

DRAFT

FILL MATERIAL SAMPLING REPORT

**14002 TACOMA STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48205**



**NOVEMBER 4, 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

**14002 TACOMA STREET
DETROIT, WAYNE COUNTY, MICHIGAN 48205**

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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 14002 Tacoma Street, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location, as referenced to nearby roads and major geographic features, is shown on Figure 1, *Site Location Map*. Figure 2, *Site Layout*, depicts the current layout of the Site.

This Executive Summary is provided to summarize the results of the work performed at the Site. The Executive Summary is general in nature and should not be used to replace or be considered apart from the entirety of this report.

The purpose of the work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths, as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. Sample analyses associated with this work included volatile organic compounds (VOCs); semivolatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc (10 Michigan metals); chloride; herbicides; and pesticides. Analytical results were compared to the current generic residential cleanup criteria (GRCC) promulgated under Part 201 of the *Natural Resources and Environmental Protection Act* (NREPA), 1994 P.A. 451, as amended (Part 201).

Pursuant to a request by the COD, MSG has completed sampling and analysis of fill material at the Site, as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. Results of this work, which are subject to the limitations presented in *Appendix A, Limitations*, incorporated by reference herewith, revealed the following:

- The stratigraphy encountered during soil boring advancement of 14002 SB01, 14002 SB02, and 14002 SB03 generally consisted of one to five feet of brownish gray sandy clay with little gravel underlain by brownish gray sand to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores ranged from 0.0 to 6.3 parts per million (ppm). There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, brick and asphalt debris were observed in the soil borings for 14002 SB02 and 14002 SB03.
- Concentrations of arsenic were detected in soil sample 14002 SB03 (5-6') in excess of its respective Part 201 drinking water protection criteria (DWPC), groundwater surface water interface protection criteria (GSIPC), and direct contact criteria (DCC).
- Concentrations of 1254 aroclor, 4,4-DDD, 4,4-DDE, 4,4-DDT, arsenic, barium, cadmium, chlordane, chloride, copper, lead, mercury, selenium, chromium (total), and zinc were detected in the soil sample 14002 SB01 (1-2'), 14002 SB02 (3-4'), and/or 14002 SB03 (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.
- Toxicity Characteristic Leaching Procedure (TCLP) laboratory analytical results revealed that concentrations of arsenic were not in excess of 40 C.F.R. § 261.24 Title 40 - *Protection of Environment, Chapter I - Environmental Protection Agency, Subchapter I - Solid Wastes, Part 261- Identification and Listing of Hazardous Waste, Subpart C - Characteristics of Hazardous Waste*.
- VOCs and SVOCs were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface

water exposure pathway can be considered not applicable. Given that the site is residential, exceedances of DCC may merit further consideration.

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

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

DRAFT

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1.0 INTRODUCTION

The Mannik & Smith Group, Inc. (MSG) was retained by the City of Detroit (COD) to conduct sampling and analysis of fill materials at the property commonly addressed as 14002 Tacoma Street, Detroit, Wayne County, Michigan (hereinafter, the "Site"). The Site location as referenced to nearby roads and major geographic features is presented as *Figure 1, Site Location Map*. *Figure 2, Site Layout*, depicts the current layout of the Site.

The purpose of this work was to assist the COD's blight remediation efforts with the sampling and analysis of fill material at the Site through soil sample collection from pre-determined depths. The scope of work for this investigation was performed in general accordance with the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025. This report presents the findings of this investigation. Soil samples were collected by MSG on August 11, 2025. The findings of this report are valid as of the report date, subject to the limitations presented in *Appendix A, Limitations*.

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

2.0 PURPOSE AND SCOPE OF WORK

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

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

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

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

3.0 SITE ASSESSMENT METHODOLOGY

The following subsections describe the methodologies employed by MSG at the Site during sampling activities that were conducted on August 11, 2025 and October 10, 2025. Daily field activity reports prepared by MSG are presented in *Appendix B, Daily Field Reports*.

3.1 Preliminary Site Work Activities

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

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

3.2 Soil Sample Collection

The sampling plan for the Site was based on the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and modified in the field (if necessary) based on encountered conditions and professional judgment of MSG's field personnel. MSG advanced three (3) soil borings, designated 14002 SB01, 14002 SB02, and 14002 SB03, using a direct push drill rig at the locations depicted on Figure 2. Photographs collected during completion of this work are provided in *Appendix C, Investigation Photographs*.

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

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

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

3.3 Toxicity Characteristic Leaching Procedure (TCLP) Soil Sample Collection

On October 10, 2025, MSG mobilized to the Site to collect an additional soil sample based on request from the COD. Sample location and analyte(s) were based on the laboratory results of the initial soil investigation. MSG personnel advanced one soil boring in the immediate vicinity of the soil boring location that exhibited the highest laboratory result(s) in excess of Part 201 GRCC. Soils were continuously profiled from the ground surface to the termination depth of six feet bgs using a direct push drill rig. These soils were homogenized in a stainless-steel bowl (or equivalent) to produce a single, composite soil sample. The composite soil sample was placed into unpreserved laboratory-supplied sample containers, as appropriate for the associated laboratory analyses.

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

3.4 Decontamination

Before initiation of sampling and drilling activities and between each sampling/soil boring, equipment was cleaned to avoid the potential for cross-contamination during field activities. Pertinent equipment and tooling

were thoroughly cleaned using a phosphate-free soap to remove chemical residue and caked-on soils. After sample collection was completed, each soil boring location was abandoned with the soil cuttings generated at each soil boring location and finished to match the original surface.

3.5 Analytical Methods

A total of three (3) soil samples, designated 14002 SB01 (1-2'), 14002 SB02 (3-4'), and 14002 SB03 (5-6'), and one (1) composite soil sample designated 14002 Tacoma SB03 TCLP were collected as part of this investigation. These soil samples were submitted to ALS Environmental Laboratory (ALS) in Holland, Michigan for laboratory analysis of the following parameters per the requested parameters as described in the COD's *Sampling and Analysis of Fill Materials Scope of Services*, dated June 17, 2025, and individual TCLP analysis:

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

3.6 Quality Assurance/Quality Control

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

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

4.0 SUMMARY OF RESULTS

The following subsections include a discussion of the soil samples that were collected from the Site on August 11, 2025 and October 10, 2025.

4.1 Site Geology and Hydrogeology

The stratigraphy encountered during soil boring advancement of 14002 SB01, 14002 SB02, and 14002 SB03 generally consisted of one to five feet of brownish gray sandy clay with little gravel underlain by brownish gray sand to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores ranged from 0.0 to 6.3 parts per million (ppm). There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, brick and asphalt debris were observed in the soil borings for 14002 SB02 and 14002 SB03.

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

4.2 Soil Sample Analytical Results

Three (3) soil samples, designated 14002 SB01 (1-2'), 14002 SB02 (3-4'), and 14002 SB03 (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 Reports and Chain of Custody Forms*.

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

Chemical	CAS Number	Soil Sample (feet bgs)	Part 201 GRCC Exceeded / Concentration (µg/kg ¹)	Maximum Detected Concentration (µg/kg)
Arsenic	7440-38-2	14002 SB03 (5-6')	² DWPC/4,600 ³ GSIPC/4,600 ⁴ DCC/7,600	8,390

¹µg/kg – Micrograms per Kilogram;

²DWPC – Drinking Water Protection Criteria

³GSIPC – Groundwater Surface Water Interface Protection Criteria

⁴DCC – Direct Contact Criteria

To support waste characterization and potential disposal decisions, the laboratory was requested to include the method detection limits in an amended laboratory analytical data report. A copy of the amended laboratory analytical data report is included in *Appendix F, Amended Laboratory Analytical Data Report*.

4.3 TCLP Analytical Results

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

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

4.4 Exposure Evaluation

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

Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the drinking water (DW) exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Given that the site is residential, exceedances of DCC may merit further consideration.

5.0 FINDINGS

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

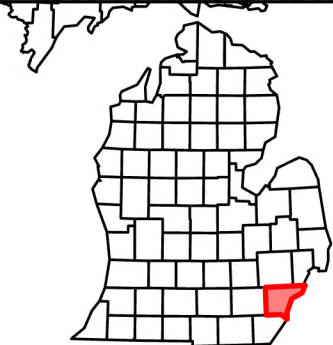
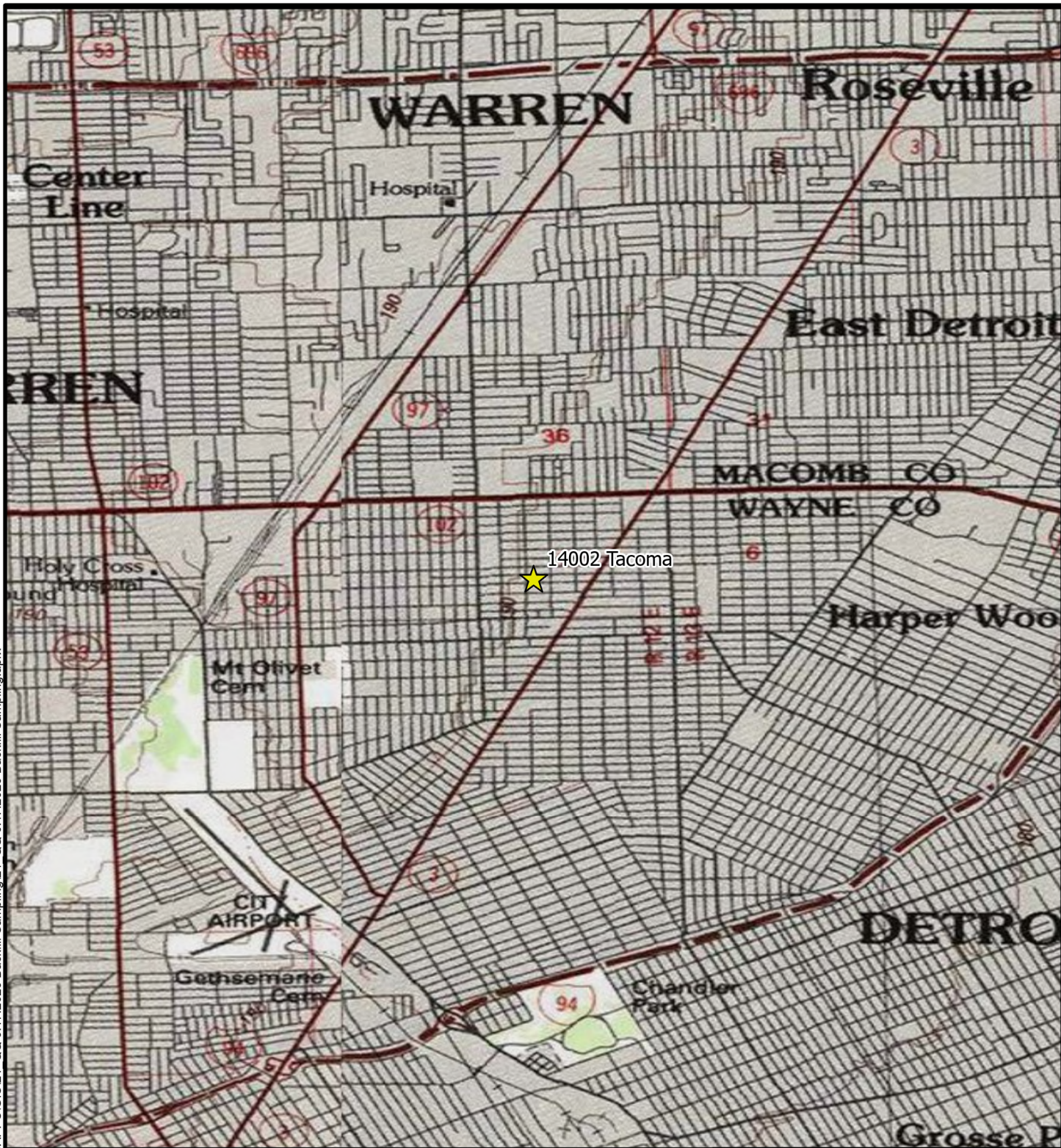
- The stratigraphy encountered during soil boring advancement of 14002 SB01, 14002 SB02, and 14002 SB03 generally consisted of one to five feet of brownish gray sandy clay with little gravel underlain by brownish gray sand to six feet bgs, the maximum depth explored for this investigation. Field PID readings of the recovered soil cores ranged from 0.0 to 6.3 ppm. There were no visual (staining) and/or olfactory (e.g., petroleum-like odors) indications of contamination observed during soil sampling activities; however, brick and asphalt debris were observed in the soil borings for 14002 SB02 and 14002 SB03.
- Concentrations of arsenic were detected in soil sample 14002 SB03 (5-6') in excess of its respective Part 201 DWPC, GSIPC, and DCC.
- Concentrations of 1254 aroclor, 4,4-DDD, 4,4-DDE, 4,4-DDT, arsenic, barium, cadmium, chlordane, chloride, copper, lead, mercury, selenium, chromium (Total), and zinc were detected in the soil sample 14002 SB01 (1-2), 14002 SB02 (3-4), and/or 14002 SB03 (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.
- TCLP laboratory analytical results revealed that concentrations of arsenic were not in excess of *40 C.F.R. § 261.24 Title 40 - Protection of Environment, Chapter I - Environmental Protection Agency, Subchapter I - Solid Wastes, Part 261- Identification and Listing of Hazardous Waste, Subpart C - Characteristics of Hazardous Waste*.
- VOCs and SVOCs were not detected above laboratory method detection reporting limits.
- Groundwater was not encountered during soil boring activities completed as part of this investigation. Groundwater is not utilized as drinking water at or near the Site, as municipal water is supplied via the COD, and the general geology of the Site and surrounding area consists of fill materials underlain by clay overlying bedrock. Therefore, the DW exposure pathway can be considered not applicable. Additionally, groundwater was not encountered during this investigation to transport contaminants to either storm sewers or surface water and the clay layer also inhibits migration. Therefore, the groundwater surface water exposure pathway can be considered not applicable. Given that the site is residential, exceedances of DCC may merit further consideration.

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

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

FIGURES





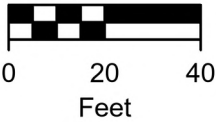
★ Site Location



FIGURE 1
SITE LOCATION

14002 Tacoma, Detroit, MI

DATE 9/23/2025	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

14002 Tacoma, Detroit, MI

DATE 9/22/2025	DRAWN BY JWW	DESIGNED BY KRB	PROJECT NO. DETR0060
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TABLES



Table 1
Soil Sample Analytical Detection Summary

Detroit Backfill Sampling
14002 Tacoma, Detroit, Michigan

SOIL: Part 201/213 Generic Residential Cleanup Criteria Revised October 12, 2023 Units: µg/kg			Volatile Organic Compounds (VOCs)	Semivolatile Organic Compounds (SVOCs)	Michigan 10 Metals										Pesticides/Herbicides				Polychlorinated Biphenyls (PCBs)	Inorganic Anions/Ions		
					Arsenic	Barium (B)	Cadmium (B)	Chromium (Total)	Copper (B)	Lead (B)	Mercury (B,Z)	Selenium (B)	Silver (B)	Zinc (B)	4,4'-DDD	4,4'-DDE	4,4'-DDT	Chlordane	Aroclor 1254	Chloride		
CAS Number					7440-38-2	7440-39-3	7440-43-9	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7782-49-2	7440-22-4	7440-66-6	72548	72559	50-29-3	57749	11097-69-1	16887006		
Statewide Default Background Levels					5,800	75,000	1,200	18,000	32,000	21,000	130	410	1,000	47,000	NA	NA	NA	NA	NA	NA		
Drinking Water Protection Criteria (DWPC)					4,600	1.3E+06	6,000	30,000	5.8E+06	7.0E+05	1,700	4,000	4,500	2.4E+06	NLL	NLL	NLL	NLL	NA	5.00E+06		
Groundwater Surface Water Interface Protection Criteria (GSIPC)					4,600	(G)	(G,X)	3,300	(G)	(G,X)	50 (M); 1.2	400	100 (M); 27	(G)	NLV	NLL	NLL	NLL	NA	(X)		
Soil Volatilization to Indoor Air Inhalation (SVIIC)					NLV	NLV	NLV	NLV	NLV	NLV	48,000	NLV	NLV	NLV	NLV	NLV	NLV	1.10E+06	NA	NLV		
Soil Volatilization to Indoor Air Pathway (SVIAP)					NA	NA	NA	--	NA	NA	22 (M)	NA	NA	NA	NA	NA	--	NA	--	--		
Infinite Source Volatile Soil Inhalation Criteria (VSIC)					NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	NLV	NLV	NLV	1.20E+06	NA	NLV		
Finite Source Volatile Soil Inhalation Criteria (5 m) (VSIC 5m)					NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	NLV	NLV	NLV	1.20E+06	NA	NLV		
Finite Source Volatile Soil Inhalation Criteria (2 m) (VSIC 2m)					NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	NLV	NLV	NLV	1.20E+06	NA	NLV		
Particulate Soil Inhalation Criteria (PSIC)					7.2E+05	3.3E+08	1.7E+06	2.6E+05	1.3E+08	1.0E+08	2.0E+07	1.3E+08	6.7E+06	ID	4.4E+07	3.2E+07	3.20E+07	3.10E+07	NA	ID		
Direct Contact Criteria (DCC)					7,600	3.7E+07	5.5E+05	2.5E+06	2.0E+07	4.0E+05	1.6E+05	2.6E+06	2.5E+06	1.7E+08	9.5E+04	45,000	57,000	31,000	NA	5.0E+5 (F)		
Soil Saturation Concentration Screening Levels (C _{sat})					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Recommended Interim Action Screening Level (RIASL)					NA	NA	NA	NA	NA	NA	2.7E-02	NA	NA	NA	NA	NA	--	NA	NA	--		
SAMPLE ID		DEPTH	SAMPLE DATE																			
14002 SB01		1-2	8/11/2025	ND	ND	4,860	70,000	140	12,700	11,400	19,900	21.4	349	<340	42,200	4.3	43	3.9	14.3	<55	12,400	
14002 SB02		3-4	8/11/2025	ND	ND	5,150	58,600	<130	12,200	13,000	11,100	<20.9	365	<326	36,700	<2.9	31	<2.9	<14	<57	16,400	
14002 SB03		5-6	8/11/2025	ND	ND	8,390	51,600	<135	11,400	11,500	7,890	<20.8	<337	<337	32,200	<2.8	<2.8	<2.8	<14	62	<11200	

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

Table 2
TCLP Analytical Detection Summary

Detroit Backfill Sampling
14002 Tacoma, Detroit, Michigan

40 C.F.R. § 261.24 Code of Federal Regulations Title 40 - Protection of Environment Chapter I - Environmental Protection Agency Subchapter I - Solid Wastes Part 261- Identification and Listing of Hazardous Waste Subpart C - Characteristics of Hazardous Waste <i>Units: mg/L</i>		TCLP Metals
Maximum Concentration of Contaminants for the Toxicity Characteristic		5.00
SAMPLE ID	SAMPLE DATE	
14002 Tacoma SB03 TCLP	10/10/2025	<0.00190

