84	µg/kg	4.84	6.67							U
Hexachlorobenzene	<9.70	µg/kg	9.70	33.0							U
Hexachlorobutadiene	<7.85	µg/kg	7.85	33.0							U
Hexachlorocyclopentadiene	<31.6	µg/kg	31.6	33.0							U
Hexachloroethane	<13.8	µg/kg	13.8	33.0							U
Indeno(1,2,3-cd) pyrene	6.00	µg/kg	4.64	6.67							J
Isophorone	<6.51	µg/kg	6.51	167							U
Methylphenol, Total	<9.01	µg/kg	9.01	67.0							U
Naphthalene	<4.26	µg/kg	4.26	6.67							U
Nitrobenzene	<11.2	µg/kg	11.2	167							U
n-Nitrosodi-n-propylamine	<5.50	µg/kg	5.50	33.0							U
N-Nitrosodiphenylamine	<19.3	µg/kg	19.3	33.0							U
Pentachlorophenol	<26.5	µg/kg	26.5	33.0							U
Phenanthrene	<3.10	µg/kg	3.10	6.67							U
Phenol	<16.7	µg/kg	16.7	33.0							U
Pyrene	<3.33	µg/kg	3.33	6.67							U
Pyridine	<65.6	µg/kg	65.6	167							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2291398-002
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Method: EPA 8270E**Dilution:** 1**Analysis Date:** 10/27/25 14:18**Prep Date:** 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	1020	µg/kg	5.41	33.0	1333		76.7	57-101			
1,2,4,5-Tetrachlorobenzene	1010	µg/kg	7.69	333	1333		75.8	54-98			
1-Methylnaphthalene	1020	µg/kg	4.80	6.67	1333		76.3	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	960	µg/kg	7.81	33.0	1333		72.0	50-101			
2,3,4,6-Tetrachlorophenol	1020	µg/kg	24.4	67.0	1333		76.5	48-103			
2,4,5-Trichlorophenol	1060	µg/kg	19.8	33.0	1333		79.3	54-98			
2,4,6-Trichlorophenol	1050	µg/kg	8.87	33.0	1333		78.5	56-97			
2,4-Dichlorophenol	995	µg/kg	17.9	33.0	1333		74.6	54-99			
2,4-Dimethylphenol	961	µg/kg	17.1	33.0	1333		72.1	47-102			
2,4-Dinitrophenol	852	µg/kg	244	333	1333		63.9	10-100			
2,4-Dinitrotoluene (2,4-DNT)	1080	µg/kg	21.6	33.0	1333		80.7	62-105			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2291398-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 14:18

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,6-Dinitrotoluene (2,6-DNT)	1070	µg/kg	8.51	33.0	1333		80.0	62-103			
2-Chloronaphthalene	1040	µg/kg	4.66	6.67	1333		78.1	57-101			
2-Chlorophenol	1020	µg/kg	21.8	33.0	1333		76.7	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	984	µg/kg	27.8	33.0	1333		73.8	42-104			
2-Methylnaphthalene	1010	µg/kg	3.39	6.67	1333		75.8	55-102			
2-Methylphenol (o-Cresol)	1030	µg/kg	9.01	33.0	1333		77.0	54-103			
2-Nitroaniline	1000	µg/kg	18.5	33.0	1333		75.4	57-103			
2-Nitrophenol	1030	µg/kg	9.50	33.0	1333		77.1	52-102			
3&4-Methylphenol	997	µg/kg	18.2	33.0	1333		74.8	56-103			
3,3'-Dichlorobenzidine	779	µg/kg	15.6	167	1333		58.5	41-91			
3-Nitroaniline	719	µg/kg	19.4	33.0	1333		54.0	35-107			
4-Bromophenyl phenyl ether (BDE-3)	1050	µg/kg	18.3	33.0	1333		79.1	63-104			
4-Chloro-3-methylphenol	1010	µg/kg	9.50	33.0	1333		75.5	57-103			
4-Chloroaniline	1070	µg/kg	16.9	67.0	1333		80.0	32-99			
4-Chlorophenyl phenylether	1080	µg/kg	9.21	33.0	1333		81.0	62-100			
4-Nitroaniline	476	µg/kg	51.7	167	1333		35.7	19-124			
4-Nitrophenol	972	µg/kg	78.1	333	1333		72.9	44-106			
Acenaphthene	1040	µg/kg	4.82	6.67	1333		77.7	60-101			
Acenaphthylene	1080	µg/kg	5.78	6.67	1333		81.4	59-101			
Acetophenone	1010	µg/kg	5.22	33.0	1333		75.4	54-102			
Anthracene	1060	µg/kg	4.70	6.67	1333		79.6	63-96			
Atrazine	<19.5	µg/kg	19.5	33.0	1333		0.00	60-110			SU
Benzaldehyde	214	µg/kg	51.2	67.0	1333		16.1	10-143			
Benzo(a)anthracene	1040	µg/kg	5.76	6.67	1333		78.1	66-102			
Benzo(a)pyrene	1070	µg/kg	4.09	6.67	1333		80.2	66-105			
Benzo(b)fluoranthene	1060	µg/kg	4.97	6.67	1333		79.5	67-105			
Benzo(g,h,i)perylene	1070	µg/kg	5.11	6.67	1333		80.6	59-110			
Benzo(k)fluoranthene	1070	µg/kg	5.05	6.67	1333		80.2	68-106			
bis(2-Chloroethoxy)methane	960	µg/kg	21.1	33.0	1333		72.0	54-102			
bis(2-Chloroethyl) ether	1020	µg/kg	9.44	33.0	1333		76.5	51-101			
Butyl benzyl phthalate	971	µg/kg	41.7	67.0	1333		72.8	59-107			
Caprolactam	957	µg/kg	30.1	33.0	1333		71.8	49-103			
Carbazole	1040	µg/kg	9.82	33.0	1333		78.2	63-103			
Chrysene	1080	µg/kg	5.39	6.67	1333		80.9	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	1010	µg/kg	27.6	33.0	1333		75.7	63-101			
Dibenz(a,h) anthracene	1090	µg/kg	3.60	33.0	1333		82.0	61-109			
Dibenzofuran	1060	µg/kg	4.90	33.0	1333		79.8	61-101			
Diethyl phthalate	1060	µg/kg	11.3	33.0	1333		79.8	63-105			
Dimethyl phthalate	1070	µg/kg	6.50	33.0	1333		80.2	64-104			
Fluoranthene	1050	µg/kg	3.20	6.67	1333		79.1	66-105			
Fluorene	1070	µg/kg	4.84	6.67	1333		80.2	62-101			
Hexachlorobenzene	1030	µg/kg	9.70	33.0	1333		77.5	61-104			
Hexachlorobutadiene	1010	µg/kg	7.85	33.0	1333		75.7	52-99			
Hexachlorocyclopentadiene	874	µg/kg	31.6	33.0	1333		65.6	39-106			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2291398-002
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 14:18