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 REPORTS



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

Date: 08/11/2025	Day: Monday	Temp: 80° F	(AM) N/A	(PM)
MSG Personnel: SRK, BJ, BM		Cloud Cover: 0%	(AM) N/A	(PM)
		Precip.: N/A	(AM) N/A	(PM)
Personnel: MSG				
MSG Hours On-Site: ~ 1 hours				
Contractors Information				
Contractor: MSG		No. Men and Type: 3; Operator/Helper/Geologist	Equipment Type: Geoprobe 7822DT	
Summary of Work Performed:				
- Advanced three (3) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs) - Collected soil samples from each soil boring (from the interval with the greatest potential to be impacted based on field indicators).				
Field Notes:				
1012 – SRK, BJ, and BM onsite (14002 Tacoma Street) 1014 – Unloaded equipment and marked boring locations 1016 – Began drilling SB01 1018 – Finished drilling SB01 1020 – Began drilling SB02 1024 – Finished drilling SB02 1025 – Sampled 14002 SB01 (1-2') 1026 – Began drilling SB03 1028 – Finished drilling SB03 1033 – Sampled 14002 SB02 (3-4') 1043 – Sampled 14002 SB03 (5-6') 1050 – Packed up equipment 1055 – MSG off site				

Supporting Documentation					
Photograph Taken	Yes ☒	No ☐	Samples Collected	Yes ☒	No ☐
Photo Log Attached	☒	☐	COC Attached	☒	☐
Boring/MW Logs	☒	☐	Field Note Book Taken	☒	☐
Problem Identification and Corrective Measures					
N/A					
Resolved?	Yes ☐	No ☐			

**DAILY FIELD REPORT**

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

Report No.: 2
Job No.: DETR0060

Date: 10/10/2025	Day: Friday	Temp: 40 ° F	(AM)	N/A	(PM)
MSG Personnel: SRK, JF		Cloud Cover: 0%	(AM)	N/A	(PM)
		Precip.: N/A	(AM)	N/A	(PM)
Personnel: MSG					
MSG Hours On-Site: ~ 0.5 hours					
Contractors Information					
Contractor: MSG		No. Men and Type: 2; Operator/Geologist		Equipment Type: Geoprobe 7822DT	
Summary of Work Performed:					
- Advanced one (1) onsite soil borings to a maximum depth of 6 feet below ground surface (bgs) - Collected TCLP of fill material from soil boring (composite sample of from zero to 6 feet bgs).					
Field Notes:					
0918 – MSG (SRK, JF) onsite (14002 Tacoma) 0920 – Attempted to locate previous boring locations. Marked out new boring location. 0926 – Began drilling SB03 TCLP 0928 – Finished drilling SB03 TCLP 0932 – Sampled 14002 Tacoma SB03 TCLP 0940 – Collected GPS points 0948 – Packed up equipment 0953 – MSG off site					

Supporting Documentation								
Photograph Taken	Yes ☒	No ☐	Samples Collected	Yes ☒	No ☐	Boring/MW Logs	Yes ☒	No ☐
Photo Log Attached	Yes ☒	No ☐	COC Attached	Yes ☒	No ☐	Field Note Book Taken	Yes ☒	No ☐
Problem Identification and Corrective Measures								
N/A								
Resolved? Yes ☐ No ☐								

APPENDIX C

INVESTIGATION PHOTOGRAPHS





Photo 1: View of Site at the time of initial soil boring activities



Photo 2: Viewing 14002 SB01 Drilling, Facing Southwest.



Photo 3: Viewing 14002 SB01 Soils, Facing West.

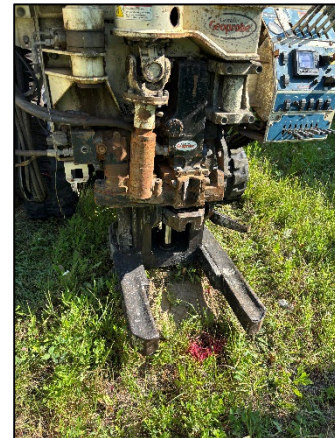


Photo 4: Viewing 14002 SB02 Drilling, Facing West.



Photo 5: Viewing 14002 SB02 Soils, Facing West.



Photo 6: Viewing 14002 SB03 Drilling, Facing West.



Photo 7: Viewing 14002 SB03 Soils, Facing West.



Photo 8: View of Site at the time of TCLP soil boring activities



Photo 9: View of TCLP soil boring location



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

APPENDIX D

SOIL BORING LOGS





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

BORING ID: SB01

PAGE 1 OF 1

CLIENT <u>City of Detroit</u>	PROJECT NAME <u>14002 Tacoma</u>
PROJECT NUMBER <u>DETR0060</u>	PROJECT LOCATION <u>14002 Tacoma St, Detroit, Michigan</u>
DATE STARTED <u>8/11/25</u> COMPLETED <u>8/11/25</u>	BORING DIAMETER: <u>3.25 inches</u>
DRILLING CONTRACTOR <u>MSG</u>	SURVEY COORDINATES: <u>N/A</u>
DRILLING METHOD <u>Direct Push</u>	GROUND SURFACE ELEV.: <u>N/A</u>
LOGGED BY <u>SRK</u> CHECKED BY <u>PDH</u>	GROUND WATER ENCOUNTERED DURING DRILLING: <u>Not Encountered</u>
NOTES	WATER LEVEL AFTER DRILLING: <u>N/A</u>

ENV BORING LOG (PID) - GINT STD US LAB.GDT - 8/20/25 14:51 - W:\PROJECTS\PROJECTS A-EDETR0060\ADMIN\23_QQ 7.25.2025 BACKFILL SAMPLING (48 SITES)\14002 TACOMA\BORING LOGS\DETR0060_14002.GPJ

DEPTH (FEET)	SAMPLE TYPE NUMBER	RECOVERY (FEET)	GRAPHIC LOG	DEPTH (FEET)	MATERIAL DESCRIPTION	PID (ppm)	LABORATORY SAMPLE	REMARKS
0								
					Brown and Gray Sandy CLAY, some gravel, dry	4.2		Collected soil sample 14002 SB01 (1-2) at 10:25
						4.3		
						0.8		
						6.3		
						0.1		
5				5.0				
				5.5	Brown SAND, moist			
				6.0	Brown and Gray Sandy CLAY, dry	0.0		
					Bottom of borehole at 6.0 feet.			



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

BORING ID: SB02

PAGE 1 OF 1

CLIENT	City of Detroit	PROJECT NAME	14002 Tacoma
PROJECT NUMBER	DETR0060	PROJECT LOCATION	14002 Tacoma St, Detroit, Michigan
DATE STARTED	8/11/25	COMPLETED	8/11/25
DRILLING CONTRACTOR	MSG	BORING DIAMETER:	3.25 inches
DRILLING METHOD	Direct Push	SURVEY COORDINATES:	N/A
LOGGED BY	SRK	CHECKED BY	PDH
NOTES	GROUND WATER ENCOUNTERED DURING DRILLING: Not Encountered		
		WATER LEVEL AFTER DRILLING: N/A	

ENV BORING LOG (PID) - GINT STD US LAB.GDT - 8/20/25 14:51 - W:\PROJECTS\PROJECTS A-EDETR0060\ADMIN\23_QQ 7.25 2025 BACKFILL SAMPLING (48 SITES)\14002 TACOMA\BORING LOGS\DETR0060_14002.GPJ

DEPTH (FEET)	SAMPLE TYPE NUMBER	RECOVERY (FEET)	GRAPHIC LOG	DEPTH (FEET)	MATERIAL DESCRIPTION	PID (ppm)	LABORATORY SAMPLE	REMARKS
0								
					Brown and Gray Sandy CLAY, some gravel	0.2		
						0.6		
	MC 1	3.5				0.3		
						3.1		Collected soil sample 14002 SB02 (3-4) at 10:33
5					Some brick debris at 5 feet bgs	0.8		
				6.0		0.2		
					Bottom of borehole at 6.0 feet.			



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

BORING ID: SB03

PAGE 1 OF 1

CLIENT <u>City of Detroit</u>	PROJECT NAME <u>14002 Tacoma</u>
PROJECT NUMBER <u>DETR0060</u>	PROJECT LOCATION <u>14002 Tacoma St, Detroit, Michigan</u>
DATE STARTED <u>8/11/25</u> COMPLETED <u>8/11/25</u>	BORING DIAMETER: <u>3.25 inches</u>
DRILLING CONTRACTOR <u>MSG</u>	SURVEY COORDINATES: <u>N/A</u>
DRILLING METHOD <u>Direct Push</u>	GROUND SURFACE ELEV.: <u>N/A</u>
LOGGED BY <u>SRK</u> CHECKED BY <u>PDH</u>	GROUND WATER ENCOUNTERED DURING DRILLING: <u>Not Encountered</u>
NOTES	WATER LEVEL AFTER DRILLING: <u>N/A</u>

ENV BORING LOG (PID) - GINT STD US LAB.GDT - 8/20/25 14:51 - W:\PROJECTS\PROJECTS A-EDETR0060\ADMIN\23_QQ 7.25.2025 BACKFILL SAMPLING (48 SITES)\14002 TACOMA\BORING LOGS\DETR0060_14002.GPJ

DEPTH (FEET)	SAMPLE TYPE NUMBER	RECOVERY (FEET)	GRAPHIC LOG	DEPTH (FEET)	MATERIAL DESCRIPTION	PID (ppm)	LABORATORY SAMPLE	REMARKS
0								
					Brown and Gray Sandy CLAY, some gravel	0.0		
						0.0		
					Some asphalt debris at 3 feet bgs	0.3		
					Some brick debris at 3.5 feet bgs	0.1		
5	MC 1	3.5				0.0		
				6.0		0.0		
					Bottom of borehole at 6.0 feet.	0.1		
								Collected soil sample 14002 SB03 (5-6) at 10:43

APPENDIX E
LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS





right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order

HN2511277

Client

The Mannik & Smith Group, Inc.

Project

14002_Tacoma

Project Date

August 12, 2025

Reporting Contact

Ryan Montri



right solutions.
right partner.

September 02, 2025

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

Work Order: **HN2511277**

Re: **14002_Tacoma**

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

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

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

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

Bill Carey
/S/ **BILL CAREY**
Project Manager



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma

Work Order: HN2511277
Date Received: 12-Aug-2025

CASE NARRATIVE

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

Sample Receipt

3 soil/solid samples were received for analysis at ALS Environmental on 12-Aug-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Organics

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

Run ID: 3410072

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): see qc

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

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

Samples have low surrogate recovery. Control charting demonstrated consistent recovery below control limits. Acceptable surrogate limit lowered to 72% recovery.

Run ID: 3403304

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

Metals

EPA 6020B-3050B-S

Run ID: 3405977

The MS recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ba, Zn batch 2162042

The MSD recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ba, Zn batch 2162042

Inorganics

EPA 9056A-S (High)

Run ID: 3400098

Matrix spike duplicate value was outside upper limit of calibration. Processed at equivalent dilution level as the parent. Chloride

The LCS recovery was above the upper control limit. The sample results for this batch may be biased high for this analyte: Fluoride

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

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

Matrix spike value was outside upper limit of calibration. Processed at equivalent dilution level as the parent. Chloride

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: 14002 SB01 (1-2)	Lab ID: HN2511277-001
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	4.86		0.340	mg/kg	EPA 6020B
Barium	70.0		0.340	mg/kg	EPA 6020B
Cadmium	0.140		0.136	mg/kg	EPA 6020B
Chloride	12.4		11.1	mg/kg	EPA 9056A
Chromium	12.7		0.340	mg/kg	EPA 6020B
Copper	11.4		0.340	mg/kg	EPA 6020B
Lead	19.9		0.340	mg/kg	EPA 6020B
Mercury	0.0214		0.0208	mg/kg	EPA 7471B
Percent Moisture	10.8		0.1	%	EPA 3550C
Selenium	0.349		0.340	mg/kg	EPA 6020B
Subcontract Analysis	See attached.			-	EPA 8151A
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	42.2		0.681	mg/kg	EPA 6020B

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	5.15		0.326	mg/kg	EPA 6020B
Barium	58.6		0.326	mg/kg	EPA 6020B
Chloride	16.4		11.5	mg/kg	EPA 9056A
Chromium	12.2		0.326	mg/kg	EPA 6020B
Copper	13.0		0.326	mg/kg	EPA 6020B
Lead	11.1		0.326	mg/kg	EPA 6020B
Percent Moisture	14.2		0.1	%	EPA 3550C
Selenium	0.365		0.326	mg/kg	EPA 6020B
Subcontract Analysis	See attached.			-	EPA 8151A
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	36.7		0.652	mg/kg	EPA 6020B

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	8.39		0.337	mg/kg	EPA 6020B
Barium	51.6		0.337	mg/kg	EPA 6020B
Chromium	11.4		0.337	mg/kg	EPA 6020B
Copper	11.5		0.337	mg/kg	EPA 6020B
Lead	7.89		0.337	mg/kg	EPA 6020B
Percent Moisture	11.6		0.1	%	EPA 3550C
Subcontract Analysis	See attached.			-	EPA 8151A

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: 14002 SB03 (5-6)

Lab ID: HN2511277-003

Analyte	Results	Flag	MRL	Units	Method
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	32.2		0.673	mg/kg	EPA 6020B

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Workorder: HN2511277

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2511277-001	14002 SB01 (1-2)	SOIL/SOLID	08/11/25 10:25	08/12/25 08:00
HN2511277-002	14002 SB02 (3-4)	SOIL/SOLID	08/11/25 10:33	08/12/25 08:00
HN2511277-003	14002 SB03 (5-6)	SOIL/SOLID	08/11/25 10:43	08/12/25 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	14002_Tacoma			A	VOCs (U.S. EPA Method 8260C (or Method 8260))										
Work Order		Project Number	DETR0060			B	SVOCs (U.S. EPA Method 8270D (or Method 8270))										
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group			C	PCBs (U.S. EPA Method 8082)										
Send Report To	Ryan Montri	Invoice Attn.				D	Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)										
Address	2365 Haggerty Rd South Suite 100	Address	2365 Haggerty Rd South Suite 100			E	Chorides (U.S. EPA Method 9056A)										
						F	Pesticides (U.S. EPA Method 8081B (or Method 8081))										
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188			G	Herbicides (U.S. EPA Method 8151A (or Method 8151))										
Phone	734-397-3100	Phone	734-397-3100			H											
Fax		Fax				I											
e-Mail Address	RMontri@manniksmithgroup.com	e-Mail Address				J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	14002 SB01 (1-2)	8/11/25	10:25	Soil	>	3	X	X	X	X	X	X	X				
2	14002 SB02 (3-4)	8/11/25	10:33	Soil	>	3	X	X	X	X	X	X	X				
3	14002 SB03 (5-6)	8/11/25	10:43	Soil	>	3	X	X	X	X	X	X	X				
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign <i>Shannon Kaczmarek</i>		Shipment Method:		Required Turnaround Time: ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour			Results Due Date:		
Relinquished by: <i>Shannon Kaczmarek</i>		Date: 8/11/25	Time: 12:45	Received by: <i>Colin</i>			Notes: Quote# HN-061825-M&S-MA		
Relinquished by: <i>[Signature]</i>		Date: 8/11/25	Time: 1700	Received by (Laboratory): <i>GS</i>			Cooler Temp. 5.6°C		
Logged by (Laboratory): <i>BC</i>		Date: 8/12/25	Time: 13:38	Checked by (Laboratory):			QC Package: (Check Box Below)		
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035							Level II: Standard QC		TRRP-Checklist
							Level III: Std QC + Raw Data		TRRP Level IV
							Level IV: SW846 CLP-Like		
							Other:		

Environmental Division
Holland
Work Order Reference
HN2511277

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: PC

Date/Time: 8/12/25 0800

Carrier Name: QS

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

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

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

Chain of Custody present? Yes / No

COC signed when relinquished and received? Yes / No

COC agrees with sample labels? Yes / No

Samples in proper container/bottle? Yes / No

Sample containers intact? Yes / No

Sufficient sample volume for indicated test? Yes / No

All samples received within holding time? Yes / No

Container/Temp Blank temperature in compliance? Yes / No

Temperature(s) (°C): 5.6°C

Thermometer(s): ±R6

Sample(s) received on ice? Yes / No

Matrix/Matrices: Soil

Cooler(s)/Kit(s): _____

Date/Time sample(s) sent to storage: 8/12/25 13:45

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

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

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

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

pH adjusted by: _____

Login Notes:

REPORT QUALIFIERS AND DEFINITIONS

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

Holland Laboratory 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: 14002_Tacoma

Work Order: HN2511277

Sample Name: 14002 SB01 (1-2)
Laboratory Code: HN2511277-001
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	001-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		001-AC	2162042		3405977	Stephanie Pierson
EPA 7471B		001-AC	2162145		3405106	Maxx Richey
EPA 8081B		001-AD			3456030	Bill Carey
EPA 8082A		001-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	001-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		001-AA	2166362		3410072	John Garvale
EPA 8260D		001-AA	2156052		3403304	John Garvale
EPA 8260D		001-AA	2156052		3404823	John Garvale
EPA 8270E		001-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	001-AC	2158565	Sage Hansen	3400098	Sage Hansen

Sample Name: 14002 SB02 (3-4)
Laboratory Code: HN2511277-002
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	002-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		002-AC	2162042		3405977	Stephanie Pierson
EPA 7471B		002-AC	2162145		3405106	Maxx Richey
EPA 8081B		002-AD			3456030	Bill Carey
EPA 8082A		002-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	002-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		002-AA	2166362		3410072	John Garvale
EPA 8260D		002-AA	2156052		3403304	John Garvale
EPA 8260D		002-AA	2156052		3404823	John Garvale
EPA 8270E		002-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	002-AC	2158565	Sage Hansen	3400098	Sage Hansen

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma

Work Order: HN2511277

Sample Name: 14002 SB03 (5-6)
Laboratory Code: HN2511277-003
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	003-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		003-AC	2162042		3405977	Stephanie Pierson
EPA 7471B		003-AC	2162145		3405106	Maxx Richey
EPA 8081B		003-AD			3456030	Bill Carey
EPA 8082A		003-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	003-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		003-AA	2166362		3410072	John Garvale
EPA 8260D		003-AA	2156052		3403304	John Garvale
EPA 8260D		003-AA	2156052		3404823	John Garvale
EPA 8270E		003-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	003-AC	2158565	Sage Hansen	3400098	Sage Hansen

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2)	Lab ID: HN2511277-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	10.8		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	12.4		mg/kg	11.1	1	08/14/25 17:03	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	4.86		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Barium	EPA 6020B	70.0		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Cadmium	EPA 6020B	0.140		mg/kg	0.136	1	08/16/25 03:35	08/15/25 08:37
Chromium	EPA 6020B	12.7		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Copper	EPA 6020B	11.4		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Lead	EPA 6020B	19.9		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Selenium	EPA 6020B	0.349		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Zinc	EPA 6020B	42.2		mg/kg	0.681	1	08/16/25 03:35	08/15/25 08:37
Mercury	EPA 7471B	0.0214		mg/kg	0.0208	1	08/18/25 10:42	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2) **Lab ID: HN2511277-001**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	249	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Ethylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2)	Lab ID: HN2511277-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
m+p-Xylene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	311	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	311	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	112	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	95.2		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	78.8	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	98.2		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	14.2		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	16.4		mg/kg	11.5	1	08/14/25 17:13	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	5.15		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Barium	EPA 6020B	58.6		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Cadmium	EPA 6020B	ND		mg/kg	0.130	1	08/16/25 03:37	08/15/25 08:37
Chromium	EPA 6020B	12.2		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Copper	EPA 6020B	13.0		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Lead	EPA 6020B	11.1		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Selenium	EPA 6020B	0.365		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Zinc	EPA 6020B	36.7		mg/kg	0.652	1	08/16/25 03:37	08/15/25 08:37
Mercury	EPA 7471B	ND		mg/kg	0.0209	1	08/18/25 10:49	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4) **Lab ID: HN2511277-002**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	270	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Ethylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4) **Lab ID: HN2511277-002**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
m+p-Xylene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	338	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	338	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	122	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	94.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	99.0		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	78.0	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	97.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	11.6		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	ND		mg/kg	11.2	1	08/14/25 17:23	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	8.39		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Barium	EPA 6020B	51.6		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Cadmium	EPA 6020B	ND		mg/kg	0.135	1	08/16/25 03:39	08/15/25 08:37
Chromium	EPA 6020B	11.4		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Copper	EPA 6020B	11.5		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Lead	EPA 6020B	7.89		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Selenium	EPA 6020B	ND		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Zinc	EPA 6020B	32.2		mg/kg	0.673	1	08/16/25 03:39	08/15/25 08:37
Mercury	EPA 7471B	ND		mg/kg	0.0208	1	08/18/25 10:51	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6) **Lab ID: HN2511277-003**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	258	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Ethylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
m+p-Xylene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	322	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	322	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	116	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	96.8		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	98.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	79.6	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	98.9		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29



September 02, 2025

Service Request No:R2510152

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

Laboratory Results for: 14002_Tacoma

Dear Bill,

Enclosed are the results of the sample(s) submitted to our laboratory August 20, 2025
For your reference, these analyses have been assigned our service request number **R2510152**.