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Hexachloroethane	999	µg/kg	13.8	33.0	1333		75.0	59-99			
Indeno(1,2,3-cd) pyrene	1170	µg/kg	4.64	6.67	1333		87.8	57-114			
Isophorone	978	µg/kg	6.51	167	1333		73.4	55-101			
Methylphenol, Total	2020	µg/kg	9.01	67.0	2667		75.9	54-103			
Naphthalene	1010	µg/kg	4.26	6.67	1333		76.0	54-99			
Nitrobenzene	1000	µg/kg	11.2	167	1333		75.2	53-100			
n-Nitrosodi-n-propylamine	1000	µg/kg	5.50	33.0	1333		75.4	52-104			
N-Nitrosodiphenylamine	1030	µg/kg	19.3	33.0	1333		77.1	61-104			
Pentachlorophenol	1040	µg/kg	26.5	33.0	1333		77.7	35-100			
Phenanthrene	1050	µg/kg	3.10	6.67	1333		78.6	64-101			
Phenol	990	µg/kg	16.7	33.0	1333		74.3	51-107			
Pyrene	1060	µg/kg	3.33	6.67	1333		79.4	62-114			
Pyridine	855	µg/kg	65.6	167	1333		64.1	40-84			

MS	CLIENT ID: Batch QC	Lab ID: QC-2291398-005
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 14:39

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2250	µg/kg	11.8	77.4	2908.4	<11.8	77.0	57-101			
1,2,4,5-Tetrachlorobenzene	2220	µg/kg	16.8	781	2908.4	<16.8	76.2	54-98			
1-Methylnaphthalene	2210	µg/kg	10.5	15.6	2908.4	<10.5	76.0	56-100			
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2090	µg/kg	17.0	77.4	2908.4	<17.0	71.7	50-101			
2,3,4,6-Tetrachlorophenol	2290	µg/kg	53.3	156	2908.4	<53.3	78.7	48-103			
2,4,5-Trichlorophenol	2370	µg/kg	43.1	77.4	2908.4	<43.1	81.5	54-98			
2,4,6-Trichlorophenol	2290	µg/kg	19.4	77.4	2908.4	<19.4	78.6	56-97			
2,4-Dichlorophenol	2140	µg/kg	39.1	77.4	2908.4	<39.1	73.7	54-99			
2,4-Dimethylphenol	1340	µg/kg	37.4	77.4	2908.4	<37.4	46.2	47-102			S
2,4-Dinitrophenol	764	µg/kg	532	781	2908.4	<532	26.3	10-100			J
2,4-Dinitrotoluene (2,4-DNT)	2280	µg/kg	47.2	77.4	2908.4	<47.2	78.3	62-105			
2,6-Dinitrotoluene (2,6-DNT)	2330	µg/kg	18.6	77.4	2908.4	<18.6	80.0	62-103			
2-Chloronaphthalene	2300	µg/kg	10.2	15.6	2908.4	<10.2	79.2	57-101			
2-Chlorophenol	2170	µg/kg	47.6	77.4	2908.4	<47.6	74.5	52-102			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1840	µg/kg	60.7	77.4	2908.4	<60.7	63.4	42-104			
2-Methylnaphthalene	2220	µg/kg	7.40	15.6	2908.4	<7.40	76.2	55-102			
2-Methylphenol (o-Cresol)	2060	µg/kg	19.7	77.4	2908.4	<19.7	70.8	54-103			
2-Nitroaniline	2190	µg/kg	40.4	77.4	2908.4	<40.4	75.2	57-103			
2-Nitrophenol	2270	µg/kg	20.7	77.4	2908.4	<20.7	78.2	52-102			
3&4-Methylphenol	2070	µg/kg	39.6	77.4	2908.4	<39.6	71.3	56-103			
3,3'-Dichlorobenzidine	1790	µg/kg	33.9	391	2908.4	<33.9	61.5	41-91			
3-Nitroaniline	1570	µg/kg	42.2	77.4	2908.4	<42.2	53.8	35-107			
4-Bromophenyl phenyl ether (BDE-3)	2200	µg/kg	39.8	77.4	2908.4	<39.8	75.7	63-104			
4-Chloro-3-methylphenol	2160	µg/kg	20.7	77.4	2908.4	<20.7	74.1	57-103			
4-Chloroaniline	2230	µg/kg	37.0	156	2908.4	<37.0	76.7	32-99			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

MS	CLIENT ID: Batch QC	Lab ID: QC-2291398-005
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 14:39

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4-Chlorophenyl phenylether	2320	µg/kg	20.1	77.4	2908.4	<20.1	79.8	62-100			
4-Nitroaniline	967	µg/kg	113	391	2908.4	<113	33.3	19-124			
4-Nitrophenol	2090	µg/kg	170	781	2908.4	<170	71.9	44-106			
Acenaphthene	2290	µg/kg	10.5	15.6	2908.4	<10.5	78.6	60-101			
Acenaphthylene	2290	µg/kg	12.6	15.6	2908.4	<12.6	78.9	59-101			
Acetophenone	2170	µg/kg	11.4	77.4	2908.4	<11.4	74.7	54-102			
Anthracene	2270	µg/kg	10.3	15.6	2908.4	<10.3	78.2	63-96			
Atrazine	<42.6	µg/kg	42.6	77.4	2908.4	<42.6	0.00	60-110			SU
Benzaldehyde	534	µg/kg	112	156	2908.4	<112	18.4	10-143			
Benzo(a)anthracene	2240	µg/kg	12.6	15.6	2908.4	<12.6	77.0	66-102			
Benzo(a)pyrene	2320	µg/kg	8.92	15.6	2908.4	<8.92	79.8	66-105			
Benzo(b)fluoranthene	2320	µg/kg	10.8	15.6	2908.4	<10.8	79.8	67-105			
Benzo(g,h,i)perylene	2290	µg/kg	11.1	15.6	2908.4	<11.1	78.8	59-110			
Benzo(k)fluoranthene	2320	µg/kg	11.0	15.6	2908.4	<11.0	79.9	68-106			
bis(2-Chloroethoxy)methane	2150	µg/kg	46.1	77.4	2908.4	<46.1	74.1	54-102			
bis(2-Chloroethyl) ether	2240	µg/kg	20.6	77.4	2908.4	<20.6	77.0	51-101			
Butyl benzyl phthalate	2190	µg/kg	91.0	156	2908.4	<91.0	73.6	59-107			
Caprolactam	2110	µg/kg	65.6	77.4	2908.4	<65.6	72.5	49-103			
Carbazole	2240	µg/kg	21.4	77.4	2908.4	<21.4	77.0	63-103			
Chrysene	2200	µg/kg	12.4	15.6	2908.4	<12.4	75.7	66-105			
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	2190	µg/kg	60.2	77.4	2908.4	<60.2	73.6	63-101			
Dibenz(a,h) anthracene	2360	µg/kg	7.85	77.4	2908.4	<7.85	81.2	61-109			
Dibenzofuran	2300	µg/kg	10.7	77.4	2908.4	<10.7	79.2	61-101			
Diethyl phthalate	2300	µg/kg	24.7	77.4	2908.4	<24.7	79.2	63-105			
Dimethyl phthalate	2330	µg/kg	14.2	77.4	2908.4	<14.2	80.1	64-104			
Fluoranthene	2250	µg/kg	6.98	15.6	2908.4	<6.98	77.2	66-105			
Fluorene	2290	µg/kg	10.6	15.6	2908.4	<10.6	78.8	62-101			
Hexachlorobenzene	2240	µg/kg	21.2	77.4	2908.4	<21.2	77.2	61-104			
Hexachlorobutadiene	2190	µg/kg	17.1	77.4	2908.4	<17.1	75.4	52-99			
Hexachlorocyclopentadiene	1850	µg/kg	71.1	77.4	2908.4	<71.1	63.6	39-106			
Hexachloroethane	2150	µg/kg	30.1	77.4	2908.4	<30.1	73.8	59-99			
Indeno(1,2,3-cd) pyrene	2560	µg/kg	10.1	15.6	2908.4	<10.1	88.1	57-114			
Isophorone	2160	µg/kg	14.2	391	2908.4	<14.2	74.3	55-101			
Methylphenol, Total	4130	µg/kg	19.7	77.4	5819	<19.7	71.0	54-103			
Naphthalene	2180	µg/kg	9.29	15.6	2908.4	<9.29	74.9	54-99			
Nitrobenzene	2170	µg/kg	24.4	391	2908.4	<24.4	74.7	53-100			
n-Nitrosodi-n-propylamine	2150	µg/kg	12.0	77.4	2908.4	<12.0	74.1	52-104			
N-Nitrosodiphenylamine	2220	µg/kg	42.1	77.4	2908.4	<42.1	76.4	61-104			
Pentachlorophenol	2190	µg/kg	57.8	77.4	2908.4	<57.8	75.3	35-100			
Phenanthrene	2230	µg/kg	6.76	15.6	2908.4	<6.76	76.7	64-101			
Phenol	2140	µg/kg	36.5	77.4	2908.4	<36.5	73.4	51-107			
Pyrene	2310	µg/kg	7.26	15.6	2908.4	<7.26	79.3	52-114			
Pyridine	1970	µg/kg	143	391	2908.4	<143	67.8	40-84			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

MSD	CLIENT ID: Batch QC	Lab ID: QC-2291398-006
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Method: EPA 8270E

Dilution: 1

Analysis Date: 10/27/25 15:00

Prep Date: 10/23/25 16:36

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1'-Biphenyl (BZ-0)	2240	µg/kg	11.8	77.4	2908	<11.8	76.8	57-101	0.207	30	
1,2,4,5-Tetrachlorobenzene	2310	µg/kg	16.8	781	2908	<16.8	79.5	54-98	4.23	30	
1-Methylnaphthalene	2240	µg/kg	10.5	15.6	2908	<10.5	76.9	56-100	1.16	30	
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	2110	µg/kg	17.0	77.4	2908	<17.0	72.4	50-101	0.958	30	
2,3,4,6-Tetrachlorophenol	2340	µg/kg	53.3	156	2908	<53.3	80.3	48-103	2.00	30	
2,4,5-Trichlorophenol	2350	µg/kg	43.1	77.4	2908	<43.1	80.9	54-98	0.814	30	
2,4,6-Trichlorophenol	2340	µg/kg	19.4	77.4	2908	<19.4	80.4	56-97	2.25	30	
2,4-Dichlorophenol	2150	µg/kg	39.1	77.4	2908	<39.1	73.8	54-99	0.190	30	
2,4-Dimethylphenol	1250	µg/kg	37.4	77.4	2908	<37.4	43.0	47-102	7.20	30	S
2,4-Dinitrophenol	608	µg/kg	532	781	2908	<532	20.9	10-100			J
2,4-Dinitrotoluene (2,4-DNT)	2330	µg/kg	47.2	77.4	2908	<47.2	80.2	62-105	2.38	30	
2,6-Dinitrotoluene (2,6-DNT)	2360	µg/kg	18.6	77.4	2908	<18.6	81.1	62-103	1.29	30	
2-Chloronaphthalene	2310	µg/kg	10.2	15.6	2908	<10.2	79.5	57-101	0.302	30	
2-Chlorophenol	2200	µg/kg	47.6	77.4	2908	<47.6	75.6	52-102	1.45	30	
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	1710	µg/kg	60.7	77.4	2908	<60.7	58.9	42-104	7.37	30	
2-Methylnaphthalene	2220	µg/kg	7.40	15.6	2908	<7.40	76.3	55-102	0.118	30	
2-Methylphenol (o-Cresol)	2070	µg/kg	19.7	77.4	2908	<19.7	71.0	54-103	0.340	30	
2-Nitroaniline	2180	µg/kg	40.4	77.4	2908	<40.4	75.0	57-103	0.280	30	
2-Nitrophenol	2220	µg/kg	20.7	77.4	2908	<20.7	76.4	52-102	2.34	30	
3&4-Methylphenol	2100	µg/kg	39.6	77.4	2908	<39.6	72.4	56-103	1.45	30	
3,3'-Dichlorobenzidine	1860	µg/kg	33.9	391	2908	<33.9	63.8	41-91	3.66	30	
3-Nitroaniline	1530	µg/kg	42.2	77.4	2908	<42.2	52.6	35-107	2.27	30	
4-Bromophenyl phenyl ether (BDE-3)	2280	µg/kg	39.8	77.4	2908	<39.8	78.6	63-104	3.75	30	
4-Chloro-3-methylphenol	2150	µg/kg	20.7	77.4	2908	<20.7	73.8	57-103	0.487	30	
4-Chloroaniline	2290	µg/kg	37.0	156	2908	<37.0	78.7	32-99	2.56	30	
4-Chlorophenyl phenylether	2330	µg/kg	20.1	77.4	2908	<20.1	80.0	62-100	0.300	30	
4-Nitroaniline	892	µg/kg	113	391	2908	<113	30.7	19-124	8.15	30	
4-Nitrophenol	2140	µg/kg	170	781	2908	<170	73.7	44-106	2.46	30	
Acenaphthene	2280	µg/kg	10.5	15.6	2908	<10.5	78.4	60-101	0.268	30	
Acenaphthylene	2320	µg/kg	12.6	15.6	2908	<12.6	79.9	59-101	1.25	30	
Acetophenone	2180	µg/kg	11.4	77.4	2908	<11.4	75.1	54-102	0.521	30	
Anthracene	2310	µg/kg	10.3	15.6	2908	<10.3	79.3	63-96	1.32	30	
Atrazine	<42.6	µg/kg	42.6	77.4	2908	<42.6	0.00	60-110			US
Benzaldehyde	369	µg/kg	112	156	2908	<112	12.7	10-143	36.4	30	R
Benzo(a)anthracene	2310	µg/kg	12.6	15.6	2908	<12.6	79.5	66-102	3.18	30	
Benzo(a)pyrene	2420	µg/kg	8.92	15.6	2908	<8.92	83.4	66-105	4.40	30	
Benzo(b)fluoranthene	2370	µg/kg	10.8	15.6	2908	<10.8	81.7	67-105	2.34	30	
Benzo(g,h,i)perylene	2380	µg/kg	11.1	15.6	2908	<11.1	81.8	59-110	3.66	30	
Benzo(k)fluoranthene	2420	µg/kg	11.0	15.6	2908	<11.0	83.3	68-106	4.22	30	
bis(2-Chloroethoxy)methane	2110	µg/kg	46.1	77.4	2908	<46.1	72.4	54-102	2.27	30	
bis(2-Chloroethyl) ether	2320	µg/kg	20.6	77.4	2908	<20.6	79.8	51-101	3.50	30	
Butyl phenyl phthalate	2210	µg/kg	91.0	156	2908	<91.0	74.3	59-107	0.912	30	
Caprolactam	2120	µg/kg	65.6	77.4	2908	<65.6	72.9	49-103	0.469	30	
Carbazole	2290	µg/kg	21.4	77.4	2908	<21.4	78.7	63-103	2.11	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2291398