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Christopher Leavy
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE

+1 585 288 5380

FAX

+1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Received: 08/20/2025

CASE NARRATIVE

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

Sample Receipt:

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

Semivolatiles by GC/MS:

Method 8270E, 08/25/2025: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 891027: The reporting limit is elevated for one or more analytes. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and viscous, which indicated the need to perform a dilution prior to injection into the instrument. The result(s) are flagged to indicate the matrix interference.

Semivolatile GC:

Method 8081B, 08/25/2025: The control limits were exceeded for analytes in the Continuing Calibration Verification (CCV). The QC failure was most likely due to the composition of the sample(s) immediately preceding the failing CCV. In order to protect the integrity of the instrument, no further corrective action was taken. Results should be considered estimated.

Method 8082A, 08/25/2025: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

General Chemistry:

No significant anomalies were noted with this analysis.

Total solid results provided from parent lab.

Report revised to report to MRL on 9/2/2025.

Approved by  _____

Date 08/28/2025



SAMPLE DETECTION SUMMARY

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

CLIENT ID: 14002 SB01 (1-2)	Lab ID: R2510152-001
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Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDD	4.3			2.9	ug/Kg	8081B
4,4'-DDE	43			2.9	ug/Kg	8081B
4,4'-DDT	3.9			2.9	ug/Kg	8081B
alpha-Chlordane	7.7			2.9	ug/Kg	8081B
gamma-Chlordane	6.6			2.9	ug/Kg	8081B
Total Solids	89.2				Percent	ALS SOP

CLIENT ID: 14002 SB02 (3-4)	Lab ID: R2510152-002
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Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDE	31			2.9	ug/Kg	8081B
Total Solids	85.8				Percent	ALS SOP

CLIENT ID: 14002 SB03 (5-6)	Lab ID: R2510152-003
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aroclor 1254	62			55	ug/Kg	8082A
Total Solids	88.4				Percent	ALS SOP



Sample Receipt Information

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: ALS Environmental - US
Project: 14002_Tacoma

Service Request:R2510152

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2510152-001	14002 SB01 (1-2)	8/11/2025	1025
R2510152-002	14002 SB02 (3-4)	8/11/2025	1033
R2510152-003	14002 SB03 (5-6)	8/11/2025	1043

ALS Group USA, Corp.3352 128th Ave Holland Michigan 49424 United States
T+1 616 399 6070 | Fright solutions.
right partner.**Subcontract Chain of Custody****SAMPLING STATE:****COC ID: HN2511277****Subcontract To:**Rochester - Environmental TEL: +1 585 288 5380
1565 Jefferson Road, Building 300, Suite 360 FAX:
Rochester New York 14623

Due Date: 08/21/2025

Analysis Report Format: ALS Standard – Level II

Electronic Data Deliverable:

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order		Project Name	14002_Tacoma	A	EPA 8081B-3546-S (INT SUB)										
Work Order	HN2511277			B	EPA 8082A-3546-S (INT SUB)										
Company Name	Holland - Environmental	Bill To Company	Holland - Environmental	C	EPA 8151A-S (INT SUB)										
Send Report To	Bill Carey	Inv Attn	Accounts Payable	D	EPA 8270E-TCL-3546-S (INT SUB)										
Address	3352 128th Ave	Address	3352 128th Ave	E											
				F											
City/State/Zip	Holland Michigan 49424	City/State/Zip	Holland Michigan 49424	G											
Phone	+1 616 399 6070	Phone	+1 616 399 6070	H											
Fax		Fax		I											
Email Address	bill.carey@alsglobal.com			J											
ALS Sample ID		Client Sample ID	Matrix	Collection Date	Bottle	A	B	C	D	E	F	G	H	I	J
HN2511277-001		14002 SB01 (1-2)	Soil/Solid	08/11/2025 10:25	001-AD	x	x	x	x						
HN2511277-002		14002 SB02 (3-4)	Soil/Solid	08/11/2025 10:33	002-AD	x	x	x	x						
HN2511277-003		14002 SB03 (5-6)	Soil/Solid	08/11/2025 10:43	003-AD	x	x	x	x						

Relinquished by	Date Time	Received by	Date Time	Cooler ID's
Relinquished by	Date Time	Received by	Date Time	
Sampled by				

R2510152ALS Environmental - Holland
14002_Tacoma**5**

ALS Group USA, Corp.

3352 128th Ave Holland Michigan 49424 United States
T+1 616 399 6070 | F



right solutions.
right partner.

Purchase Order

PO: HN2511277**Subcontractor:**

Rochester - Environmental
1565 Jefferson Road, Building 300, Suite 360
Rochester New York 14623

Phone: +1 585 288 5380**CUSTOMER
INFORMATION:**

Company: Holland - Environmental
Contact: Bill Carey
Address: 3352 128th Ave
Phone: +1 616 399 6070
Email: bill.carey@alsglobal.com

**INVOICE
INFORMATION:**

Company: Holland - Environmental
Contact: Accounts Payable
Address: 3352 128th Ave
Phone: +1 616 399 6070

Sales Item	QTY	Unit Price	Total Price
EPA 8081B-3548-S (INT SUB)	3.00	\$76.50	\$229.50
EPA 8082A-3548-S (INT SUB)	3.00	\$59.50	\$178.50
EPA 8151A-S (INT SUB)	3.00	\$127.50	\$382.50
EPA 8270E-TCL-3548-S (INT SUB) ^c	3.00	\$114.75	\$344.25

Comments:



R2510152
ALS Environmental - Holland
14002_Tacoma

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Cooler Receipt and Preservation Check Form



Project/Client _____ Folder Number _____

Cooler received on 8/20/25 by: RM

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>
2	Custody papers properly completed (ink, signed)?	Y <u>(N)</u>
3	Did all bottles arrive in good condition (unbroken)?	Y <u>(N)</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	Y <u>(N)</u>

5a	Did VOA vials have sig* bubbles?	Y N <u>(NA)</u>
5b	Sig* bubbles: Alk? Y N <u>(NA)</u> Sulfide? Y N <u>(NA)</u>	
6	Where did the bottles originate?	ALS/ROC <u>(CLIENT)</u>
7	Soil VOA received as: Bulk Encore 5035set	<u>(NA)</u>

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

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

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by RM on 8/20 at 12:16
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/20/25 Time: 14:58 by: MM

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

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 062325-152

Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: MM *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

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REPORT QUALIFIERS AND DEFINITIONS

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

Rochester Lab ID # for State Accreditations¹



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

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

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

ALS Laboratory Group

Acronyms

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

Client: ALS Environmental - US
Project: 14002_Tacoma

Service Request: R2510152

Non-Certified Analytes

Certifying Agency: New York Department of Health

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

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: ALS Environmental - US
Project: 14002_Tacoma/

Service Request: R2510152

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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



PREPARATION METHODS

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

INORGANIC

Water/Liquid Matrix

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

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

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

Regarding "Bulk/5035A":

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



Sample Results

ALS Environmental—Rochester Laboratory

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Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Methylphenols, Total	U	-	1	08/21/25 15:00	8/21/25	
1,2,4,5-Tetrachlorobenzene	370 U	370	1	08/21/25 15:00	8/21/25	
1-Methylnaphthalene	370 U	370	1	08/21/25 15:00	8/21/25	
2-Methylnaphthalene	370 U	370	1	08/21/25 15:00	8/21/25	
Acenaphthene	370 U	370	1	08/21/25 15:00	8/21/25	
Acenaphthylene	370 U	370	1	08/21/25 15:00	8/21/25	
Anthracene	370 U	370	1	08/21/25 15:00	8/21/25	
Benz(a)anthracene	370 U	370	1	08/21/25 15:00	8/21/25	
Benzo(a)pyrene	370 U	370	1	08/21/25 15:00	8/21/25	
Benzo(b)fluoranthene	370 U	370	1	08/21/25 15:00	8/21/25	
Benzo(g,h,i)perylene	370 U	370	1	08/21/25 15:00	8/21/25	
1,4-Dichlorobenzene	370 U	370	1	08/21/25 15:00	8/21/25	
Benzo(k)fluoranthene	370 U	370	1	08/21/25 15:00	8/21/25	
Biphenyl	370 U	370	1	08/21/25 15:00	8/21/25	
Chrysene	370 U	370	1	08/21/25 15:00	8/21/25	
1,4-Dioxane	75 U	75	1	08/21/25 15:00	8/21/25	
Dibenz(a,h)anthracene	370 U	370	1	08/21/25 15:00	8/21/25	
Dibenzofuran	370 U	370	1	08/21/25 15:00	8/21/25	
Fluoranthene	370 U	370	1	08/21/25 15:00	8/21/25	
Fluorene	370 U	370	1	08/21/25 15:00	8/21/25	
Indeno(1,2,3-cd)pyrene	370 U	370	1	08/21/25 15:00	8/21/25	
Naphthalene	370 U	370	1	08/21/25 15:00	8/21/25	
Phenanthrene	370 U	370	1	08/21/25 15:00	8/21/25	
Pyrene	370 U	370	1	08/21/25 15:00	8/21/25	
2,3,4,6-Tetrachlorophenol	370 U	370	1	08/21/25 15:00	8/21/25	
2,4,5-Trichlorophenol	370 U	370	1	08/21/25 15:00	8/21/25	
2,4,6-Trichlorophenol	370 U	370	1	08/21/25 15:00	8/21/25	
2,4-Dichlorophenol	370 U	370	1	08/21/25 15:00	8/21/25	
2,4-Dimethylphenol	370 U	370	1	08/21/25 15:00	8/21/25	
2,4-Dinitrophenol	1900 U	1900	1	08/21/25 15:00	8/21/25	
2,4-Dinitrotoluene	370 U	370	1	08/21/25 15:00	8/21/25	
2,6-Dinitrotoluene	370 U	370	1	08/21/25 15:00	8/21/25	
2-Chloronaphthalene	370 U	370	1	08/21/25 15:00	8/21/25	
2-Chlorophenol	370 U	370	1	08/21/25 15:00	8/21/25	
2-Methylphenol	370 U	370	1	08/21/25 15:00	8/21/25	
2-Nitroaniline	1900 U	1900	1	08/21/25 15:00	8/21/25	
2-Nitrophenol	370 U	370	1	08/21/25 15:00	8/21/25	
3,3'-Dichlorobenzidine	370 U	370	1	08/21/25 15:00	8/21/25	
3- and 4-Methylphenol Coelution	370 U	370	1	08/21/25 15:00	8/21/25	
3-Nitroaniline	1900 U	1900	1	08/21/25 15:00	8/21/25	
4,6-Dinitro-2-methylphenol	1900 U	1900	1	08/21/25 15:00	8/21/25	
4-Bromophenyl Phenyl Ether	370 U	370	1	08/21/25 15:00	8/21/25	
4-Chloro-3-methylphenol	370 U	370	1	08/21/25 15:00	8/21/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4-Chloroaniline	370 U	370	1	08/21/25 15:00	8/21/25	
4-Chlorophenyl Phenyl Ether	370 U	370	1	08/21/25 15:00	8/21/25	
4-Nitroaniline	1900 U	1900	1	08/21/25 15:00	8/21/25	
4-Nitrophenol	1900 U	1900	1	08/21/25 15:00	8/21/25	
Acetophenone	370 U	370	1	08/21/25 15:00	8/21/25	
Atrazine	370 U	370	1	08/21/25 15:00	8/21/25	
Benzaldehyde	1900 U	1900	1	08/21/25 15:00	8/21/25	
Benzoic Acid	1900 U	1900	1	08/21/25 15:00	8/21/25	
Bis(1-chloroisopropyl) Ether	370 U	370	1	08/21/25 15:00	8/21/25	
Bis(2-chloroethoxy)methane	370 U	370	1	08/21/25 15:00	8/21/25	
Bis(2-chloroethyl) Ether	370 U	370	1	08/21/25 15:00	8/21/25	
Bis(2-ethylhexyl) Phthalate	560 U	560	1	08/21/25 15:00	8/21/25	
Butyl Benzyl Phthalate	370 U	370	1	08/21/25 15:00	8/21/25	
Caprolactam	370 U	370	1	08/21/25 15:00	8/21/25	
Carbazole	370 U	370	1	08/21/25 15:00	8/21/25	
Di-n-butyl Phthalate	370 U	370	1	08/21/25 15:00	8/21/25	
Di-n-octyl Phthalate	370 U	370	1	08/21/25 15:00	8/21/25	
Diethyl Phthalate	370 U	370	1	08/21/25 15:00	8/21/25	
Dimethyl Phthalate	370 U	370	1	08/21/25 15:00	8/21/25	
Hexachlorobenzene	370 U	370	1	08/21/25 15:00	8/21/25	
Hexachlorobutadiene	370 U	370	1	08/21/25 15:00	8/21/25	
Hexachlorocyclopentadiene	370 U	370	1	08/21/25 15:00	8/21/25	
Hexachloroethane	370 U	370	1	08/21/25 15:00	8/21/25	
Isophorone	370 U	370	1	08/21/25 15:00	8/21/25	
N-Nitrosodi-n-propylamine	370 U	370	1	08/21/25 15:00	8/21/25	
N-Nitrosodiphenylamine	370 U	370	1	08/21/25 15:00	8/21/25	
Nitrobenzene	370 U	370	1	08/21/25 15:00	8/21/25	
Pentachlorophenol (PCP)	1900 U	1900	1	08/21/25 15:00	8/21/25	
Phenol	370 U	370	1	08/21/25 15:00	8/21/25	
Pyridine	1900 U	1900	1	08/21/25 15:00	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	69	18 - 104	08/21/25 15:00	
Nitrobenzene-d5	60	12 - 98	08/21/25 15:00	
p-Terphenyl-d14	89	26 - 134	08/21/25 15:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Methylphenols, Total	U	-	10	08/25/25 10:14	8/21/25	
1-Methylnaphthalene	3800 U	3800	10	08/25/25 10:14	8/21/25	
1,2,4,5-Tetrachlorobenzene	3800 U	3800	10	08/25/25 10:14	8/21/25	
2-Methylnaphthalene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Acenaphthene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Acenaphthylene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Anthracene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benz(a)anthracene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benzo(a)pyrene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benzo(b)fluoranthene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benzo(g,h,i)perylene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benzo(k)fluoranthene	3800 U	3800	10	08/25/25 10:14	8/21/25	
1,4-Dichlorobenzene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Biphenyl	3800 U	3800	10	08/25/25 10:14	8/21/25	
Chrysene	3800 U	3800	10	08/25/25 10:14	8/21/25	
1,4-Dioxane	770 U	770	10	08/25/25 10:14	8/21/25	
Dibenz(a,h)anthracene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Dibenzofuran	3800 U	3800	10	08/25/25 10:14	8/21/25	
Fluoranthene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Fluorene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Indeno(1,2,3-cd)pyrene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Naphthalene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Phenanthrene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Pyrene	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,3,4,6-Tetrachlorophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,4,5-Trichlorophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,4,6-Trichlorophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,4-Dichlorophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,4-Dimethylphenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,4-Dinitrophenol	20000 U	20000	10	08/25/25 10:14	8/21/25	
2,4-Dinitrotoluene	3800 U	3800	10	08/25/25 10:14	8/21/25	
2,6-Dinitrotoluene	3800 U	3800	10	08/25/25 10:14	8/21/25	
2-Chloronaphthalene	3800 U	3800	10	08/25/25 10:14	8/21/25	
2-Chlorophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2-Methylphenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
2-Nitroaniline	20000 U	20000	10	08/25/25 10:14	8/21/25	
2-Nitrophenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
3,3'-Dichlorobenzidine	3800 U	3800	10	08/25/25 10:14	8/21/25	
3- and 4-Methylphenol Coelution	3800 U	3800	10	08/25/25 10:14	8/21/25	
3-Nitroaniline	20000 U	20000	10	08/25/25 10:14	8/21/25	
4,6-Dinitro-2-methylphenol	20000 U	20000	10	08/25/25 10:14	8/21/25	
4-Bromophenyl Phenyl Ether	3800 U	3800	10	08/25/25 10:14	8/21/25	
4-Chloro-3-methylphenol	3800 U	3800	10	08/25/25 10:14	8/21/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4-Chloroaniline	3800 U	3800	10	08/25/25 10:14	8/21/25	
4-Chlorophenyl Phenyl Ether	3800 U	3800	10	08/25/25 10:14	8/21/25	
4-Nitroaniline	20000 U	20000	10	08/25/25 10:14	8/21/25	
4-Nitrophenol	20000 U	20000	10	08/25/25 10:14	8/21/25	
Acetophenone	3800 U	3800	10	08/25/25 10:14	8/21/25	
Atrazine	3800 U	3800	10	08/25/25 10:14	8/21/25	
Benzaldehyde	20000 U	20000	10	08/25/25 10:14	8/21/25	
Benzoic Acid	20000 U	20000	10	08/25/25 10:14	8/21/25	
Bis(1-chloroisopropyl) Ether	3800 U	3800	10	08/25/25 10:14	8/21/25	
Bis(2-chloroethoxy)methane	3800 U	3800	10	08/25/25 10:14	8/21/25	
Bis(2-chloroethyl) Ether	3800 U	3800	10	08/25/25 10:14	8/21/25	
Bis(2-ethylhexyl) Phthalate	5800 U	5800	10	08/25/25 10:14	8/21/25	
Butyl Benzyl Phthalate	3800 U	3800	10	08/25/25 10:14	8/21/25	
Caprolactam	3800 U	3800	10	08/25/25 10:14	8/21/25	
Carbazole	3800 U	3800	10	08/25/25 10:14	8/21/25	
Di-n-butyl Phthalate	3800 U	3800	10	08/25/25 10:14	8/21/25	
Di-n-octyl Phthalate	3800 U	3800	10	08/25/25 10:14	8/21/25	
Diethyl Phthalate	3800 U	3800	10	08/25/25 10:14	8/21/25	
Dimethyl Phthalate	3800 U	3800	10	08/25/25 10:14	8/21/25	
Hexachlorobenzene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Hexachlorobutadiene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Hexachlorocyclopentadiene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Hexachloroethane	3800 U	3800	10	08/25/25 10:14	8/21/25	
Isophorone	3800 U	3800	10	08/25/25 10:14	8/21/25	
N-Nitrosodi-n-propylamine	3800 U	3800	10	08/25/25 10:14	8/21/25	
N-Nitrosodiphenylamine	3800 U	3800	10	08/25/25 10:14	8/21/25	
Nitrobenzene	3800 U	3800	10	08/25/25 10:14	8/21/25	
Pentachlorophenol (PCP)	20000 U	20000	10	08/25/25 10:14	8/21/25	
Phenol	3800 U	3800	10	08/25/25 10:14	8/21/25	
Pyridine	20000 U	20000	10	08/25/25 10:14	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	69	18 - 104	08/25/25 10:14	
Nitrobenzene-d5	71	12 - 98	08/25/25 10:14	
p-Terphenyl-d14	82	26 - 134	08/25/25 10:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Methylphenols, Total	U	-	1	08/21/25 15:48	8/21/25	
1,2,4,5-Tetrachlorobenzene	370 U	370	1	08/21/25 15:48	8/21/25	
1-Methylnaphthalene	370 U	370	1	08/21/25 15:48	8/21/25	
2-Methylnaphthalene	370 U	370	1	08/21/25 15:48	8/21/25	
Acenaphthene	370 U	370	1	08/21/25 15:48	8/21/25	
Acenaphthylene	370 U	370	1	08/21/25 15:48	8/21/25	
Anthracene	370 U	370	1	08/21/25 15:48	8/21/25	
Benz(a)anthracene	370 U	370	1	08/21/25 15:48	8/21/25	
Benzo(a)pyrene	370 U	370	1	08/21/25 15:48	8/21/25	
Benzo(b)fluoranthene	370 U	370	1	08/21/25 15:48	8/21/25	
Benzo(g,h,i)perylene	370 U	370	1	08/21/25 15:48	8/21/25	
Benzo(k)fluoranthene	370 U	370	1	08/21/25 15:48	8/21/25	
1,4-Dichlorobenzene	370 U	370	1	08/21/25 15:48	8/21/25	
Biphenyl	370 U	370	1	08/21/25 15:48	8/21/25	
Chrysene	370 U	370	1	08/21/25 15:48	8/21/25	
1,4-Dioxane	75 U	75	1	08/21/25 15:48	8/21/25	
Dibenz(a,h)anthracene	370 U	370	1	08/21/25 15:48	8/21/25	
Dibenzofuran	370 U	370	1	08/21/25 15:48	8/21/25	
Fluoranthene	370 U	370	1	08/21/25 15:48	8/21/25	
Fluorene	370 U	370	1	08/21/25 15:48	8/21/25	
Indeno(1,2,3-cd)pyrene	370 U	370	1	08/21/25 15:48	8/21/25	
Naphthalene	370 U	370	1	08/21/25 15:48	8/21/25	
Phenanthrene	370 U	370	1	08/21/25 15:48	8/21/25	
Pyrene	370 U	370	1	08/21/25 15:48	8/21/25	
2,3,4,6-Tetrachlorophenol	370 U	370	1	08/21/25 15:48	8/21/25	
2,4,5-Trichlorophenol	370 U	370	1	08/21/25 15:48	8/21/25	
2,4,6-Trichlorophenol	370 U	370	1	08/21/25 15:48	8/21/25	
2,4-Dichlorophenol	370 U	370	1	08/21/25 15:48	8/21/25	
2,4-Dimethylphenol	370 U	370	1	08/21/25 15:48	8/21/25	
2,4-Dinitrophenol	1900 U	1900	1	08/21/25 15:48	8/21/25	
2,4-Dinitrotoluene	370 U	370	1	08/21/25 15:48	8/21/25	
2,6-Dinitrotoluene	370 U	370	1	08/21/25 15:48	8/21/25	
2-Chloronaphthalene	370 U	370	1	08/21/25 15:48	8/21/25	
2-Chlorophenol	370 U	370	1	08/21/25 15:48	8/21/25	
2-Methylphenol	370 U	370	1	08/21/25 15:48	8/21/25	
2-Nitroaniline	1900 U	1900	1	08/21/25 15:48	8/21/25	
2-Nitrophenol	370 U	370	1	08/21/25 15:48	8/21/25	
3,3'-Dichlorobenzidine	370 U	370	1	08/21/25 15:48	8/21/25	
3- and 4-Methylphenol Coelution	370 U	370	1	08/21/25 15:48	8/21/25	
3-Nitroaniline	1900 U	1900	1	08/21/25 15:48	8/21/25	
4,6-Dinitro-2-methylphenol	1900 U	1900	1	08/21/25 15:48	8/21/25	
4-Bromophenyl Phenyl Ether	370 U	370	1	08/21/25 15:48	8/21/25	
4-Chloro-3-methylphenol	370 U	370	1	08/21/25 15:48	8/21/25	