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3630819

MSD		CLIENT ID: Batch QC				Lab ID: QC-2291398-006					
Method: EPA 8270E		Dilution: 1				Analysis Date: 10/27/25 15:00					
						Prep Date: 10/23/25 16:36					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chrysene	2330	µg/kg	12.4	15.6	2908	<12.4	80.3	66-105	5.82	30	
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	2310	µg/kg	60.1	77.4	2908	<60.1	77.7	63-101	5.29	30	
Dibenz(a,h) anthracene	2430	µg/kg	7.85	77.4	2908	<7.85	83.7	61-109	3.08	30	
Dibenzofuran	2330	µg/kg	10.7	77.4	2908	<10.7	80.2	61-101	1.24	30	
Diethyl phthalate	2310	µg/kg	24.7	77.4	2908	<24.7	79.3	63-105	0.0500	30	
Dimethyl phthalate	2300	µg/kg	14.2	77.4	2908	<14.2	79.2	64-104	1.14	30	
Fluoranthene	2340	µg/kg	6.98	15.6	2908	<6.98	80.4	66-105	3.99	30	
Fluorene	2340	µg/kg	10.6	15.6	2908	<10.6	80.6	62-101	2.18	30	
Hexachlorobenzene	2220	µg/kg	21.2	77.4	2908	<21.2	76.3	61-104	1.19	30	
Hexachlorobutadiene	2230	µg/kg	17.1	77.4	2908	<17.1	76.5	52-99	1.50	30	
Hexachlorocyclopentadiene	1850	µg/kg	71.1	77.4	2908	<71.1	63.7	39-106	0.0655	30	
Hexachloroethane	2220	µg/kg	30.1	77.4	2908	<30.1	76.3	59-99	3.25	30	
Indeno(1,2,3-cd) pyrene	2650	µg/kg	10.1	15.6	2908	<10.1	91.2	57-114	3.44	30	
Isophorone	2140	µg/kg	14.2	391	2908	<14.2	73.7	55-101	0.824	30	
Methylphenol, Total	4170	µg/kg	19.7	77.4	5818.2	<19.7	71.7	54-103	0.898	30	
Naphthalene	2160	µg/kg	9.29	15.6	2908	<9.29	74.4	54-99	0.750	30	
Nitrobenzene	2180	µg/kg	24.4	391	2908	<24.4	74.8	53-100	0.188	30	
n-Nitrosodi-n-propylamine	2180	µg/kg	12.0	77.4	2908	<12.0	75.0	52-104	1.26	30	
N-Nitrosodiphenylamine	2270	µg/kg	42.1	77.4	2908	<42.1	77.9	61-104	1.93	30	
Pentachlorophenol	2180	µg/kg	57.8	77.4	2908	<57.8	74.9	35-100	0.546	30	
Phenanthrene	2310	µg/kg	6.76	15.6	2908	<6.76	79.3	64-101	3.32	30	
Phenol	2160	µg/kg	36.5	77.4	2908	<36.5	74.4	51-107	1.34	30	
Pyrene	2360	µg/kg	7.26	15.6	2908	<7.26	81.1	52-114	2.29	30	
Pyridine	1940	µg/kg	143	391	2908	<143	66.9	40-84	1.42	30	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2324365

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3673053

TCLP Chlorinated Herbicides by GC/ECD

MB CLIENT ID: Method Blank Lab ID: QC-2324365-001

Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 11/10/25 11:33
Prep Date: 11/07/25 09:31

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	<0.384	µg/L	0.384	2.00							U
2,4-D	<0.658	µg/L	0.658	2.00							U
Surr: DCAA	10.6	µg/L			10		106	10-147			

LCS CLIENT ID: Laboratory Control Sample Lab ID: QC-2324365-002

Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 11/10/25 11:46
Prep Date: 11/07/25 09:31

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	9.20	µg/L	0.384	2.00	10		92.0	10-140			
2,4-D	11.2	µg/L	0.658	2.00	10		112	26-154			
Surr: DCAA	17.4	µg/L			10		174	10-147			S

MS CLIENT ID: Batch QC Lab ID: QC-2324365-005

Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 11/10/25 12:24
Prep Date: 11/07/25 09:31

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	9.90	µg/L	0.396	2.06	10.309	<0.396	96.0	10-140			
2,4-D	12.8	µg/L	0.678	2.06	10.309	<0.678	124	26-154			
Surr: DCAA	<2.06	µg/L			10.309		-200	10-147			SU

MSD CLIENT ID: Batch QC Lab ID: QC-2324365-006

Method: EPA 8151A **Dilution:** 1 **Analysis Date:** 11/10/25 12:37
Prep Date: 11/07/25 09:31

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	10.3	µg/L	0.387	2.02	10.081	<0.387	102	10-140	3.82	30	
2,4-D	12.9	µg/L	0.663	2.02	10.081	<0.663	128	26-154	0.932	30	
Surr: DCAA	<2.02	µg/L			10.081		-200	10-147	NC		US

The following samples were analyzed in this batch: HN2515341-004



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2322497

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3667390

TCLP Organochlorine Pesticides by GC/ECD

MB	CLIENT ID: Method Blank	Lab ID: QC-MRG2-2322496001
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Method: EPA 8081B

Dilution: 1

Analysis Date: 11/07/25 02:44

Prep Date: 11/06/25 13:54

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chlordane, Technical	<0.0340	µg/L	0.0340	0.500							U
Endrin	<0.00851	µg/L	0.00851	0.0100							U
gamma-BHC (Lindane)	<0.00832	µg/L	0.00832	0.0100							U
Heptachlor	<0.00760	µg/L	0.00760	0.0100							U
Heptachlor epoxide	<0.00796	µg/L	0.00796	0.0100							U
Methoxychlor	<0.00989	µg/L	0.00989	0.0100							U
Toxaphene	<0.110	µg/L	0.110	2.00							U
Surr: Decachlorobiphenyl	0.259	µg/L			0.25		104	0.42-148			
Surr: Tetrachloro-m-xylene	0.200	µg/L			0.25		79.8	57-141			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-MRG2-2322496002
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Method: EPA 8081B

Dilution: 1

Analysis Date: 11/07/25 02:59

Prep Date: 11/06/25 13:54

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin	0.258	µg/L	0.00851	0.0100	0.2		129	43-176			
gamma-BHC (Lindane)	0.238	µg/L	0.00832	0.0100	0.2		119	63-158			
Heptachlor	0.235	µg/L	0.00760	0.0100	0.2		118	47-166			
Heptachlor epoxide	0.243	µg/L	0.00796	0.0100	0.2		122	63-164			
Methoxychlor	0.191	µg/L	0.00989	0.0100	0.2		95.6	36-176			
Surr: Decachlorobiphenyl	0.279	µg/L			0.25		111	42-148			
Surr: Tetrachloro-m-xylene	0.218	µg/L			0.25		87.0	57-141			

DLCS	CLIENT ID: Laboratory Control Sample Duplicate	Lab ID: QC-MRG2-2322496003
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Method: EPA 8081B

Dilution: 1

Analysis Date: 11/07/25 03:13

Prep Date: 11/06/25 13:54

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Endrin	0.248	µg/L	0.00851	0.0100	0.2		124	43-176	3.80	20	
gamma-BHC (Lindane)	0.234	µg/L	0.00832	0.0100	0.2		117	63-158	1.61	20	
Heptachlor	0.231	µg/L	0.00760	0.0100	0.2		116	47-166	1.63	20	
Heptachlor epoxide	0.235	µg/L	0.00796	0.0100	0.2		117	63-164	3.68	20	
Methoxychlor	0.195	µg/L	0.00989	0.0100	0.2		97.6	36-176	2.07	20	
Surr: Decachlorobiphenyl	0.273	µg/L			0.25		109	42-148	2.03	30	
Surr: Tetrachloro-m-xylene	0.223	µg/L			0.25		89.1	57-141	2.36	30	

The following samples were analyzed in this batch: HN2515341-004



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2279131-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/20/25 22:54

Prep Date: 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	<13.6	µg/kg	13.6	30.0							U
1,1,2,2-Tetrachloroethane	<13.2	µg/kg	13.2	30.0							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<19.0	µg/kg	19.0	30.0							U
1,1,2-Trichloroethane	<12.8	µg/kg	12.8	30.0							U
1,1-Dichloroethane	<10.9	µg/kg	10.9	30.0							U
1,1-Dichloroethylene	<9.72	µg/kg	9.72	30.0							U
1,2,3-Trichlorobenzene	<36.0	µg/kg	36.0	100							U
1,2,3-Trichloropropane	<12.6	µg/kg	12.6	30.0							U
1,2,4-Trichlorobenzene	<34.0	µg/kg	34.0	100							U
1,2,4-Trimethylbenzene	<22.0	µg/kg	22.0	30.0							U
1,2-Dibromo-3-chloropropane (DBCP)	<27.6	µg/kg	27.6	100							U
1,2-Dibromoethane (EDB, Ethylene dibromide)	<17.6	µg/kg	17.6	30.0							U
1,2-Dichlorobenzene (o-Dichlorobenzene)	<11.4	µg/kg	11.4	30.0							U
1,2-Dichloroethane (Ethylene dichloride)	<26.3	µg/kg	26.3	100							U
1,2-Dichloropropane	<22.1	µg/kg	22.1	30.0							U
1,3,5-Trimethylbenzene	<21.2	µg/kg	21.2	100							U
1,3-Dichlorobenzene (m-Dichlorobenzene)	<20.7	µg/kg	20.7	30.0							U
1,3-Dichloropropene	<16.8	µg/kg	16.8	60.0							U
1,4-Dichlorobenzene (p-Dichlorobenzene)	<24.4	µg/kg	24.4	30.0							U
2-Butanone (Methyl ethyl ketone, MEK)	<71.4	µg/kg	71.4	200							U
2-Hexanone	<14.9	µg/kg	14.9	30.0							U
4-Methyl-2-pentanone (MIBK)	<28.0	µg/kg	28.0	30.0							U
Acetone	<89.0	µg/kg	89.0	100							U
Benzene	<14.5	µg/kg	14.5	30.0							U
Bromochloromethane	<15.3	µg/kg	15.3	30.0							U
Bromodichloromethane	<16.8	µg/kg	16.8	30.0							U
Bromoform	<12.6	µg/kg	12.6	30.0							U
Carbon disulfide	<15.5	µg/kg	15.5	30.0							U
Carbon tetrachloride	<11.7	µg/kg	11.7	30.0							U
Chlorobenzene	<9.96	µg/kg	9.96	30.0							U
Chlorodibromomethane	<16.8	µg/kg	16.8	30.0							U
Chloroethane (Ethyl chloride)	<84.0	µg/kg	84.0	100							U
Chloroform	<11.0	µg/kg	11.0	30.0							U
cis-1,2-Dichloroethylene	<19.3	µg/kg	19.3	30.0							U
cis-1,3-Dichloropropene	<22.6	µg/kg	22.6	30.0							U
Cyclohexane	<23.0	µg/kg	23.0	100							U
Dichlorodifluoromethane (Freon-12)	<36.3	µg/kg	36.3	100							U
Ethylbenzene	<21.3	µg/kg	21.3	30.0							U