ALS Group USA, Corp.
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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4-Chloroaniline	370 U	370	1	08/21/25 15:48	8/21/25	
4-Chlorophenyl Phenyl Ether	370 U	370	1	08/21/25 15:48	8/21/25	
4-Nitroaniline	1900 U	1900	1	08/21/25 15:48	8/21/25	
4-Nitrophenol	1900 U	1900	1	08/21/25 15:48	8/21/25	
Acetophenone	370 U	370	1	08/21/25 15:48	8/21/25	
Atrazine	370 U	370	1	08/21/25 15:48	8/21/25	
Benzaldehyde	1900 U	1900	1	08/21/25 15:48	8/21/25	
Benzoic Acid	1900 U	1900	1	08/21/25 15:48	8/21/25	
Bis(1-chloroisopropyl) Ether	370 U	370	1	08/21/25 15:48	8/21/25	
Bis(2-chloroethoxy)methane	370 U	370	1	08/21/25 15:48	8/21/25	
Bis(2-chloroethyl) Ether	370 U	370	1	08/21/25 15:48	8/21/25	
Bis(2-ethylhexyl) Phthalate	560 U	560	1	08/21/25 15:48	8/21/25	
Butyl Benzyl Phthalate	370 U	370	1	08/21/25 15:48	8/21/25	
Caprolactam	370 U	370	1	08/21/25 15:48	8/21/25	
Carbazole	370 U	370	1	08/21/25 15:48	8/21/25	
Di-n-butyl Phthalate	370 U	370	1	08/21/25 15:48	8/21/25	
Di-n-octyl Phthalate	370 U	370	1	08/21/25 15:48	8/21/25	
Diethyl Phthalate	370 U	370	1	08/21/25 15:48	8/21/25	
Dimethyl Phthalate	370 U	370	1	08/21/25 15:48	8/21/25	
Hexachlorobenzene	370 U	370	1	08/21/25 15:48	8/21/25	
Hexachlorobutadiene	370 U	370	1	08/21/25 15:48	8/21/25	
Hexachlorocyclopentadiene	370 U	370	1	08/21/25 15:48	8/21/25	
Hexachloroethane	370 U	370	1	08/21/25 15:48	8/21/25	
Isophorone	370 U	370	1	08/21/25 15:48	8/21/25	
N-Nitrosodi-n-propylamine	370 U	370	1	08/21/25 15:48	8/21/25	
N-Nitrosodiphenylamine	370 U	370	1	08/21/25 15:48	8/21/25	
Nitrobenzene	370 U	370	1	08/21/25 15:48	8/21/25	
Pentachlorophenol (PCP)	1900 U	1900	1	08/21/25 15:48	8/21/25	
Phenol	370 U	370	1	08/21/25 15:48	8/21/25	
Pyridine	1900 U	1900	1	08/21/25 15:48	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	64	18 - 104	08/21/25 15:48	
Nitrobenzene-d5	56	12 - 98	08/21/25 15:48	
p-Terphenyl-d14	84	26 - 134	08/21/25 15:48	



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	4.3	2.9	1	08/25/25 13:35	8/21/25	
4,4'-DDE	43	2.9	1	08/25/25 13:35	8/21/25	
4,4'-DDT	3.9	2.9	1	08/25/25 13:35	8/21/25	
Aldrin	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Chlordane	14 U	14	1	08/25/25 13:35	8/21/25	
Dieldrin	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endosulfan I	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endosulfan II	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endosulfan Sulfate	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endrin	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endrin Aldehyde	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Endrin Ketone	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Heptachlor	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Heptachlor Epoxide	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Methoxychlor	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
Toxaphene	55 U	55	1	08/25/25 13:35	8/21/25	
alpha-BHC	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
alpha-Chlordane	7.7	2.9	1	08/25/25 13:35	8/21/25	
beta-BHC	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
delta-BHC	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
gamma-BHC (Lindane)	2.9 U	2.9	1	08/25/25 13:35	8/21/25	
gamma-Chlordane	6.6	2.9	1	08/25/25 13:35	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	56	10 - 159	08/25/25 13:35	
Tetrachloro-m-xylene	65	10 - 132	08/25/25 13:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
4,4'-DDE	31	2.9	1	08/25/25 13:53	8/21/25	
4,4'-DDT	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Aldrin	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Chlordane	14 U	14	1	08/25/25 13:53	8/21/25	
Dieldrin	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endosulfan I	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endosulfan II	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endosulfan Sulfate	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endrin	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endrin Aldehyde	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Endrin Ketone	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Heptachlor	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Heptachlor Epoxide	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Methoxychlor	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
Toxaphene	57 U	57	1	08/25/25 13:53	8/21/25	
alpha-BHC	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
alpha-Chlordane	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
beta-BHC	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
delta-BHC	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
gamma-BHC (Lindane)	2.9 U	2.9	1	08/25/25 13:53	8/21/25	
gamma-Chlordane	2.9 U	2.9	1	08/25/25 13:53	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	33	10 - 159	08/25/25 13:53	
Tetrachloro-m-xylene	40	10 - 132	08/25/25 13:53	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
4,4'-DDE	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
4,4'-DDT	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Aldrin	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Chlordane	14 U	14	1	08/25/25 14:10	8/21/25	
Dieldrin	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endosulfan I	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endosulfan II	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endosulfan Sulfate	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endrin	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endrin Aldehyde	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Endrin Ketone	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Heptachlor	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Heptachlor Epoxide	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Methoxychlor	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
Toxaphene	55 U	55	1	08/25/25 14:10	8/21/25	
alpha-BHC	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
alpha-Chlordane	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
beta-BHC	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
delta-BHC	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
gamma-BHC (Lindane)	2.8 U	2.8	1	08/25/25 14:10	8/21/25	
gamma-Chlordane	2.8 PU	2.8	1	08/25/25 14:10	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	53	10 - 159	08/25/25 14:10	
Tetrachloro-m-xylene	50	10 - 132	08/25/25 14:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1221	110 U	110	1	08/25/25 00:30	8/21/25	
Aroclor 1232	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1242	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1248	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1254	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1260	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1262	55 U	55	1	08/25/25 00:30	8/21/25	
Aroclor 1268	55 U	55	1	08/25/25 00:30	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	73	10 - 138	08/25/25 00:30	
Tetrachloro-m-xylene	64	11 - 122	08/25/25 00:30	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1221	120 U	120	1	08/25/25 00:44	8/21/25	
Aroclor 1232	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1242	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1248	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1254	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1260	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1262	57 U	57	1	08/25/25 00:44	8/21/25	
Aroclor 1268	57 U	57	1	08/25/25 00:44	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	47	10 - 138	08/25/25 00:44	
Tetrachloro-m-xylene	46	11 - 122	08/25/25 00:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1221	110 U	110	1	08/25/25 00:57	8/21/25	
Aroclor 1232	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1242	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1248	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1254	62	55	1	08/25/25 00:57	8/21/25	
Aroclor 1260	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1262	55 U	55	1	08/25/25 00:57	8/21/25	
Aroclor 1268	55 U	55	1	08/25/25 00:57	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	62	10 - 138	08/25/25 00:57	
Tetrachloro-m-xylene	47	11 - 122	08/25/25 00:57	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	18 U	18	1	08/26/25 20:11	8/22/25	
2,4,5-TP	18 U	18	1	08/26/25 20:11	8/22/25	
2,4-D	18 U	18	1	08/26/25 20:11	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	64	10 - 151	08/26/25 20:11	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	12 U	12	1	08/26/25 20:29	8/22/25	
2,4,5-TP	12 U	12	1	08/26/25 20:29	8/22/25	
2,4-D	12 U	12	1	08/26/25 20:29	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	69	10 - 151	08/26/25 20:29	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	11 U	11	1	08/26/25 20:47	8/22/25	
2,4,5-TP	11 U	11	1	08/26/25 20:47	8/22/25	
2,4-D	11 U	11	1	08/26/25 20:47	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	50	10 - 151	08/26/25 20:47	



General Chemistry

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

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

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	85.8	Percent	-	1	08/29/25 10:00	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	88.4	Percent	-	1	08/29/25 10:00	



QC Summary Forms

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Semivolatile Organic Compounds by GC/MS

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Extraction Method: EPA 3546

Sample Name	Lab Code	2-Fluorobiphenyl	Nitrobenzene-d5	p-Terphenyl-d14
		18 - 104	12 - 98	26 - 134
14002 SB01 (1-2)	R2510152-001	69	60	89
14002 SB02 (3-4)	R2510152-002	69	71	82
14002 SB03 (5-6)	R2510152-003	64	56	84
Method Blank	RQ2511066-01	54	51	70
Lab Control Sample	RQ2511066-02	61	52	75
Duplicate Lab Control Sample	RQ2511066-03	58	50	74

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511066-01

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Methylphenols, Total	U	-	1	08/21/25 13:25	8/21/25	
1-Methylnaphthalene	330 U	330	1	08/21/25 13:25	8/21/25	
1,2,4,5-Tetrachlorobenzene	330 U	330	1	08/21/25 13:25	8/21/25	
2-Methylnaphthalene	330 U	330	1	08/21/25 13:25	8/21/25	
Acenaphthene	330 U	330	1	08/21/25 13:25	8/21/25	
Acenaphthylene	330 U	330	1	08/21/25 13:25	8/21/25	
Anthracene	330 U	330	1	08/21/25 13:25	8/21/25	
Benz(a)anthracene	330 U	330	1	08/21/25 13:25	8/21/25	
Benzo(a)pyrene	330 U	330	1	08/21/25 13:25	8/21/25	
Benzo(b)fluoranthene	330 U	330	1	08/21/25 13:25	8/21/25	
Benzo(g,h,i)perylene	330 U	330	1	08/21/25 13:25	8/21/25	
Benzo(k)fluoranthene	330 U	330	1	08/21/25 13:25	8/21/25	
1,4-Dichlorobenzene	330 U	330	1	08/21/25 13:25	8/21/25	
Biphenyl	330 U	330	1	08/21/25 13:25	8/21/25	
Chrysene	330 U	330	1	08/21/25 13:25	8/21/25	
Dibenz(a,h)anthracene	330 U	330	1	08/21/25 13:25	8/21/25	
1,4-Dioxane	67 U	67	1	08/21/25 13:25	8/21/25	
Dibenzofuran	330 U	330	1	08/21/25 13:25	8/21/25	
Fluoranthene	330 U	330	1	08/21/25 13:25	8/21/25	
Fluorene	330 U	330	1	08/21/25 13:25	8/21/25	
Indeno(1,2,3-cd)pyrene	330 U	330	1	08/21/25 13:25	8/21/25	
Naphthalene	330 U	330	1	08/21/25 13:25	8/21/25	
Phenanthrene	330 U	330	1	08/21/25 13:25	8/21/25	
Pyrene	330 U	330	1	08/21/25 13:25	8/21/25	
2,3,4,6-Tetrachlorophenol	330 U	330	1	08/21/25 13:25	8/21/25	
2,4,5-Trichlorophenol	330 U	330	1	08/21/25 13:25	8/21/25	
2,4,6-Trichlorophenol	330 U	330	1	08/21/25 13:25	8/21/25	
2,4-Dichlorophenol	330 U	330	1	08/21/25 13:25	8/21/25	
2,4-Dimethylphenol	330 U	330	1	08/21/25 13:25	8/21/25	
2,4-Dinitrophenol	1700 U	1700	1	08/21/25 13:25	8/21/25	
2,4-Dinitrotoluene	330 U	330	1	08/21/25 13:25	8/21/25	
2,6-Dinitrotoluene	330 U	330	1	08/21/25 13:25	8/21/25	
2-Chloronaphthalene	330 U	330	1	08/21/25 13:25	8/21/25	
2-Chlorophenol	330 U	330	1	08/21/25 13:25	8/21/25	
2-Methylphenol	330 U	330	1	08/21/25 13:25	8/21/25	
2-Nitroaniline	1700 U	1700	1	08/21/25 13:25	8/21/25	
2-Nitrophenol	330 U	330	1	08/21/25 13:25	8/21/25	
3,3'-Dichlorobenzidine	330 U	330	1	08/21/25 13:25	8/21/25	
3- and 4-Methylphenol Coelution	330 U	330	1	08/21/25 13:25	8/21/25	
3-Nitroaniline	1700 U	1700	1	08/21/25 13:25	8/21/25	
4,6-Dinitro-2-methylphenol	1700 U	1700	1	08/21/25 13:25	8/21/25	
4-Bromophenyl Phenyl Ether	330 U	330	1	08/21/25 13:25	8/21/25	
4-Chloro-3-methylphenol	330 U	330	1	08/21/25 13:25	8/21/25	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511066-01

Units:
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4-Chloroaniline	330 U	330	1	08/21/25 13:25	8/21/25	
4-Chlorophenyl Phenyl Ether	330 U	330	1	08/21/25 13:25	8/21/25	
4-Nitroaniline	1700 U	1700	1	08/21/25 13:25	8/21/25	
4-Nitrophenol	1700 U	1700	1	08/21/25 13:25	8/21/25	
Acetophenone	330 U	330	1	08/21/25 13:25	8/21/25	
Atrazine	330 U	330	1	08/21/25 13:25	8/21/25	
Benzaldehyde	1700 U	1700	1	08/21/25 13:25	8/21/25	
Benzoic Acid	1700 U	1700	1	08/21/25 13:25	8/21/25	
Bis(1-chloroisopropyl) Ether	330 U	330	1	08/21/25 13:25	8/21/25	
Bis(2-chloroethoxy)methane	330 U	330	1	08/21/25 13:25	8/21/25	
Bis(2-chloroethyl) Ether	330 U	330	1	08/21/25 13:25	8/21/25	
Bis(2-ethylhexyl) Phthalate	500 U	500	1	08/21/25 13:25	8/21/25	
Butyl Benzyl Phthalate	330 U	330	1	08/21/25 13:25	8/21/25	
Caprolactam	330 U	330	1	08/21/25 13:25	8/21/25	
Carbazole	330 U	330	1	08/21/25 13:25	8/21/25	
Di-n-butyl Phthalate	330 U	330	1	08/21/25 13:25	8/21/25	
Di-n-octyl Phthalate	330 U	330	1	08/21/25 13:25	8/21/25	
Diethyl Phthalate	330 U	330	1	08/21/25 13:25	8/21/25	
Dimethyl Phthalate	330 U	330	1	08/21/25 13:25	8/21/25	
Hexachlorobenzene	330 U	330	1	08/21/25 13:25	8/21/25	
Hexachlorobutadiene	330 U	330	1	08/21/25 13:25	8/21/25	
Hexachlorocyclopentadiene	330 U	330	1	08/21/25 13:25	8/21/25	
Hexachloroethane	330 U	330	1	08/21/25 13:25	8/21/25	
Isophorone	330 U	330	1	08/21/25 13:25	8/21/25	
N-Nitrosodi-n-propylamine	330 U	330	1	08/21/25 13:25	8/21/25	
N-Nitrosodiphenylamine	330 U	330	1	08/21/25 13:25	8/21/25	
Nitrobenzene	330 U	330	1	08/21/25 13:25	8/21/25	
Pentachlorophenol (PCP)	1700 U	1700	1	08/21/25 13:25	8/21/25	
Phenol	330 U	330	1	08/21/25 13:25	8/21/25	
Pyridine	1700 U	1700	1	08/21/25 13:25	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	54	18 - 104	08/21/25 13:25	
Nitrobenzene-d5	51	12 - 98	08/21/25 13:25	
p-Terphenyl-d14	70	26 - 134	08/21/25 13:25	