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

MB	CLIENT ID: Method Blank	Lab ID: QC-2279131-001
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 10/20/25 22:54**Prep Date:** 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Isopropylbenzene	<19.0	µg/kg	19.0	30.0							U
m+p-Xylene	<40.0	µg/kg	40.0	60.0							U
Methyl bromide (Bromomethane)	<57.4	µg/kg	57.4	100							U
Methyl chloride (Chloromethane)	<82.0	µg/kg	82.0	100							U
Methyl tert-butyl ether (MTBE)	<21.9	µg/kg	21.9	30.0							U
Methylcyclohexane	<11.4	µg/kg	11.4	30.0							U
Methylene chloride (Dichloromethane)	<79.6	µg/kg	79.6	250							U
o-Xylene	<11.6	µg/kg	11.6	30.0							U
Styrene	<11.9	µg/kg	11.9	30.0							U
Tetrachloroethylene (Perchloroethylene)	<18.1	µg/kg	18.1	30.0							U
Toluene	<24.7	µg/kg	24.7	30.0							U
Total Xylene	<11.6	µg/kg	11.6	90.0							U
trans-1,2-Dichloroethylene	<24.8	µg/kg	24.8	30.0							U
trans-1,3-Dichloropropylene	<16.8	µg/kg	16.8	30.0							U
Trichloroethene (Trichloroethylene)	<13.4	µg/kg	13.4	30.0							U
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	<15.3	µg/kg	15.3	30.0							U
Vinyl chloride (Chloroethene)	<19.9	µg/kg	19.9	30.0							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279131-002
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 10/20/25 21:57**Prep Date:** 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1070	µg/kg	13.6	30.0	1000		107	75-121			
1,1,2,2-Tetrachloroethane	910	µg/kg	13.2	30.0	1000		91.0	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	974	µg/kg	19.0	30.0	1000		97.4	62-129			
1,1,2-Trichloroethane	880	µg/kg	12.8	30.0	1000		88.0	80-123			
1,1-Dichloroethane	892	µg/kg	10.9	30.0	1000		89.2	74-124			
1,1-Dichloroethylene	928	µg/kg	9.72	30.0	1000		92.8	68-131			
1,2,3-Trichlorobenzene	950	µg/kg	36.0	100	1000		95.0	60-135			
1,2,3-Trichloropropane	880	µg/kg	12.6	30.0	1000		88.0	77-121			
1,2,4-Trichlorobenzene	970	µg/kg	34.0	100	1000		97.0	63-130			
1,2,4-Trimethylbenzene	960	µg/kg	22.0	30.0	1000		96.0	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	853	µg/kg	27.6	100	1000		85.3	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	945	µg/kg	17.6	30.0	1000		94.5	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	956	µg/kg	11.4	30.0	1000		95.6	77-122			
1,2-Dichloroethane (Ethylene dichloride)	917	µg/kg	26.3	100	1000		91.7	70-130			
1,2-Dichloropropane	860	µg/kg	22.1	30.0	1000		86.0	71-130			
1,3,5-Trimethylbenzene	1000	µg/kg	21.2	100	1000		100	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	914	µg/kg	20.7	30.0	1000		91.4	78-121			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2279131-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/20/25 21:57

Prep Date: 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,3-Dichloropropene	1690	µg/kg	16.8	60.0	2000		84.6	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	985	µg/kg	24.4	30.0	1000		98.5	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	790	µg/kg	71.4	200	1000		79.0	47-164			
2-Hexanone	892	µg/kg	14.9	30.0	1000		89.2	70-137			
4-Methyl-2-pentanone (MIBK)	1220	µg/kg	28.0	30.0	1000		122	57-200			
Acetone	758	µg/kg	89.0	100	1000		75.8	52-190			
Benzene	950	µg/kg	14.5	30.0	1000		95.0	78-122			
Bromochloromethane	815	µg/kg	15.3	30.0	1000		81.5	68-130			
Bromodichloromethane	880	µg/kg	16.8	30.0	1000		88.0	75-125			
Bromoform	914	µg/kg	12.6	30.0	1000		91.4	59-120			
Carbon disulfide	986	µg/kg	15.5	30.0	1000		98.6	60-163			
Carbon tetrachloride	1110	µg/kg	11.7	30.0	1000		111	69-123			
Chlorobenzene	946	µg/kg	9.96	30.0	1000		94.6	79-120			
Chlorodibromomethane	888	µg/kg	16.8	30.0	1000		88.8	57-123			
Chloroethane (Ethyl chloride)	990	µg/kg	84.0	100	1000		99.0	38-132			
Chloroform	833	µg/kg	11.0	30.0	1000		83.3	72-122			
cis-1,2-Dichloroethylene	843	µg/kg	19.3	30.0	1000		84.3	74-125			
cis-1,3-Dichloropropene	842	µg/kg	22.6	30.0	1000		84.2	62-124			
Dichlorodifluoromethane (Freon-12)	722	µg/kg	36.3	100	1000		72.2	28-137			
Ethylbenzene	992	µg/kg	21.3	30.0	1000		99.2	75-121			
Isopropylbenzene	970	µg/kg	19.0	30.0	1000		97.0	74-121			
m+p-Xylene	1970	µg/kg	40.0	60.0	2000		98.4	67-129			
Methyl bromide (Bromomethane)	1240	µg/kg	57.4	100	1000		124	31-169			
Methyl chloride (Chloromethane)	799	µg/kg	82.0	100	1000		79.9	24-119			
Methyl tert-butyl ether (MTBE)	969	µg/kg	21.9	30.0	1000		96.9	79-139			
Methylene chloride (Dichloromethane)	826	µg/kg	79.6	250	1000		82.6	62-135			
o-Xylene	979	µg/kg	11.6	30.0	1000		97.9	75-120			
Styrene	914	µg/kg	11.9	30.0	1000		91.4	74-126			
Tetrachloroethylene (Perchloroethylene)	1070	µg/kg	18.1	30.0	1000		107	76-128			
Toluene	960	µg/kg	24.7	30.0	1000		96.0	76-120			
Total Xylene	2950	µg/kg	11.6	90.0	3000		98.2	67-129			
trans-1,2-Dichloroethylene	886	µg/kg	25.8	30.0	1000		88.6	72-127			
trans-1,3-Dichloropropylene	850	µg/kg	16.8	30.0	1000		85.0	66-120			
Trichloroethene (Trichloroethylene)	1010	µg/kg	13.4	30.0	1000		101	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1010	µg/kg	15.3	30.0	1000		101	51-115			
Vinyl chloride (Chloroethene)	830	µg/kg	19.9	30.0	1000		83.0	43-128			

MS	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2279131-005
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/21/25 06:25

Prep Date: 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
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QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

MS	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2279131-005
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/21/25 06:25