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Analyte Name	Lab Control Sample RQ2511066-02				Duplicate Lab Control Sample RQ2511066-03				RPD	RPD Limit
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
1-Methylnaphthalene	8270E	1630	3320	49	1740	3330	52	29-100	6	30
1,2,4,5-Tetrachlorobenzene	8270E	1830	3320	55	1650	3330	49	20-126	10	30
2-Methylnaphthalene	8270E	1540	3320	46	1660	3330	50	29-99	7	30
Acenaphthene	8270E	1850	3320	56	1990	3330	60	41-110	7	30
Acenaphthylene	8270E	2090	3320	63	2230	3330	67	44-122	6	30
Anthracene	8270E	1950	3320	59	2070	3330	62	41-123	6	30
Benz(a)anthracene	8270E	1990	3320	60	2140	3330	64	44-116	8	30
Benzo(a)pyrene	8270E	2270	3320	68	2420	3330	73	56-146	7	30
Benzo(b)fluoranthene	8270E	1860	3320	56	2000	3330	60	47-120	7	30
Benzo(g,h,i)perylene	8270E	1920	3320	58	2060	3330	62	41-129	7	30
Benzo(k)fluoranthene	8270E	2020	3320	61	2170	3330	65	49-124	7	30
1,4-Dichlorobenzene	8270E	1430	3320	43	1610	3330	48	16-83	12	30
Biphenyl	8270E	1920	3320	58	1720	3330	52	24-112	11	30
Chrysene	8270E	2030	3320	61	2180	3330	65	44-119	7	30
1,4-Dioxane	8270E	1070	3320	32	1050	3330	32	10-58	2	30
Dibenz(a,h)anthracene	8270E	2030	3320	61	2160	3330	65	18-146	6	30
Dibenzofuran	8270E	1940	3320	58	2070	3330	62	43-113	7	30
Fluoranthene	8270E	2000	3320	60	2140	3330	64	39-128	6	30
Fluorene	8270E	1960	3320	59	2070	3330	62	40-117	5	30
Indeno(1,2,3-cd)pyrene	8270E	2120	3320	64	2290	3330	69	43-129	8	30
Naphthalene	8270E	1550	3320	47	1660	3330	50	31-93	7	30
Phenanthrene	8270E	1810	3320	54	1920	3330	58	39-120	6	30
Pyrene	8270E	1960	3320	59	2130	3330	64	45-125	8	30
2,3,4,6-Tetrachlorophenol	8270E	2300	3320	69	2440	3330	73	42-117	6	30
2,4,5-Trichlorophenol	8270E	2080	3320	63	2180	3330	66	40-114	5	30
2,4,6-Trichlorophenol	8270E	1970	3320	59	2130	3330	64	33-108	8	30
2,4-Dichlorophenol	8270E	1820	3320	55	1930	3330	58	30-103	6	30
2,4-Dimethylphenol	8270E	1810	3320	54	1900	3330	57	32-100	5	30
2,4-Dinitrophenol	8270E	1540 J	3320	46	1700 J	3330	51	10-97	9	30
2,4-Dinitrotoluene	8270E	2060	3320	62	2210	3330	67	53-120	7	30
2,6-Dinitrotoluene	8270E	2060	3320	62	2220	3330	67	48-119	7	30
2-Chloronaphthalene	8270E	1850	3320	56	1980	3330	60	33-103	7	30
2-Chlorophenol	8270E	1780	3320	53	1910	3330	57	26-90	7	30

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Lab Control Sample RQ2511066-02					Duplicate Lab Control Sample RQ2511066-03					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2-Methylphenol	8270E	1950	3320	59	2080	3330	63	33-99	7	30
2-Nitroaniline	8270E	1970	3320	59	2110	3330	63	41-119	7	30
2-Nitrophenol	8270E	1660	3320	50	1780	3330	53	24-98	7	30
3- and 4-Methylphenol Coelution	8270E	2030	3320	61	2210	3330	66	32-100	9	30
3-Nitroaniline	8270E	1700	3320	51	1750	3330	53	29-105	3	30
4,6-Dinitro-2-methylphenol	8270E	1960	3320	59	2110	3330	64	20-105	7	30
4-Bromophenyl Phenyl Ether	8270E	2000	3320	60	2130	3330	64	37-116	7	30
4-Chloro-3-methylphenol	8270E	1900	3320	57	2000	3330	60	40-116	5	30
4-Chloroaniline	8270E	1330	3320	40	1230	3330	37	10-87	8	30
4-Chlorophenyl Phenyl Ether	8270E	1920	3320	58	2050	3330	62	42-111	6	30
4-Nitroaniline	8270E	1600 J	3320	48	1880	3330	57	43-120	16	30
4-Nitrophenol	8270E	1760	3320	53	1810	3330	54	34-116	2	30
Acetophenone	8270E	1830	3320	55	1640	3330	49	23-87	11	30
Benzoic Acid	8270E	1960	3320	59	2120	3330	64	10-126	8	30
Bis(1-chloroisopropyl) Ether	8270E	1760	3320	53	1930	3330	58	22-99	9	30
Bis(2-chloroethoxy)methane	8270E	1820	3320	55	1930	3330	58	38-119	6	30
Bis(2-chloroethyl) Ether	8270E	1630	3320	49	1780	3330	53	23-94	9	30
Bis(2-ethylhexyl) Phthalate	8270E	2190	3320	66	2370	3330	71	38-139	8	30
Butyl Benzyl Phthalate	8270E	2080	3320	63	2240	3330	67	40-134	8	30
Caprolactam	8270E	1890	3320	57	1630	3330	49	21-128	15	30
Carbazole	8270E	1960	3320	59	2140	3330	64	42-131	9	30
Di-n-butyl Phthalate	8270E	2170	3320	65	2340	3330	70	42-141	8	30
Di-n-octyl Phthalate	8270E	2290	3320	69	2470	3330	74	38-143	8	30
Diethyl Phthalate	8270E	1980	3320	60	2100	3330	63	43-118	6	30
Dimethyl Phthalate	8270E	1990	3320	60	2140	3330	64	40-118	7	30
Hexachlorobenzene	8270E	1940	3320	59	2070	3330	62	35-122	6	30
Hexachlorobutadiene	8270E	1510	3320	45	1650	3330	49	28-96	9	30
Hexachlorocyclopentadiene	8270E	1670	3320	50	1850	3330	55	10-111	10	30
Hexachloroethane	8270E	1460	3320	44	1660	3330	50	18-85	13	30
Isophorone	8270E	1800	3320	54	1920	3330	58	39-104	6	30
N-Nitrosodi-n-propylamine	8270E	1790	3320	54	1910	3330	57	30-98	7	30
N-Nitrosodiphenylamine	8270E	2220	3320	67	2380	3330	72	43-130	7	30
Nitrobenzene	8270E	1640	3320	49	1760	3330	53	31-99	7	30

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Analyte Name	Lab Control Sample				Duplicate Lab Control Sample					
	RQ2511066-02				RQ2511066-03					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Pentachlorophenol (PCP)	8270E	1680 J	3320	51	1770	3330	53	36-138	5	30
Phenol	8270E	1850	3320	56	1980	3330	60	31-100	7	30
Pyridine	8270E	2760	6640	42	2910	6660	44	12-80	5	30



Semivolatile Organic Compounds by GC

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Extraction Method: EPA 3546

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 159	10 - 132
14002 SB01 (1-2)	R2510152-001	56	65
14002 SB02 (3-4)	R2510152-002	33	40
14002 SB03 (5-6)	R2510152-003	53	50
Method Blank	RQ2511079-01	64	54
Lab Control Sample	RQ2511079-02	68	61
Duplicate Lab Control Sample	RQ2511079-03	69	58

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511079-01

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
4,4'-DDE	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
4,4'-DDT	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Aldrin	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Chlordane	8.3 U	8.3	1	08/25/25 12:41	8/21/25	
Dieldrin	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endosulfan I	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endosulfan II	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endosulfan Sulfate	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endrin	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endrin Aldehyde	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Endrin Ketone	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Heptachlor	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Heptachlor Epoxide	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Methoxychlor	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
Toxaphene	33 U	33	1	08/25/25 12:41	8/21/25	
alpha-BHC	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
alpha-Chlordane	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
beta-BHC	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
delta-BHC	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
gamma-BHC (Lindane)	1.7 U	1.7	1	08/25/25 12:41	8/21/25	
gamma-Chlordane	1.7 U	1.7	1	08/25/25 12:41	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	64	10 - 159	08/25/25 12:41	
Tetrachloro-m-xylene	54	10 - 132	08/25/25 12:41	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/25/25

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

Units:ug/Kg
Basis:Dry

Lab Control Sample RQ2511079-02					Duplicate Lab Control Sample RQ2511079-03					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4,4'-DDD	8081B	5.86	6.57	89	5.89	6.64	89	48-121	<1	30
4,4'-DDE	8081B	5.52	6.57	84	5.24	6.64	79	51-119	5	30
4,4'-DDT	8081B	6.01	6.57	92	6.09	6.64	92	51-126	1	30
Aldrin	8081B	4.95	6.57	75	4.64	6.64	70	45-109	6	30
Dieldrin	8081B	5.28	6.57	80	5.11	6.64	77	56-111	3	30
Endosulfan I	8081B	4.60	6.57	70	4.55	6.64	68	54-109	1	30
Endosulfan II	8081B	5.12	6.57	78	5.16	6.64	78	50-116	<1	30
Endosulfan Sulfate	8081B	5.30	6.57	81	5.31	6.64	80	55-115	<1	30
Endrin	8081B	5.41	6.57	82	5.24	6.64	79	49-124	3	30
Endrin Aldehyde	8081B	5.42	6.57	83	5.44	6.64	82	21-139	<1	30
Endrin Ketone	8081B	5.52	6.57	84	5.44	6.64	82	50-124	1	30
Heptachlor	8081B	5.17	6.57	79	4.88	6.64	73	43-115	6	30
Heptachlor Epoxide	8081B	5.38	6.57	82	5.07	6.64	76	53-113	6	30
Methoxychlor	8081B	6.41	6.57	98	6.17	6.64	93	47-141	4	30
alpha-BHC	8081B	5.00	6.57	76	4.55	6.64	68	44-109	10	30
alpha-Chlordane	8081B	5.23	6.57	80	5.09	6.64	77	52-114	3	30
beta-BHC	8081B	5.76	6.57	88	5.22	6.64	79	49-119	10	30
delta-BHC	8081B	5.50	6.57	84	5.32	6.64	80	49-113	3	30
gamma-BHC (Lindane)	8081B	4.88	6.57	74	4.55	6.64	69	43-112	7	30
gamma-Chlordane	8081B	5.37	6.57	82	5.12	6.64	77	51-117	5	30

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 8/20/25

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry
Percent Solids: 89.2

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analytical Method: 8081B
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDD	2.9	4.3	5.3	21		1	08/25/25 13:35
4,4'-DDE	2.9	43	46	7		1	08/25/25 13:35
4,4'-DDT	2.9	3.9	5.0	25		1	08/25/25 13:35
alpha-Chlordane	2.9	7.7	11	35		1	08/25/25 13:35
gamma-Chlordane	2.9	6.6	6.7	2		1	08/25/25 13:35

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 8/20/25

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry
Percent Solids: 85.8

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analytical Method: 8081B
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDE	2.9	31	33	6		1	08/25/25 13:53

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152

Date Collected: NA

Date Received:

Sample Name: Lab Control Sample

Lab Code: RQ2511079-02

Units: ug/Kg

Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analytical Method: 8081B

Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDD	1.7	5.86	6.03	3		1	08/25/25 12:59
4,4'-DDE	1.7	5.52	5.79	5		1	08/25/25 12:59
4,4'-DDT	1.7	6.01	6.58	9		1	08/25/25 12:59
Aldrin	1.7	4.95	5.24	6		1	08/25/25 12:59
Dieldrin	1.7	5.28	5.59	6		1	08/25/25 12:59
Endosulfan I	1.7	4.60	5.01	9		1	08/25/25 12:59
Endosulfan II	1.7	5.12	5.59	9		1	08/25/25 12:59
Endosulfan Sulfate	1.7	5.30	5.86	10		1	08/25/25 12:59
Endrin	1.7	5.41	5.78	7		1	08/25/25 12:59
Endrin Aldehyde	1.7	5.42	5.45	<1		1	08/25/25 12:59
Endrin Ketone	1.7	5.52	5.78	5		1	08/25/25 12:59
Heptachlor	1.7	5.17	5.48	6		1	08/25/25 12:59
Heptachlor Epoxide	1.7	5.38	5.68	5		1	08/25/25 12:59
Methoxychlor	1.7	6.41	6.43	<1		1	08/25/25 12:59
alpha-BHC	1.7	5.00	5.42	8		1	08/25/25 12:59
alpha-Chlordane	1.7	5.23	5.55	6		1	08/25/25 12:59
beta-BHC	1.7	5.76	5.82	1		1	08/25/25 12:59
delta-BHC	1.7	5.50	5.76	5		1	08/25/25 12:59
gamma-BHC (Lindane)	1.7	4.88	5.38	10		1	08/25/25 12:59
gamma-Chlordane	1.7	5.37	5.89	9		1	08/25/25 12:59

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil
Sample Name: Duplicate Lab Control Sample
Lab Code: RQ2511079-03

Service Request: R2510152
Date Collected: NA
Date Received:

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analytical Method: 8081B
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDD	1.7	5.89	5.89	<1		1	08/25/25 13:17
4,4'-DDE	1.7	5.24	5.72	9		1	08/25/25 13:17
4,4'-DDT	1.7	6.09	6.48	6		1	08/25/25 13:17
Aldrin	1.7	4.64	4.92	6		1	08/25/25 13:17
Dieldrin	1.7	5.11	5.70	11		1	08/25/25 13:17
Endosulfan I	1.7	4.55	4.92	8		1	08/25/25 13:17
Endosulfan II	1.7	5.16	5.55	7		1	08/25/25 13:17
Endosulfan Sulfate	1.7	5.31	5.81	9		1	08/25/25 13:17
Endrin	1.7	5.24	5.57	6		1	08/25/25 13:17
Endrin Aldehyde	1.7	5.44	5.50	1		1	08/25/25 13:17
Endrin Ketone	1.7	5.44	5.63	3		1	08/25/25 13:17
Heptachlor	1.7	4.88	5.23	7		1	08/25/25 13:17
Heptachlor Epoxide	1.7	5.07	5.61	10		1	08/25/25 13:17
Methoxychlor	1.7	6.17	6.36	3		1	08/25/25 13:17
alpha-BHC	1.7	4.55	5.01	10		1	08/25/25 13:17
alpha-Chlordane	1.7	5.09	5.46	7		1	08/25/25 13:17
beta-BHC	1.7	5.22	5.33	2		1	08/25/25 13:17
delta-BHC	1.7	5.32	5.58	5		1	08/25/25 13:17
gamma-BHC (Lindane)	1.7	4.55	5.14	12		1	08/25/25 13:17
gamma-Chlordane	1.7	5.12	5.73	11		1	08/25/25 13:17

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152

Date Collected: NA

Date Received:

Sample Name: Performance Evaluation

Lab Code: RQ2511366-01

Units: ug/Kg

Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

8081B

Prep Method:

		Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDT	1.7	70	77	10	E	1	08/25/25 11:30
Endrin	1.7	33	35	6		1	08/25/25 11:30
Methoxychlor	1.7	170	180	6	E	1	08/25/25 11:30
alpha-BHC	1.7	7.1	6.6	7		1	08/25/25 11:30
beta-BHC	1.7	6.7	6.2	8		1	08/25/25 11:30
gamma-BHC (Lindane)	1.7	7.0	6.5	7		1	08/25/25 11:30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

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

Analysis Method: 8082A
Extraction Method: EPA 3546

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 138	11 - 122
14002 SB01 (1-2)	R2510152-001	73	64
14002 SB02 (3-4)	R2510152-002	47 P	46
14002 SB03 (5-6)	R2510152-003	62	47
Method Blank	RQ2511079-01	71	54
Lab Control Sample	RQ2511079-04	77	65
Duplicate Lab Control Sample	RQ2511079-05	84	62

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511079-01

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1221	66 U	66	1	08/24/25 23:50	8/21/25	
Aroclor 1232	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1242	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1248	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1254	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1260	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1262	32 U	32	1	08/24/25 23:50	8/21/25	
Aroclor 1268	32 U	32	1	08/24/25 23:50	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	71	10 - 138	08/24/25 23:50	
Tetrachloro-m-xylene	54	11 - 122	08/24/25 23:50	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/25/25

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

Units:ug/Kg
Basis:Dry

			Lab Control Sample			Duplicate Lab Control Sample				
			RQ2511079-04			RQ2511079-05				
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	8082A	131	166	79	126	166	76	34-141	4	30
Aroclor 1260	8082A	140	166	85	144	166	87	30-158	3	30

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 8/20/25

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry
Percent Solids: 88.4

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analytical Method: 8082A
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1254	55	62	69	11		1	08/25/25 00:57

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Lab Control Sample
Lab Code: RQ2511079-04

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analytical Method: 8082A
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	33	131	137	4		1	08/25/25 00:03
Aroclor 1260	33	140	142	1		1	08/25/25 00:03

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: RQ2511079-05

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analytical Method: 8082A
Prep Method: EPA 3546

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	33	126	134	6		1	08/25/25 00:17
Aroclor 1260	33	144	146	1		1	08/25/25 00:17

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY
Chlorinated Herbicides by GC

Analysis Method: 8151A
Extraction Method: Method

Sample Name	Lab Code	DCAA
		10 - 151
14002 SB01 (1-2)	R2510152-001	64
14002 SB02 (3-4)	R2510152-002	69
14002 SB03 (5-6)	R2510152-003	50
Method Blank	RQ2511152-01	63
Lab Control Sample	RQ2511152-02	59
Duplicate Lab Control Sample	RQ2511152-03	65

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511152-01

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	9.9 U	9.9	1	08/26/25 19:16	8/22/25	
2,4,5-TP	9.9 U	9.9	1	08/26/25 19:16	8/22/25	
2,4-D	9.9 U	9.9	1	08/26/25 19:16	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	63	10 - 151	08/26/25 19:16	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/26/25

Duplicate Lab Control Sample Summary
Chlorinated Herbicides by GC

Units:ug/Kg
Basis:Dry

Lab Control Sample					Duplicate Lab Control Sample					
RQ2511152-02					RQ2511152-03					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2,4,5-T	8151A	16.3	25.0	65	19.0	25.2	75	19-127	15	30
2,4,5-TP	8151A	13.9	25.0	56	16.4	25.2	65	18-122	16	30
2,4-D	8151A	12.7	25.0	51	14.7	25.2	58	31-119	15	30

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Lab Control Sample
Lab Code: RQ2511152-02

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analytical Method: 8151A
Prep Method: Method

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
2,4,5-T	10	16.3	16.7	2		1	08/26/25 19:34
2,4,5-TP	10	13.9	14.4	4		1	08/26/25 19:34
2,4-D	10	12.7	15.2	18		1	08/26/25 19:34

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: RQ2511152-03

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analytical Method: 8151A
Prep Method: Method

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
2,4,5-T	10	19.0	18.1	5		1	08/26/25 19:52
2,4,5-TP	10	16.4	16.5	<1		1	08/26/25 19:52
2,4-D	10	14.7	17.7	19		1	08/26/25 19:52



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2158252

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3397197

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2158252-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 08/13/25 00:00
Prep Date: NA

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2158252-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 08/13/25 00:00
Prep Date: NA

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

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2158565

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3400098

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2158565-001
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 08/14/25 14:17
Prep Date: 08/14/25 11:50

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	ND	mg/kg	10.0							

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2158565-002
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 08/14/25 14:27
Prep Date: 08/14/25 11:50

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	95.3	mg/kg	10.0	100		95.3	87-110			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2162042

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3405977

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2162042-001
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Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 08/16/25 02:22
Prep Date: 08/15/25 08:38

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	ND	mg/kg	0.250							
Barium	ND	mg/kg	0.250							
Cadmium	ND	mg/kg	0.100							
Chromium	ND	mg/kg	0.250							
Copper	ND	mg/kg	0.250							
Lead	ND	mg/kg	0.250							
Selenium	ND	mg/kg	0.250							
Silver	ND	mg/kg	0.250							
Zinc	ND	mg/kg	0.500							

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2162042-002
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Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 08/16/25 02:24
Prep Date: 08/15/25 08:38

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.66	mg/kg	0.250	5		93.3	80-120			
Barium	4.70	mg/kg	0.250	5		94.1	80-120			
Cadmium	4.75	mg/kg	0.100	5		95.1	80-120			
Chromium	4.67	mg/kg	0.250	5		93.4	80-120			
Copper	4.73	mg/kg	0.250	5		94.6	80-120			
Lead	4.72	mg/kg	0.250	5		94.4	80-120			
Selenium	4.58	mg/kg	0.250	5		91.7	80-120			
Silver	4.63	mg/kg	0.250	5		92.5	80-120			
Zinc	4.69	mg/kg	0.500	5		93.8	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2162145

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3405106

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2162145-001
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:38
Prep Date: 08/15/25 14:36

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2162145-002
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:39
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.172	mg/kg	0.0200	0.1665		104	80-120			

MS	CLIENT ID: 14002 SB01 (1-2)	Lab ID: QC-2162145-004
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:44
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.190	mg/kg	0.0212	0.15781	0.0214	108	75-125			

MSD	CLIENT ID: 14002 SB01 (1-2)	Lab ID: QC-2162145-005
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:46
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.190	mg/kg	0.0217	0.16086	0.0214	106	75-125	0.233	35	

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2156052-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:40

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	µg/kg	30.0							
1,1,2,2-Tetrachloroethane	ND	µg/kg	30.0							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	µg/kg	30.0							
1,1,2-Trichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethylene	ND	µg/kg	30.0							
1,2,3-Trichlorobenzene	ND	µg/kg	100							
1,2,3-Trichloropropane	ND	µg/kg	30.0							
1,2,4-Trichlorobenzene	ND	µg/kg	100							
1,2,4-Trimethylbenzene	ND	µg/kg	30.0							
1,2-Dibromo-3-chloropropane (DBCP)	ND	µg/kg	100							
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND	µg/kg	30.0							
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND	µg/kg	30.0							
1,2-Dichloroethane (Ethylene dichloride)	ND	µg/kg	100							
1,2-Dichloropropane	ND	µg/kg	30.0							
1,3,5-Trimethylbenzene	ND	µg/kg	100							
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND	µg/kg	30.0							
1,3-Dichloropropene	ND	µg/kg	60.0							
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND	µg/kg	30.0							
2-Butanone (Methyl ethyl ketone, MEK)	ND	µg/kg	200							
2-Hexanone	ND	µg/kg	30.0							
4-Methyl-2-pentanone (MIBK)	ND	µg/kg	30.0							
Acetone	ND	µg/kg	100							
Benzene	ND	µg/kg	30.0							
Bromochloromethane	ND	µg/kg	30.0							
Bromodichloromethane	ND	µg/kg	30.0							
Bromoform	ND	µg/kg	30.0							
Carbon disulfide	ND	µg/kg	30.0							
Carbon tetrachloride	ND	µg/kg	30.0							
Chlorobenzene	ND	µg/kg	30.0							
Chlorodibromomethane	ND	µg/kg	30.0							
Chloroethane (Ethyl chloride)	ND	µg/kg	100							
Chloroform	ND	µg/kg	30.0							
cis & trans-1,2-Dichloroethene	ND	µg/kg	60.0							
cis-1,2-Dichloroethylene	ND	µg/kg	30.0							
cis-1,3-Dichloropropene	ND	µg/kg	30.0							
Cyclohexane	ND	µg/kg	100							
Dichlorodifluoromethane (Freon-12)	ND	µg/kg	100							



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

MB	CLIENT ID: Method Blank	Lab ID: QC-2156052-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:40

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Ethylbenzene	ND	µg/kg	30.0							
Isopropylbenzene	ND	µg/kg	30.0							
m+p-Xylene	ND	µg/kg	60.0							
Methyl acetate	ND	µg/kg	250							
Methyl bromide (Bromomethane)	ND	µg/kg	100							
Methyl chloride (Chloromethane)	ND	µg/kg	100							
Methyl tert-butyl ether (MTBE)	ND	µg/kg	30.0							
Methylcyclohexane	ND	µg/kg	30.0							
Methylene chloride (Dichloromethane)	ND	µg/kg	250							
o-Xylene	ND	µg/kg	30.0							
Styrene	ND	µg/kg	30.0							
Tetrachloroethylene (Perchloroethylene)	ND	µg/kg	30.0							
Toluene	ND	µg/kg	30.0							
Total Xylene	ND	µg/kg	90.0							
trans-1,2-Dichloroethylene	ND	µg/kg	30.0							
trans-1,3-Dichloropropylene	ND	µg/kg	30.0							
Trichloroethene (Trichloroethylene)	ND	µg/kg	30.0							
Trichlorofluoromethane	ND	µg/kg	30.0							
(Fluorotrichloromethane, Freon 11)										
Vinyl chloride (Chloroethene)	ND	µg/kg	30.0							
Surr: 1,2-Dichloroethane-d4	988	µg/kg		1000		98.8	80-120			
Surr: 4-Bromofluorobenzene	973	µg/kg		1000		97.3	80-120			
Surr: Dibromofluoromethane	914	µg/kg		1000		91.4	80-120			
Surr: Toluene-d8	1030	µg/kg		1000		103	80-120			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	869	µg/kg	30.0	1000		86.9	75-121			
1,1,2,2-Tetrachloroethane	932	µg/kg	30.0	1000		93.2	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	866	µg/kg	30.0	1000		86.6	62-129			
1,1,2-Trichloroethane	944	µg/kg	30.0	1000		94.4	80-123			
1,1-Dichloroethane	942	µg/kg	30.0	1000		94.2	74-124			
1,1-Dichloroethylene	862	µg/kg	30.0	1000		86.2	68-131			
1,2,3-Trichlorobenzene	846	µg/kg	100	1000		84.6	60-135			
1,2,3-Trichloropropane	852	µg/kg	30.0	1000		85.2	77-121			
1,2,4-Trichlorobenzene	816	µg/kg	100	1000		81.6	63-130			
1,2,4-Trimethylbenzene	855	µg/kg	30.0	1000		85.5	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	885	µg/kg	100	1000		88.5	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	800	µg/kg	30.0	1000		80.0	63-155			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichlorobenzene (o-Dichlorobenzene)	853	µg/kg	30.0	1000		85.3	77-122			
1,2-Dichloroethane (Ethylene dichloride)	890	µg/kg	100	1000		89.0	70-130			
1,2-Dichloropropane	888	µg/kg	30.0	1000		88.8	71-130			
1,3,5-Trimethylbenzene	843	µg/kg	100	1000		84.3	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	842	µg/kg	30.0	1000		84.2	78-121			
1,3-Dichloropropene	1740	µg/kg	60.0	2000		87.0	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	854	µg/kg	30.0	1000		85.4	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	966	µg/kg	200	1000		96.6	47-164			
2-Hexanone	970	µg/kg	30.0	1000		97.0	70-137			
4-Methyl-2-pentanone (MIBK)	1530	µg/kg	30.0	1000		153	57-200			
Acetone	1160	µg/kg	100	1000		116	52-190			
Benzene	946	µg/kg	30.0	1000		94.6	78-122			
Bromochloromethane	900	µg/kg	30.0	1000		90.0	68-130			
Bromodichloromethane	996	µg/kg	30.0	1000		99.6	75-125			
Bromoform	806	µg/kg	30.0	1000		80.6	59-120			
Carbon disulfide	1120	µg/kg	30.0	1000		112	60-163			
Carbon tetrachloride	906	µg/kg	30.0	1000		90.6	69-123			
Chlorobenzene	853	µg/kg	30.0	1000		85.3	79-120			
Chlorodibromomethane	796	µg/kg	30.0	1000		79.6	57-123			
Chloroethane (Ethyl chloride)	1030	µg/kg	100	1000		103	38-132			
Chloroform	878	µg/kg	30.0	1000		87.8	72-122			
cis & trans-1,2-Dichloroethene	1800	µg/kg	60.0	2000		90.0	72-127			
cis-1,2-Dichloroethylene	907	µg/kg	30.0	1000		90.7	74-125			
cis-1,3-Dichloropropene	970	µg/kg	30.0	1000		97.0	62-124			
Dichlorodifluoromethane (Freon-12)	1040	µg/kg	100	1000		104	28-137			
Ethylbenzene	863	µg/kg	30.0	1000		86.3	75-121			
Isopropylbenzene	856	µg/kg	30.0	1000		85.6	74-121			
m+p-Xylene	1780	µg/kg	60.0	2000		88.8	67-129			
Methyl acetate	582	µg/kg	250	1000		58.2	61-125			
Methyl bromide (Bromomethane)	1040	µg/kg	100	1000		104	31-169			
Methyl chloride (Chloromethane)	979	µg/kg	100	1000		97.9	24-119			
Methyl tert-butyl ether (MTBE)	983	µg/kg	30.0	1000		98.3	79-139			
Methylene chloride (Dichloromethane)	876	µg/kg	250	1000		87.6	62-135			
o-Xylene	888	µg/kg	30.0	1000		88.8	75-120			
Styrene	868	µg/kg	30.0	1000		86.8	74-126			
Tetrachloroethylene (Perchloroethylene)	899	µg/kg	30.0	1000		89.9	76-128			
Toluene	924	µg/kg	30.0	1000		92.4	76-120			
Total Xylene	2660	µg/kg	90.0	3000		88.8	67-129			
trans-1,2-Dichloroethylene	894	µg/kg	30.0	1000		89.4	72-127			
trans-1,3-Dichloropropylene	770	µg/kg	30.0	1000		77.0	66-120			
Trichloroethene (Trichloroethylene)	888	µg/kg	30.0	1000		88.8	75-122			

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QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	818	µg/kg	30.0	1000		81.8	51-115			
Vinyl chloride (Chloroethene)	1090	µg/kg	30.0	1000		109	43-128			
<i>Surr: 1,2-Dichloroethane-d4</i>	1000	<i>µg/kg</i>		1000		100	80-120			
<i>Surr: 4-Bromofluorobenzene</i>	957	<i>µg/kg</i>		1000		95.7	80-120			
<i>Surr: Dibromofluoromethane</i>	1040	<i>µg/kg</i>		1000		104	80-120			
<i>Surr: Toluene-d8</i>	955	<i>µg/kg</i>		1000		95.5	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2166362-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	µg/kg	30.0							
1,1,2,2-Tetrachloroethane	ND	µg/kg	30.0							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	µg/kg	30.0							
1,1,2-Trichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethylene	ND	µg/kg	30.0							
1,2,3-Trichlorobenzene	ND	µg/kg	100							
1,2,3-Trichloropropane	ND	µg/kg	30.0							
1,2,4-Trichlorobenzene	ND	µg/kg	100							
1,2,4-Trimethylbenzene	ND	µg/kg	30.0							
1,2-Dibromo-3-chloropropane (DBCP)	ND	µg/kg	100							
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND	µg/kg	30.0							
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND	µg/kg	30.0							
1,2-Dichloroethane (Ethylene dichloride)	ND	µg/kg	100							
1,2-Dichloropropane	ND	µg/kg	30.0							
1,3,5-Trimethylbenzene	ND	µg/kg	100							
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND	µg/kg	30.0							
1,3-Dichloropropene	ND	µg/kg	60.0							
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND	µg/kg	30.0							
2-Butanone (Methyl ethyl ketone, MEK)	ND	µg/kg	200							
2-Hexanone	ND	µg/kg	30.0							
4-Methyl-2-pentanone (MIBK)	ND	µg/kg	30.0							
Acetone	ND	µg/kg	100							
Benzene	ND	µg/kg	30.0							
Bromochloromethane	ND	µg/kg	30.0							
Bromodichloromethane	ND	µg/kg	30.0							
Bromoform	ND	µg/kg	30.0							
Carbon disulfide	ND	µg/kg	30.0							
Carbon tetrachloride	ND	µg/kg	30.0							
Chlorobenzene	ND	µg/kg	30.0							
Chlorodibromomethane	ND	µg/kg	30.0							
Chloroethane (Ethyl chloride)	ND	µg/kg	100							
Chloroform	ND	µg/kg	30.0							
cis & trans-1,2-Dichloroethene	ND	µg/kg	60.0							
cis-1,2-Dichloroethylene	ND	µg/kg	30.0							
cis-1,3-Dichloropropene	ND	µg/kg	30.0							
Cyclohexane	ND	µg/kg	100							
Dichlorodifluoromethane (Freon-12)	ND	µg/kg	100							

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

MB	CLIENT ID: Method Blank	Lab ID: QC-2166362-001
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Method: EPA 8260D **Dilution:** 1 **Analysis Date:** 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Ethylbenzene	ND	µg/kg	30.0							
Isopropylbenzene	ND	µg/kg	30.0							
m+p-Xylene	ND	µg/kg	60.0							
Methyl acetate	ND	µg/kg	250							
Methyl bromide (Bromomethane)	ND	µg/kg	100							
Methyl chloride (Chloromethane)	ND	µg/kg	100							
Methyl tert-butyl ether (MTBE)	ND	µg/kg	30.0							
Methylcyclohexane	ND	µg/kg	30.0							
Methylene chloride (Dichloromethane)	ND	µg/kg	250							
o-Xylene	ND	µg/kg	30.0							
Styrene	ND	µg/kg	30.0							
Tetrachloroethylene (Perchloroethylene)	ND	µg/kg	30.0							
Toluene	ND	µg/kg	30.0							
Total Xylene	ND	µg/kg	90.0							
trans-1,2-Dichloroethylene	ND	µg/kg	30.0							
trans-1,3-Dichloropropylene	ND	µg/kg	30.0							
Trichloroethene (Trichloroethylene)	ND	µg/kg	30.0							
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND	µg/kg	30.0							
Vinyl chloride (Chloroethene)	ND	µg/kg	30.0							
Surr: 1,2-Dichloroethane-d4	973	µg/kg		1000		97.3	80-120			
Surr: 4-Bromofluorobenzene	984	µg/kg		1000		98.4	80-120			
Surr: Dibromofluoromethane	946	µg/kg		1000		94.6	72-120			
Surr: Toluene-d8	986	µg/kg		1000		98.6	80-120			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
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Method: EPA 8260D **Dilution:** 1 **Analysis Date:** 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	906	µg/kg	30.0	1000		90.6	75-121			
1,1,2,2-Tetrachloroethane	926	µg/kg	30.0	1000		92.6	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	918	µg/kg	30.0	1000		91.8	62-129			
1,1,2-Trichloroethane	888	µg/kg	30.0	1000		88.8	80-123			
1,1-Dichloroethane	1040	µg/kg	30.0	1000		104	74-124			
1,1-Dichloroethylene	1010	µg/kg	30.0	1000		101	68-131			
1,2,3-Trichlorobenzene	957	µg/kg	100	1000		95.7	60-135			
1,2,3-Trichloropropane	890	µg/kg	30.0	1000		89.0	77-121			
1,2,4-Trichlorobenzene	953	µg/kg	100	1000		95.3	63-130			
1,2,4-Trimethylbenzene	912	µg/kg	30.0	1000		91.2	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	819	µg/kg	100	1000		81.9	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	872	µg/kg	30.0	1000		87.2	63-155			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
-----	--------------------------------------	------------------------

Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichlorobenzene (o-Dichlorobenzene)	900	µg/kg	30.0	1000		90.0	77-122			
1,2-Dichloroethane (Ethylene dichloride)	929	µg/kg	100	1000		92.9	70-130			
1,2-Dichloropropane	915	µg/kg	30.0	1000		91.5	71-130			
1,3,5-Trimethylbenzene	940	µg/kg	100	1000		94.0	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	898	µg/kg	30.0	1000		89.8	78-121			
1,3-Dichloropropene	1490	µg/kg	60.0	2000		74.3	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	919	µg/kg	30.0	1000		91.9	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	1010	µg/kg	200	1000		101	47-164			
2-Hexanone	926	µg/kg	30.0	1000		92.6	70-137			
4-Methyl-2-pentanone (MIBK)	1260	µg/kg	30.0	1000		126	57-200			
Acetone	1390	µg/kg	100	1000		139	52-190			
Benzene	970	µg/kg	30.0	1000		97.0	78-122			
Bromochloromethane	924	µg/kg	30.0	1000		92.4	68-130			
Bromodichloromethane	856	µg/kg	30.0	1000		85.6	75-125			
Bromoform	770	µg/kg	30.0	1000		77.0	59-120			
Carbon disulfide	1190	µg/kg	30.0	1000		119	60-163			
Carbon tetrachloride	938	µg/kg	30.0	1000		93.8	69-123			
Chlorobenzene	903	µg/kg	30.0	1000		90.3	79-120			
Chlorodibromomethane	674	µg/kg	30.0	1000		67.4	57-123			
Chloroethane (Ethyl chloride)	972	µg/kg	100	1000		97.2	38-132			
Chloroform	938	µg/kg	30.0	1000		93.8	72-122			
cis & trans-1,2-Dichloroethene	1930	µg/kg	60.0	2000		96.7	72-127			
cis-1,2-Dichloroethylene	952	µg/kg	30.0	1000		95.2	74-125			
cis-1,3-Dichloropropene	816	µg/kg	30.0	1000		81.6	62-124			
Dichlorodifluoromethane (Freon-12)	837	µg/kg	100	1000		83.7	28-137			
Ethylbenzene	937	µg/kg	30.0	1000		93.7	75-121			
Isopropylbenzene	923	µg/kg	30.0	1000		92.3	74-121			
m+p-Xylene	1870	µg/kg	60.0	2000		93.7	67-129			
Methyl acetate	926	µg/kg	250	1000		92.6	61-125			
Methyl bromide (Bromomethane)	902	µg/kg	100	1000		90.2	31-169			
Methyl chloride (Chloromethane)	921	µg/kg	100	1000		92.1	24-119			
Methyl tert-butyl ether (MTBE)	946	µg/kg	30.0	1000		94.6	79-139			
Methylene chloride (Dichloromethane)	988	µg/kg	250	1000		98.8	62-135			
o-Xylene	926	µg/kg	30.0	1000		92.6	75-120			
Styrene	895	µg/kg	30.0	1000		89.5	74-126			
Tetrachloroethylene (Perchloroethylene)	922	µg/kg	30.0	1000		92.2	76-128			
Toluene	932	µg/kg	30.0	1000		93.2	76-120			
Total Xylene	2800	µg/kg	90.0	3000		93.3	67-129			
trans-1,2-Dichloroethylene	982	µg/kg	30.0	1000		98.2	72-127			
trans-1,3-Dichloropropylene	671	µg/kg	30.0	1000		67.1	66-120			
Trichloroethene (Trichloroethylene)	886	µg/kg	30.0	1000		88.6	75-122			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
-----	--------------------------------------	------------------------

Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	874	µg/kg	30.0	1000		87.4	51-115			
Vinyl chloride (Chloroethene)	1030	µg/kg	30.0	1000		103	43-128			
Surr: 1,2-Dichloroethane-d4	960	µg/kg		1000		96.0	80-120			
Surr: 4-Bromofluorobenzene	990	µg/kg		1000		99.0	80-120			
Surr: Dibromofluoromethane	980	µg/kg		1000		98.0	72-120			
Surr: Toluene-d8	980	µg/kg		1000		98.0	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



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October 20, 2025

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

Re: **DETR0060**

Date Received: **10/11/2025**

Work Order: **HN2515109**

Dear Ryan,

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

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

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

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

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

Dale Schipper

/S/ DALE SCHIPPER

Project Manager



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

Work Order: HN2515109
Date Received: 11-Oct-2025

CASE NARRATIVE

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

Sample Receipt

1 soil/solid sample was received for analysis at ALS Environmental on 11-Oct-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Workorder: HN2515109

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2515109-001	14002 Tacoma SB03 TCLP	SOIL/SOLID	10/10/25 09:32	10/11/25 07:00

REPORT QUALIFIERS AND DEFINITIONS

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

Holland Laboratory 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

Analytical Report



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

Work Order: HN2515109
Date Collected: 10/10/25 09:32
Date Received: 10/11/25 07:00

CLIENT ID: 14002 Tacoma SB03 TCLP	Lab ID: HN2515109-001
--	------------------------------

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
TCLP Metals								
Arsenic	EPA 6020B	<0.00190	U	mg/L	0.0499	1	10/17/25 20:34	10/17/25 10:28

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: DETR0060
Matrix: SOIL/SOLID
QC Lot: 2281436

Work Order: HN2515109
Date Collected: NA
Date Received: NA
Run ID: 3599113

TCLP Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2281436-001
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Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 10/17/25 20:16
Prep Date: 10/17/25 10:29

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	<0.00190	mg/L	0.0499							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2281436-002
------------	---	-------------------------------

Method: EPA 6020B **Dilution:** 1 **Analysis Date:** 10/17/25 20:18
Prep Date: 10/17/25 10:29

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	1.02	mg/L	0.0499	1		102	80-120			

The following samples were analyzed in this batch: HN2515109-001

ANALYST SUMMARY



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

Work Order: HN2515109

Sample Name: 14002 Tacoma SB03 TCLP
Laboratory Code: HN2515109-001
Sample Matrix: SOIL/SOLID

Date Collected: 10/10/25
Date Received: 10/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 6020B	EPA 3015A	001-AD	2281436	Chloe Patrick	3599113	Hunter Johnson



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	14002 TACOMA				A	TCLP Arsenic			
Work Order	Quote ID - 11631	Project Number	DETR0060				B				
Company Name	Mannik Smith Group	Bill To Company	Mannik Smith Group				C				
Send Report To	Ryan Montri	Invoice Attn.					D				
Address	2365 South Haggerty Road	Address	2365 South Haggerty Road				E				
City/State/Zip	Canton, Mi 48188	City/State/Zip	Canton, Mi 48188				F				
Phone	734-397-3100	Phone	734-397-3100				G				
Fax		Fax					H				
e-Mail Address	rmontri@mannaiksmithgroup.com	e-Mail Address					I				
							J				
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	J	Hold
1	14002 Tacoma S303 TCLP	10/10/25	09:32	Soil		2	X				
2											
3											
4											
5											
6											
7											
8											
9											
10											
Sampler(s): Please Print & Sign Shannon Kaczmarek		Shipment Method:		Required Turnaround Time: ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:			
Relinquished by: Shannon Kaczmarek		Date: 10/10/25	Time: 1430	Received by: [Signature]		10/10/25 1430		Notes:			
Relinquished by: [Signature]		Date: 10/10	Time: 1700	Received by (Laboratory): [Signature]		10/10 1700		Cooler Temp. 2.1/2.1°C 127			
Logged by (Laboratory): [Signature]		Date: 10/11/25	Time: 0700	Checked by (Laboratory): [Signature]		10/11/25 0930		QC Package: (Check Box Below) ☐ Level II: Standard QC ☐ TRRP-Checklist ☐ Level III: Std QC + Raw Data ☐ TRRP Level IV ☐ Level IV: SW846 CLP-Like			
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
HN2515109

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:

NS

Date/Time:

10/11/25 0700

Carrier Name:

QS

Shipping container/cooler in good condition?

Yes / No / Not Present

Custody seals intact on shipping container/cooler?

Yes / No / Not Present

Custody seals intact on sample bottles?

Yes / No / Not Present

Chain of Custody present?

Yes / No

COC signed when relinquished and received?

Yes / No

COC agrees with sample labels?

Yes / No

Samples in proper container/bottle?

Yes / No

Sample containers intact?

Yes / No

Sufficient sample volume for indicated test?

Yes / No

All samples received within holding time?

Yes / No

Container/Temp Blank temperature in compliance?

Yes / No

Temperature(s) (°C):

2.1 / 2.1 °C

Thermometer(s):

127

Sample(s) received on ice?

Yes / No

Matrix/Matrices:

3

Cooler(s)/Kit(s):

10/11/25 1

Date/Time sample(s) sent to storage:

10/11/25 0945

Water – VOA vials have zero headspace?

Yes / No / No Vials

Water – pH acceptable upon receipt?

Yes / No / N/A

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

pH adjusted (note adjustments below)?

Yes / No / N/A

pH adjusted by:

Login Notes:

APPENDIX F
AMENDED LABORATORY ANALYTICAL DATA REPORT





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CERTIFICATE OF ANALYSIS

Work Order

HN2511277

Client

The Mannik & Smith Group, Inc.

Project

14002_Tacoma

Project Date

August 12, 2025

Reporting Contact

Ryan Montri



right solutions.
right partner.

October 31, 2025

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

Re: **14002_Tacoma**

Date Received: **08/12/2025**
Work Order: **HN2511277**
Revision: **1**

Dear Ryan,

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

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

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

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

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

Dale Schipper

/S/ DALE SCHIPPER

Project Manager



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma

Work Order: HN2511277
Date Received: 12-Aug-2025

CASE NARRATIVE

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

Sample Receipt

3 soil/solid samples were received for analysis at ALS Environmental on 12-Aug-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Organics

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

Run ID: 3403304

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

Run ID: 3410072

MS/MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for the following analyte(s): See QA/QC Report
The Continuing Calibration Verification did not meet acceptance criteria with low bias. Instrument sensitivity was verified as sufficient through the analysis of a low-level standard. The following non-detects are reported without qualification:
Bromodichloromethane
Samples have low surrogate recovery. Control charting demonstrated consistent recovery below control limits. Acceptable surrogate limit lowered to 72% recovery.

Run ID: 3402980

LCS recovery was below the lower control limit. Sample results in the batch may be biased low for the analyte(s): Methyl acetate

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: 14002 SB01 (1-2)	Lab ID: HN2511277-001
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	4.86		0.340	mg/kg	EPA 6020B
Barium	70.0		0.340	mg/kg	EPA 6020B
Cadmium	0.140		0.136	mg/kg	EPA 6020B
Chloride	12.4		11.1	mg/kg	EPA 9056A
Chromium	12.7		0.340	mg/kg	EPA 6020B
Copper	11.4		0.340	mg/kg	EPA 6020B
Lead	19.9		0.340	mg/kg	EPA 6020B
Mercury	0.0214		0.0208	mg/kg	EPA 7471B
Percent Moisture	10.8		0.1	%	EPA 3550C
Selenium	0.349		0.340	mg/kg	EPA 6020B
Subcontract Analysis	See attached.			-	EPA 8151A
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	42.2		0.681	mg/kg	EPA 6020B

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	5.15		0.326	mg/kg	EPA 6020B
Barium	58.6		0.326	mg/kg	EPA 6020B
Chloride	16.4		11.5	mg/kg	EPA 9056A
Chromium	12.2		0.326	mg/kg	EPA 6020B
Copper	13.0		0.326	mg/kg	EPA 6020B
Lead	11.1		0.326	mg/kg	EPA 6020B
Percent Moisture	14.2		0.1	%	EPA 3550C
Selenium	0.365		0.326	mg/kg	EPA 6020B
Subcontract Analysis	See attached.			-	EPA 8151A
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	36.7		0.652	mg/kg	EPA 6020B

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
-----------------------------	-----------------------

Analyte	Results	Flag	MRL	Units	Method
Arsenic	8.39		0.337	mg/kg	EPA 6020B
Barium	51.6		0.337	mg/kg	EPA 6020B
Chromium	11.4		0.337	mg/kg	EPA 6020B
Copper	11.5		0.337	mg/kg	EPA 6020B
Lead	7.89		0.337	mg/kg	EPA 6020B
Percent Moisture	11.6		0.1	%	EPA 3550C
Subcontract Analysis	See attached.			-	EPA 8151A

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: 14002 SB03 (5-6)

Lab ID: HN2511277-003

Analyte	Results	Flag	MRL	Units	Method
Subcontract Analysis	See attached.			-	EPA 8081B
Subcontract Analysis	See attached.			-	EPA 8082A
Subcontract Analysis	See attached.			-	EPA 8270E
Zinc	32.2		0.673	mg/kg	EPA 6020B

SAMPLE SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Workorder: HN2511277

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2511277-001	14002 SB01 (1-2)	SOIL/SOLID	08/11/25 10:25	08/12/25 08:00
HN2511277-002	14002 SB02 (3-4)	SOIL/SOLID	08/11/25 10:33	08/12/25 08:00
HN2511277-003	14002 SB03 (5-6)	SOIL/SOLID	08/11/25 10:43	08/12/25 08:00

REPORT QUALIFIERS AND DEFINITIONS

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

Holland Laboratory 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

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2)	Lab ID: HN2511277-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	10.8		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	12.4		mg/kg	11.1	1	08/14/25 17:03	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	4.86		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Barium	EPA 6020B	70.0		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Cadmium	EPA 6020B	0.140		mg/kg	0.136	1	08/16/25 03:35	08/15/25 08:37
Chromium	EPA 6020B	12.7		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Copper	EPA 6020B	11.4		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Lead	EPA 6020B	19.9		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Selenium	EPA 6020B	0.349		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.340	1	08/16/25 03:35	08/15/25 08:37
Zinc	EPA 6020B	42.2		mg/kg	0.681	1	08/16/25 03:35	08/15/25 08:37
Mercury	EPA 7471B	0.0214		mg/kg	0.0208	1	08/18/25 10:42	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2)	Lab ID: HN2511277-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	249	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:25
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB01 (1-2)	Lab ID: HN2511277-001
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Ethylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
m+p-Xylene	EPA 8260D	ND		µg/kg	74.6	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	311	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	124	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	311	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	112	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	37.3	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	95.2		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	101		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	78.8	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	98.2		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	14.2		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	16.4		mg/kg	11.5	1	08/14/25 17:13	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	5.15		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Barium	EPA 6020B	58.6		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Cadmium	EPA 6020B	ND		mg/kg	0.130	1	08/16/25 03:37	08/15/25 08:37
Chromium	EPA 6020B	12.2		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Copper	EPA 6020B	13.0		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Lead	EPA 6020B	11.1		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Selenium	EPA 6020B	0.365		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.326	1	08/16/25 03:37	08/15/25 08:37
Zinc	EPA 6020B	36.7		mg/kg	0.652	1	08/16/25 03:37	08/15/25 08:37
Mercury	EPA 7471B	ND		mg/kg	0.0209	1	08/18/25 10:49	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	270	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:33
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB02 (3-4)	Lab ID: HN2511277-002
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Ethylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
m+p-Xylene	EPA 8260D	ND		µg/kg	81.1	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	338	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	135	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	338	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	122	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	40.5	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>EPA 8260D</i>	94.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: 4-Bromofluorobenzene</i>	<i>EPA 8260D</i>	99.0		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Dibromofluoromethane</i>	<i>EPA 8260D</i>	78.0	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
<i>Surr: Toluene-d8</i>	<i>EPA 8260D</i>	97.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters								
Percent Moisture	EPA 3550C	11.6		%	0.1	1	08/13/25 00:00	NA
Chloride	EPA 9056A	ND		mg/kg	11.2	1	08/14/25 17:23	08/14/25 11:50
Metals								
Arsenic	EPA 6020B	8.39		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Barium	EPA 6020B	51.6		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Cadmium	EPA 6020B	ND		mg/kg	0.135	1	08/16/25 03:39	08/15/25 08:37
Chromium	EPA 6020B	11.4		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Copper	EPA 6020B	11.5		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Lead	EPA 6020B	7.89		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Selenium	EPA 6020B	ND		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Silver	EPA 6020B	ND		mg/kg	0.337	1	08/16/25 03:39	08/15/25 08:37
Zinc	EPA 6020B	32.2		mg/kg	0.673	1	08/16/25 03:39	08/15/25 08:37
Mercury	EPA 7471B	ND		mg/kg	0.0208	1	08/18/25 10:51	08/15/25 14:35
Subcontracted Parameters								
Subcontract Analysis	EPA 8081B	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8082A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8151A	See attached.		-		1	09/02/25 14:47	NA
Subcontract Analysis	EPA 8270E	See attached.		-		1	09/02/25 14:47	NA
Volatile Organic Compounds by GC-MS								
1,1,1-Trichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2,2-Tetrachloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1,2-Trichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,1-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichlorobenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2,3-Trichloropropane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trichlorobenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2,4-Trimethylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6) **Lab ID: HN2511277-003**

Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichlorobenzene (o-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,2-Dichloropropane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,3,5-Trimethylbenzene	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichlorobenzene (m-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
1,3-Dichloropropene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
1,4-Dichlorobenzene (p-Dichlorobenzene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	ND		µg/kg	258	1	08/18/25 12:37	08/18/25 12:29
2-Hexanone	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
4-Methyl-2-pentanone (MIBK)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Acetone	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Benzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromochloromethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromodichloromethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Bromoform	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Carbon disulfide	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Carbon tetrachloride	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chlorobenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chlorodibromomethane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Chloroethane (Ethyl chloride)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Chloroform	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
cis & trans-1,2-Dichloroethene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
cis-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
cis-1,3-Dichloropropene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Cyclohexane	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Dichlorodifluoromethane (Freon-12)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29

Analytical Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID

Work Order: HN2511277
Date Collected: 08/11/25 10:43
Date Received: 08/12/25 08:00

CLIENT ID: 14002 SB03 (5-6)	Lab ID: HN2511277-003
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Analyte	Method	Results	Qual	Units	MRL	Dilution Factor	Date Analyzed	Date Extracted
Ethylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Isopropylbenzene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
m+p-Xylene	EPA 8260D	ND		µg/kg	77.3	1	08/18/25 12:37	08/18/25 12:29
Methyl acetate	EPA 8260D	ND		µg/kg	322	1	08/18/25 12:37	08/18/25 12:29
Methyl bromide (Bromomethane)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Methyl chloride (Chloromethane)	EPA 8260D	ND		µg/kg	129	1	08/18/25 12:37	08/18/25 12:29
Methyl tert-butyl ether (MTBE)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Methylcyclohexane	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Methylene chloride (Dichloromethane)	EPA 8260D	ND		µg/kg	322	1	08/18/25 12:37	08/18/25 12:29
o-Xylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Styrene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Tetrachloroethylene (Perchloroethylene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Toluene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Total Xylene	EPA 8260D	ND		µg/kg	116	1	08/18/25 12:37	08/18/25 12:29
trans-1,2-Dichloroethylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
trans-1,3-Dichloropropylene	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Trichloroethene (Trichloroethylene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Vinyl chloride (Chloroethene)	EPA 8260D	ND		µg/kg	38.6	1	08/18/25 12:37	08/18/25 12:29
Surr: 1,2-Dichloroethane-d4	EPA 8260D	96.8		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
Surr: 4-Bromofluorobenzene	EPA 8260D	98.6		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
Surr: Dibromofluoromethane	EPA 8260D	79.6	S	%REC	80-120	1	08/18/25 12:37	08/18/25 12:29
Surr: Toluene-d8	EPA 8260D	98.9		%REC	80-120	1	08/18/25 12:37	08/18/25 12:29



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2158252

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3397197

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2158252-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 08/13/25 00:00
Prep Date: NA

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2158252-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 08/13/25 00:00
Prep Date: NA

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

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2158565

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3400098

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2158565-001
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 08/14/25 14:17
Prep Date: 08/14/25 11:50

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	ND	mg/kg	10.0							

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2158565-002
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Method: EPA 9056A **Dilution:** 1 **Analysis Date:** 08/14/25 14:27
Prep Date: 08/14/25 11:50

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Chloride	95.3	mg/kg	10.0	100		95.3	87-110			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2162042

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3405977

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2162042-001
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Method: EPA 6020B

Dilution: 1

Analysis Date: 08/16/25 02:22

Prep Date: 08/15/25 08:38

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	ND	mg/kg	0.250							
Barium	ND	mg/kg	0.250							
Cadmium	ND	mg/kg	0.100							
Chromium	ND	mg/kg	0.250							
Copper	ND	mg/kg	0.250							
Lead	ND	mg/kg	0.250							
Selenium	ND	mg/kg	0.250							
Silver	ND	mg/kg	0.250							
Zinc	ND	mg/kg	0.500							

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2162042-002
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Method: EPA 6020B

Dilution: 1

Analysis Date: 08/16/25 02:24

Prep Date: 08/15/25 08:38

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Arsenic	4.66	mg/kg	0.250	5		93.3	80-120			
Barium	4.70	mg/kg	0.250	5		94.1	80-120			
Cadmium	4.75	mg/kg	0.100	5		95.1	80-120			
Chromium	4.67	mg/kg	0.250	5		93.4	80-120			
Copper	4.73	mg/kg	0.250	5		94.6	80-120			
Lead	4.72	mg/kg	0.250	5		94.4	80-120			
Selenium	4.58	mg/kg	0.250	5		91.7	80-120			
Silver	4.63	mg/kg	0.250	5		92.5	80-120			
Zinc	4.69	mg/kg	0.500	5		93.8	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2162145

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3405106

Metals

MB	CLIENT ID: Method Blank	Lab ID: QC-2162145-001
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:38
Prep Date: 08/15/25 14:36

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

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2162145-002
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:39
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.172	mg/kg	0.0200	0.1665		104	80-120			

MS	CLIENT ID: 14002 SB01 (1-2)	Lab ID: QC-2162145-004
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:44
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.190	mg/kg	0.0212	0.15781	0.0214	108	75-125			