Prep Date: 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	813	µg/kg	12.0	38.4	883.39	<12.0	92.0	75-121			
1,1,2,2-Tetrachloroethane	689	µg/kg	11.7	38.4	883.39	<11.7	78.0	79-125			S
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	879	µg/kg	16.8	38.4	883.39	<16.8	99.5	62-129			
1,1,2-Trichloroethane	755	µg/kg	11.3	38.4	883.39	<11.3	85.5	80-123			
1,1-Dichloroethane	742	µg/kg	9.66	38.4	883.39	<9.66	84.0	74-124			
1,1-Dichloroethylene	880	µg/kg	8.59	38.4	883.39	<8.59	99.6	68-131			
1,2,3-Trichlorobenzene	428	µg/kg	31.8	128	883.39	<31.8	48.5	60-135			S
1,2,3-Trichloropropane	718	µg/kg	11.1	38.4	883.39	<11.1	81.2	77-121			
1,2,4-Trichlorobenzene	492	µg/kg	30.0	128	883.39	<30.0	55.6	63-130			S
1,2,4-Trimethylbenzene	657	µg/kg	19.4	38.4	883.39	<19.4	74.4	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	461	µg/kg	24.4	128	883.39	<24.4	52.2	55-135			S
1,2-Dibromoethane (EDB, Ethylene dibromide)	803	µg/kg	15.6	38.4	883.39	<15.6	91.0	63-155			
1,2-Dichlorobenzene (o-Dichlorobenzene)	700	µg/kg	10.1	38.4	883.39	<10.1	79.2	77-122			
1,2-Dichloroethane (Ethylene dichloride)	780	µg/kg	23.3	128	883.39	<23.3	88.3	70-130			
1,2-Dichloropropane	740	µg/kg	19.5	38.4	883.39	<19.5	83.8	71-130			
1,3,5-Trimethylbenzene	774	µg/kg	18.7	128	883.39	<18.7	87.6	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	766	µg/kg	18.3	38.4	883.39	<18.3	86.7	78-121			
1,3-Dichloropropene	1370	µg/kg	14.8	76.8	1766.8	<14.8	77.4	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	786	µg/kg	21.5	38.4	883.39	<21.5	89.0	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	722	µg/kg	63.1	256	883.39	<63.1	81.8	47-164			
2-Hexanone	825	µg/kg	13.1	38.4	883.39	<13.1	93.4	70-137			
4-Methyl-2-pentanone (MIBK)	897	µg/kg	24.7	38.4	883.39	<24.7	102	57-200			
Acetone	1180	µg/kg	78.6	128	883.39	<78.6	130	52-190			
Benzene	815	µg/kg	12.8	38.4	883.39	<12.8	92.3	78-122			
Bromochloromethane	771	µg/kg	13.5	38.4	883.39	<13.5	87.2	68-130			
Bromodichloromethane	731	µg/kg	14.8	38.4	883.39	<14.8	82.8	75-125			
Bromoform	727	µg/kg	11.2	38.4	883.39	<11.2	82.3	59-120			
Carbon disulfide	922	µg/kg	13.7	38.4	883.39	<13.7	104	60-163			
Carbon tetrachloride	870	µg/kg	10.4	38.4	883.39	<10.4	98.5	69-123			
Chlorobenzene	822	µg/kg	8.80	38.4	883.39	<8.80	93.1	79-120			
Chlorodibromomethane	716	µg/kg	14.9	38.4	883.39	<14.9	81.0	57-123			
Chloroethane (Ethyl chloride)	379	µg/kg	74.2	128	883.39	<74.2	42.8	38-132			
Chloroform	778	µg/kg	9.71	38.4	883.39	<9.71	88.1	72-122			
cis-1,2-Dichloroethylene	784	µg/kg	17.0	38.4	883.39	<17.0	88.7	74-125			
cis-1,3-Dichloropropene	671	µg/kg	20.0	38.4	883.39	<20.0	76.0	62-124			
Dichlorodifluoromethane (Freon-12)	757	µg/kg	32.1	128	883.39	<32.1	85.6	28-137			
Ethylbenzene	840	µg/kg	18.8	38.4	883.39	<18.8	95.1	75-121			
Isopropylbenzene	788	µg/kg	16.7	38.4	883.39	<16.7	89.2	74-121			
m+p-Xylene	1690	µg/kg	35.3	76.8	1766.8	<35.3	95.7	67-129			
Methyl bromide (Bromomethane)	480	µg/kg	50.7	128	883.39	<50.7	54.3	31-169			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

MS	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2279131-005
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 10/21/25 06:25**Prep Date:** 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Methyl chloride (Chloromethane)	809	µg/kg	72.4	128	883.39	<72.4	91.6	24-119			
Methyl tert-butyl ether (MTBE)	772	µg/kg	19.3	38.4	883.39	<19.3	87.4	79-139			
Methylene chloride (Dichloromethane)	772	µg/kg	70.3	320	883.39	<70.3	87.4	62-135			
o-Xylene	818	µg/kg	10.2	38.4	883.39	<10.2	92.6	75-120			
Styrene	751	µg/kg	10.5	38.4	883.39	<10.5	85.0	74-126			
Tetrachloroethylene (Perchloroethylene)	1580	µg/kg	16.0	38.4	883.39	<16.0	178	76-128			S
Toluene	882	µg/kg	21.8	38.4	883.39	<21.8	99.8	76-120			
Total Xylene	2510	µg/kg	10.2	115	2650.2	<10.2	94.7	67-129			
trans-1,2-Dichloroethylene	746	µg/kg	21.9	38.4	883.39	<21.9	84.4	72-127			
trans-1,3-Dichloropropylene	697	µg/kg	14.8	38.4	883.39	<14.8	78.8	66-120			
Trichloroethene (Trichloroethylene)	926	µg/kg	11.9	38.4	883.39	<11.9	105	75-122			
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1000	µg/kg	13.6	38.4	883.39	<13.6	114	51-115			
Vinyl chloride (Chloroethene)	836	µg/kg	17.6	38.4	883.39	<17.6	94.6	43-128			

MSD	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2279131-006
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Method: EPA 8260D**Dilution:** 1**Analysis Date:** 10/21/25 06:44**Prep Date:** 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	890	µg/kg	13.6	38.4	883.39	<13.6	101	75-121	9.07	30	
1,1,2,2-Tetrachloroethane	758	µg/kg	13.2	38.4	883.39	<13.2	85.8	79-125	9.46	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1020	µg/kg	19.0	38.4	883.39	<19.0	115	62-129	14.5	30	
1,1,2-Trichloroethane	858	µg/kg	12.8	38.4	883.39	<12.8	97.1	80-123	12.7	30	
1,1-Dichloroethane	841	µg/kg	10.9	38.4	883.39	<10.9	95.2	74-124	12.4	30	
1,1-Dichloroethylene	1050	µg/kg	9.72	38.4	883.39	<9.72	118	68-131	17.3	30	
1,2,3-Trichlorobenzene	858	µg/kg	36.0	128	883.39	<36.0	97.2	60-135	66.8	30	R
1,2,3-Trichloropropane	858	µg/kg	12.6	38.4	883.39	<12.6	97.2	77-121	17.8	30	
1,2,4-Trichlorobenzene	860	µg/kg	34.0	128	883.39	<34.0	97.3	63-130	54.5	30	R
1,2,4-Trimethylbenzene	897	µg/kg	22.0	38.4	883.39	<22.0	102	64-126	30.9	30	R
1,2-Dibromo-3-chloropropane (DBCP)	794	µg/kg	27.6	128	883.39	<27.6	89.8	55-135	53.1	30	R
1,2-Dibromoethane (EDB, Ethylene dibromide)	892	µg/kg	17.6	38.4	883.39	<17.6	101	63-155	10.4	30	
1,2-Dichlorobenzene (o-Dichlorobenzene)	909	µg/kg	11.4	38.4	883.39	<11.4	103	77-122	26.0	30	
1,2-Dichloroethane (Ethylene dichloride)	880	µg/kg	26.3	128	883.39	<26.3	99.6	70-130	12.1	30	
1,2-Dichloropropane	832	µg/kg	22.1	38.4	883.39	<22.1	94.2	71-130	11.6	30	
1,3,5-Trimethylbenzene	945	µg/kg	21.2	128	883.39	<21.2	107	66-130	19.9	30	
1,3-Dichlorobenzene (m-Dichlorobenzene)	853	µg/kg	20.7	38.4	883.39	<20.7	96.6	78-121	10.8	30	
1,3-Dichloropropene	1580	µg/kg	16.8	76.8	1766.8	<16.8	89.5	62-124	14.5	30	
1,4-Dichlorobenzene (p-Dichlorobenzene)	902	µg/kg	24.4	38.4	883.39	<24.4	102	78-122	13.8	30	

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2279131

Work Order: HN2515341
Date Collected: NA
Date Received: NA
Run ID: 3607599

MSD	CLIENT ID: 9615 Cascade SB-1 (1'-2')	Lab ID: QC-2279131-006
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Method: EPA 8260D

Dilution: 1

Analysis Date: 10/21/25 06:44

Prep Date: 10/16/25 12:59

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
2-Butanone (Methyl ethyl ketone, MEK)	1070	µg/kg	71.4	256	883.39	<71.4	121	47-164	38.7	30	R
2-Hexanone	1090	µg/kg	14.9	38.4	883.39	<14.9	123	70-137	27.3	30	
4-Methyl-2-pentanone (MIBK)	990	µg/kg	28.0	38.4	883.39	<28.0	112	57-200	9.88	30	
Acetone	1710	µg/kg	89.0	128	883.39	<89.0	190	52-190	36.6	30	R
Benzene	886	µg/kg	14.5	38.4	883.39	<14.5	100	78-122	8.36	30	
Bromochloromethane	894	µg/kg	15.3	38.4	883.39	<15.3	101	68-130	14.8	30	
Bromodichloromethane	856	µg/kg	16.8	38.4	883.39	<16.8	96.8	75-125	15.7	30	
Bromoform	821	µg/kg	12.6	38.4	883.39	<12.6	93.0	59-120	12.2	30	
Carbon disulfide	1080	µg/kg	15.5	38.4	883.39	<15.5	122	60-163	15.8	30	
Carbon tetrachloride	954	µg/kg	11.7	38.4	883.39	<11.7	108	69-123	9.20	30	
Chlorobenzene	941	µg/kg	9.96	38.4	883.39	<9.96	107	79-120	13.5	30	
Chlorodibromomethane	799	µg/kg	16.8	38.4	883.39	<16.8	90.5	57-123	11.1	30	
Chloroethane (Ethyl chloride)	451	µg/kg	84.0	128	883.39	<84.0	51.0	38-132	17.5	30	
Chloroform	916	µg/kg	11.0	38.4	883.39	<11.0	104	72-122	16.3	30	
cis-1,2-Dichloroethylene	894	µg/kg	19.3	38.4	883.39	<19.3	101	74-125	13.2	30	
cis-1,3-Dichloropropene	796	µg/kg	22.6	38.4	883.39	<22.6	90.1	62-124	17.0	30	
Dichlorodifluoromethane (Freon-12)	924	µg/kg	36.3	128	883.39	<36.3	105	28-137	20.0	30	
Ethylbenzene	973	µg/kg	21.3	38.4	883.39	<21.3	110	75-121	14.6	30	
Isopropylbenzene	924	µg/kg	19.0	38.4	883.39	<19.0	105	74-121	15.9	30	
m+p-Xylene	1920	µg/kg	40.0	76.8	1766.8	<40.0	109	67-129	12.6	30	
Methyl bromide (Bromomethane)	598	µg/kg	57.4	128	883.39	<57.4	67.8	31-169	22.0	30	
Methyl chloride (Chloromethane)	943	µg/kg	82.0	128	883.39	<82.0	107	24-119	15.2	30	
Methyl tert-butyl ether (MTBE)	933	µg/kg	21.9	38.4	883.39	<21.9	106	79-139	19.0	30	
Methylene chloride (Dichloromethane)	931	µg/kg	79.6	320	883.39	<79.6	105	62-135	18.7	30	
o-Xylene	932	µg/kg	11.6	38.4	883.39	<11.6	106	75-120	13.0	30	
Styrene	853	µg/kg	11.9	38.4	883.39	<11.9	96.6	74-126	12.7	30	
Tetrachloroethylene (Perchloroethylene)	1850	µg/kg	18.1	38.4	883.39	<18.1	210	76-128	16.0	30	S
Toluene	975	µg/kg	24.7	38.4	883.39	<24.7	110	76-120	10.0	30	
Total Xylene	2850	µg/kg	11.6	115	2650.2	<11.6	108	67-129	12.7	30	
trans-1,2-Dichloroethylene	833	µg/kg	24.8	38.4	883.39	<24.8	94.3	72-127	11.0	30	
trans-1,3-Dichloropropylene	786	µg/kg	16.8	38.4	883.39	<16.8	89.0	66-120	12.0	30	
Trichloroethene (Trichloroethylene)	1060	µg/kg	13.4	38.4	883.39	<13.4	120	75-122	13.4	30	
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	1060	µg/kg	15.3	38.4	883.39	<15.3	120	51-115	5.64	30	S
Vinyl chloride (Chloroethene)	992	µg/kg	19.9	38.4	883.39	<19.9	112	43-128	17.0	30	

The following samples were analyzed in this batch: HN2515341-001, HN2515341-002, HN2515341-003