MSD	CLIENT ID: 14002 SB01 (1-2)	Lab ID: QC-2162145-005
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Method: EPA 7471B **Dilution:** 1 **Analysis Date:** 08/18/25 10:46
Prep Date: 08/15/25 14:36

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Mercury	0.190	mg/kg	0.0217	0.16086	0.0214	106	75-125	0.233	35	

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2156052-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:40

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	µg/kg	30.0							
1,1,2,2-Tetrachloroethane	ND	µg/kg	30.0							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	µg/kg	30.0							
1,1,2-Trichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethylene	ND	µg/kg	30.0							
1,2,3-Trichlorobenzene	ND	µg/kg	100							
1,2,3-Trichloropropane	ND	µg/kg	30.0							
1,2,4-Trichlorobenzene	ND	µg/kg	100							
1,2,4-Trimethylbenzene	ND	µg/kg	30.0							
1,2-Dibromo-3-chloropropane (DBCP)	ND	µg/kg	100							
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND	µg/kg	30.0							
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND	µg/kg	30.0							
1,2-Dichloroethane (Ethylene dichloride)	ND	µg/kg	100							
1,2-Dichloropropane	ND	µg/kg	30.0							
1,3,5-Trimethylbenzene	ND	µg/kg	100							
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND	µg/kg	30.0							
1,3-Dichloropropene	ND	µg/kg	60.0							
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND	µg/kg	30.0							
2-Butanone (Methyl ethyl ketone, MEK)	ND	µg/kg	200							
2-Hexanone	ND	µg/kg	30.0							
4-Methyl-2-pentanone (MIBK)	ND	µg/kg	30.0							
Acetone	ND	µg/kg	100							
Benzene	ND	µg/kg	30.0							
Bromochloromethane	ND	µg/kg	30.0							
Bromodichloromethane	ND	µg/kg	30.0							
Bromoform	ND	µg/kg	30.0							
Carbon disulfide	ND	µg/kg	30.0							
Carbon tetrachloride	ND	µg/kg	30.0							
Chlorobenzene	ND	µg/kg	30.0							
Chlorodibromomethane	ND	µg/kg	30.0							
Chloroethane (Ethyl chloride)	ND	µg/kg	100							
Chloroform	ND	µg/kg	30.0							
cis & trans-1,2-Dichloroethene	ND	µg/kg	60.0							
cis-1,2-Dichloroethylene	ND	µg/kg	30.0							
cis-1,3-Dichloropropene	ND	µg/kg	30.0							
Cyclohexane	ND	µg/kg	100							
Dichlorodifluoromethane (Freon-12)	ND	µg/kg	100							

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

MB	CLIENT ID: Method Blank	Lab ID: QC-2156052-001
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Method: EPA 8260D **Dilution:** 1 **Analysis Date:** 08/14/25 22:40

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Ethylbenzene	ND	µg/kg	30.0							
Isopropylbenzene	ND	µg/kg	30.0							
m+p-Xylene	ND	µg/kg	60.0							
Methyl acetate	ND	µg/kg	250							
Methyl bromide (Bromomethane)	ND	µg/kg	100							
Methyl chloride (Chloromethane)	ND	µg/kg	100							
Methyl tert-butyl ether (MTBE)	ND	µg/kg	30.0							
Methylcyclohexane	ND	µg/kg	30.0							
Methylene chloride (Dichloromethane)	ND	µg/kg	250							
o-Xylene	ND	µg/kg	30.0							
Styrene	ND	µg/kg	30.0							
Tetrachloroethylene (Perchloroethylene)	ND	µg/kg	30.0							
Toluene	ND	µg/kg	30.0							
Total Xylene	ND	µg/kg	90.0							
trans-1,2-Dichloroethylene	ND	µg/kg	30.0							
trans-1,3-Dichloropropylene	ND	µg/kg	30.0							
Trichloroethene (Trichloroethylene)	ND	µg/kg	30.0							
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND	µg/kg	30.0							
Vinyl chloride (Chloroethene)	ND	µg/kg	30.0							
Surr: 1,2-Dichloroethane-d4	988	µg/kg		1000		98.8	80-120			
Surr: 4-Bromofluorobenzene	973	µg/kg		1000		97.3	80-120			
Surr: Dibromofluoromethane	914	µg/kg		1000		91.4	80-120			
Surr: Toluene-d8	1030	µg/kg		1000		103	80-120			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D **Dilution:** 1 **Analysis Date:** 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	869	µg/kg	30.0	1000		86.9	75-121			
1,1,2,2-Tetrachloroethane	932	µg/kg	30.0	1000		93.2	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	866	µg/kg	30.0	1000		86.6	62-129			
1,1,2-Trichloroethane	944	µg/kg	30.0	1000		94.4	80-123			
1,1-Dichloroethane	942	µg/kg	30.0	1000		94.2	74-124			
1,1-Dichloroethylene	862	µg/kg	30.0	1000		86.2	68-131			
1,2,3-Trichlorobenzene	846	µg/kg	100	1000		84.6	60-135			
1,2,3-Trichloropropane	852	µg/kg	30.0	1000		85.2	77-121			
1,2,4-Trichlorobenzene	816	µg/kg	100	1000		81.6	63-130			
1,2,4-Trimethylbenzene	855	µg/kg	30.0	1000		85.5	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	885	µg/kg	100	1000		88.5	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	800	µg/kg	30.0	1000		80.0	63-155			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichlorobenzene (o-Dichlorobenzene)	853	µg/kg	30.0	1000		85.3	77-122			
1,2-Dichloroethane (Ethylene dichloride)	890	µg/kg	100	1000		89.0	70-130			
1,2-Dichloropropane	888	µg/kg	30.0	1000		88.8	71-130			
1,3,5-Trimethylbenzene	843	µg/kg	100	1000		84.3	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	842	µg/kg	30.0	1000		84.2	78-121			
1,3-Dichloropropene	1740	µg/kg	60.0	2000		87.0	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	854	µg/kg	30.0	1000		85.4	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	966	µg/kg	200	1000		96.6	47-164			
2-Hexanone	970	µg/kg	30.0	1000		97.0	70-137			
4-Methyl-2-pentanone (MIBK)	1530	µg/kg	30.0	1000		153	57-200			
Acetone	1160	µg/kg	100	1000		116	52-190			
Benzene	946	µg/kg	30.0	1000		94.6	78-122			
Bromochloromethane	900	µg/kg	30.0	1000		90.0	68-130			
Bromodichloromethane	996	µg/kg	30.0	1000		99.6	75-125			
Bromoform	806	µg/kg	30.0	1000		80.6	59-120			
Carbon disulfide	1120	µg/kg	30.0	1000		112	60-163			
Carbon tetrachloride	906	µg/kg	30.0	1000		90.6	69-123			
Chlorobenzene	853	µg/kg	30.0	1000		85.3	79-120			
Chlorodibromomethane	796	µg/kg	30.0	1000		79.6	57-123			
Chloroethane (Ethyl chloride)	1030	µg/kg	100	1000		103	38-132			
Chloroform	878	µg/kg	30.0	1000		87.8	72-122			
cis & trans-1,2-Dichloroethene	1800	µg/kg	60.0	2000		90.0	72-127			
cis-1,2-Dichloroethylene	907	µg/kg	30.0	1000		90.7	74-125			
cis-1,3-Dichloropropene	970	µg/kg	30.0	1000		97.0	62-124			
Dichlorodifluoromethane (Freon-12)	1040	µg/kg	100	1000		104	28-137			
Ethylbenzene	863	µg/kg	30.0	1000		86.3	75-121			
Isopropylbenzene	856	µg/kg	30.0	1000		85.6	74-121			
m+p-Xylene	1780	µg/kg	60.0	2000		88.8	67-129			
Methyl acetate	582	µg/kg	250	1000		58.2	61-125			
Methyl bromide (Bromomethane)	1040	µg/kg	100	1000		104	31-169			
Methyl chloride (Chloromethane)	979	µg/kg	100	1000		97.9	24-119			
Methyl tert-butyl ether (MTBE)	983	µg/kg	30.0	1000		98.3	79-139			
Methylene chloride (Dichloromethane)	876	µg/kg	250	1000		87.6	62-135			
o-Xylene	888	µg/kg	30.0	1000		88.8	75-120			
Styrene	868	µg/kg	30.0	1000		86.8	74-126			
Tetrachloroethylene (Perchloroethylene)	899	µg/kg	30.0	1000		89.9	76-128			
Toluene	924	µg/kg	30.0	1000		92.4	76-120			
Total Xylene	2660	µg/kg	90.0	3000		88.8	67-129			
trans-1,2-Dichloroethylene	894	µg/kg	30.0	1000		89.4	72-127			
trans-1,3-Dichloropropylene	770	µg/kg	30.0	1000		77.0	66-120			
Trichloroethene (Trichloroethylene)	888	µg/kg	30.0	1000		88.8	75-122			

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QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2156052

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3402980

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2156052-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/14/25 22:08

Prep Date: 08/12/25 15:49

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	818	µg/kg	30.0	1000		81.8	51-115			
Vinyl chloride (Chloroethene)	1090	µg/kg	30.0	1000		109	43-128			
<i>Surr: 1,2-Dichloroethane-d4</i>	1000	<i>µg/kg</i>		1000		100	80-120			
<i>Surr: 4-Bromofluorobenzene</i>	957	<i>µg/kg</i>		1000		95.7	80-120			
<i>Surr: Dibromofluoromethane</i>	1040	<i>µg/kg</i>		1000		104	80-120			
<i>Surr: Toluene-d8</i>	955	<i>µg/kg</i>		1000		95.5	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

Volatile Organic Compounds by GC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2166362-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	µg/kg	30.0							
1,1,2,2-Tetrachloroethane	ND	µg/kg	30.0							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	µg/kg	30.0							
1,1,2-Trichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethane	ND	µg/kg	30.0							
1,1-Dichloroethylene	ND	µg/kg	30.0							
1,2,3-Trichlorobenzene	ND	µg/kg	100							
1,2,3-Trichloropropane	ND	µg/kg	30.0							
1,2,4-Trichlorobenzene	ND	µg/kg	100							
1,2,4-Trimethylbenzene	ND	µg/kg	30.0							
1,2-Dibromo-3-chloropropane (DBCP)	ND	µg/kg	100							
1,2-Dibromoethane (EDB, Ethylene dibromide)	ND	µg/kg	30.0							
1,2-Dichlorobenzene (o-Dichlorobenzene)	ND	µg/kg	30.0							
1,2-Dichloroethane (Ethylene dichloride)	ND	µg/kg	100							
1,2-Dichloropropane	ND	µg/kg	30.0							
1,3,5-Trimethylbenzene	ND	µg/kg	100							
1,3-Dichlorobenzene (m-Dichlorobenzene)	ND	µg/kg	30.0							
1,3-Dichloropropene	ND	µg/kg	60.0							
1,4-Dichlorobenzene (p-Dichlorobenzene)	ND	µg/kg	30.0							
2-Butanone (Methyl ethyl ketone, MEK)	ND	µg/kg	200							
2-Hexanone	ND	µg/kg	30.0							
4-Methyl-2-pentanone (MIBK)	ND	µg/kg	30.0							
Acetone	ND	µg/kg	100							
Benzene	ND	µg/kg	30.0							
Bromochloromethane	ND	µg/kg	30.0							
Bromodichloromethane	ND	µg/kg	30.0							
Bromoform	ND	µg/kg	30.0							
Carbon disulfide	ND	µg/kg	30.0							
Carbon tetrachloride	ND	µg/kg	30.0							
Chlorobenzene	ND	µg/kg	30.0							
Chlorodibromomethane	ND	µg/kg	30.0							
Chloroethane (Ethyl chloride)	ND	µg/kg	100							
Chloroform	ND	µg/kg	30.0							
cis & trans-1,2-Dichloroethene	ND	µg/kg	60.0							
cis-1,2-Dichloroethylene	ND	µg/kg	30.0							
cis-1,3-Dichloropropene	ND	µg/kg	30.0							
Cyclohexane	ND	µg/kg	100							
Dichlorodifluoromethane (Freon-12)	ND	µg/kg	100							

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

MB	CLIENT ID: Method Blank	Lab ID: QC-2166362-001
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Ethylbenzene	ND	µg/kg	30.0							
Isopropylbenzene	ND	µg/kg	30.0							
m+p-Xylene	ND	µg/kg	60.0							
Methyl acetate	ND	µg/kg	250							
Methyl bromide (Bromomethane)	ND	µg/kg	100							
Methyl chloride (Chloromethane)	ND	µg/kg	100							
Methyl tert-butyl ether (MTBE)	ND	µg/kg	30.0							
Methylcyclohexane	ND	µg/kg	30.0							
Methylene chloride (Dichloromethane)	ND	µg/kg	250							
o-Xylene	ND	µg/kg	30.0							
Styrene	ND	µg/kg	30.0							
Tetrachloroethylene (Perchloroethylene)	ND	µg/kg	30.0							
Toluene	ND	µg/kg	30.0							
Total Xylene	ND	µg/kg	90.0							
trans-1,2-Dichloroethylene	ND	µg/kg	30.0							
trans-1,3-Dichloropropylene	ND	µg/kg	30.0							
Trichloroethene (Trichloroethylene)	ND	µg/kg	30.0							
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ND	µg/kg	30.0							
Vinyl chloride (Chloroethene)	ND	µg/kg	30.0							
Surr: 1,2-Dichloroethane-d4	973	µg/kg		1000		97.3	80-120			
Surr: 4-Bromofluorobenzene	984	µg/kg		1000		98.4	80-120			
Surr: Dibromofluoromethane	946	µg/kg		1000		94.6	72-120			
Surr: Toluene-d8	986	µg/kg		1000		98.6	80-120			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,1,1-Trichloroethane	906	µg/kg	30.0	1000		90.6	75-121			
1,1,2,2-Tetrachloroethane	926	µg/kg	30.0	1000		92.6	79-125			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	918	µg/kg	30.0	1000		91.8	62-129			
1,1,2-Trichloroethane	888	µg/kg	30.0	1000		88.8	80-123			
1,1-Dichloroethane	1040	µg/kg	30.0	1000		104	74-124			
1,1-Dichloroethylene	1010	µg/kg	30.0	1000		101	68-131			
1,2,3-Trichlorobenzene	957	µg/kg	100	1000		95.7	60-135			
1,2,3-Trichloropropane	890	µg/kg	30.0	1000		89.0	77-121			
1,2,4-Trichlorobenzene	953	µg/kg	100	1000		95.3	63-130			
1,2,4-Trimethylbenzene	912	µg/kg	30.0	1000		91.2	64-126			
1,2-Dibromo-3-chloropropane (DBCP)	819	µg/kg	100	1000		81.9	55-135			
1,2-Dibromoethane (EDB, Ethylene dibromide)	872	µg/kg	30.0	1000		87.2	63-155			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1,2-Dichlorobenzene (o-Dichlorobenzene)	900	µg/kg	30.0	1000		90.0	77-122			
1,2-Dichloroethane (Ethylene dichloride)	929	µg/kg	100	1000		92.9	70-130			
1,2-Dichloropropane	915	µg/kg	30.0	1000		91.5	71-130			
1,3,5-Trimethylbenzene	940	µg/kg	100	1000		94.0	66-130			
1,3-Dichlorobenzene (m-Dichlorobenzene)	898	µg/kg	30.0	1000		89.8	78-121			
1,3-Dichloropropene	1490	µg/kg	60.0	2000		74.3	62-124			
1,4-Dichlorobenzene (p-Dichlorobenzene)	919	µg/kg	30.0	1000		91.9	78-122			
2-Butanone (Methyl ethyl ketone, MEK)	1010	µg/kg	200	1000		101	47-164			
2-Hexanone	926	µg/kg	30.0	1000		92.6	70-137			
4-Methyl-2-pentanone (MIBK)	1260	µg/kg	30.0	1000		126	57-200			
Acetone	1390	µg/kg	100	1000		139	52-190			
Benzene	970	µg/kg	30.0	1000		97.0	78-122			
Bromochloromethane	924	µg/kg	30.0	1000		92.4	68-130			
Bromodichloromethane	856	µg/kg	30.0	1000		85.6	75-125			
Bromoform	770	µg/kg	30.0	1000		77.0	59-120			
Carbon disulfide	1190	µg/kg	30.0	1000		119	60-163			
Carbon tetrachloride	938	µg/kg	30.0	1000		93.8	69-123			
Chlorobenzene	903	µg/kg	30.0	1000		90.3	79-120			
Chlorodibromomethane	674	µg/kg	30.0	1000		67.4	57-123			
Chloroethane (Ethyl chloride)	972	µg/kg	100	1000		97.2	38-132			
Chloroform	938	µg/kg	30.0	1000		93.8	72-122			
cis & trans-1,2-Dichloroethene	1930	µg/kg	60.0	2000		96.7	72-127			
cis-1,2-Dichloroethylene	952	µg/kg	30.0	1000		95.2	74-125			
cis-1,3-Dichloropropene	816	µg/kg	30.0	1000		81.6	62-124			
Dichlorodifluoromethane (Freon-12)	837	µg/kg	100	1000		83.7	28-137			
Ethylbenzene	937	µg/kg	30.0	1000		93.7	75-121			
Isopropylbenzene	923	µg/kg	30.0	1000		92.3	74-121			
m+p-Xylene	1870	µg/kg	60.0	2000		93.7	67-129			
Methyl acetate	926	µg/kg	250	1000		92.6	61-125			
Methyl bromide (Bromomethane)	902	µg/kg	100	1000		90.2	31-169			
Methyl chloride (Chloromethane)	921	µg/kg	100	1000		92.1	24-119			
Methyl tert-butyl ether (MTBE)	946	µg/kg	30.0	1000		94.6	79-139			
Methylene chloride (Dichloromethane)	988	µg/kg	250	1000		98.8	62-135			
o-Xylene	926	µg/kg	30.0	1000		92.6	75-120			
Styrene	895	µg/kg	30.0	1000		89.5	74-126			
Tetrachloroethylene (Perchloroethylene)	922	µg/kg	30.0	1000		92.2	76-128			
Toluene	932	µg/kg	30.0	1000		93.2	76-120			
Total Xylene	2800	µg/kg	90.0	3000		93.3	67-129			
trans-1,2-Dichloroethylene	982	µg/kg	30.0	1000		98.2	72-127			
trans-1,3-Dichloropropylene	671	µg/kg	30.0	1000		67.1	66-120			
Trichloroethene (Trichloroethylene)	886	µg/kg	30.0	1000		88.6	75-122			

QA/QC Report



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma
Matrix: SOIL/SOLID
QC Lot: 2166362

Work Order: HN2511277
Date Collected: NA
Date Received: NA
Run ID: 3410072

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2166362-002
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Method: EPA 8260D

Dilution: 1

Analysis Date: 08/18/25 12:38

Prep Date: 08/18/25 12:30

Analyte	Result	Units	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	874	µg/kg	30.0	1000		87.4	51-115			
Vinyl chloride (Chloroethene)	1030	µg/kg	30.0	1000		103	43-128			
<i>Surr: 1,2-Dichloroethane-d4</i>	960	<i>µg/kg</i>		1000		96.0	80-120			
<i>Surr: 4-Bromofluorobenzene</i>	990	<i>µg/kg</i>		1000		99.0	80-120			
<i>Surr: Dibromofluoromethane</i>	980	<i>µg/kg</i>		1000		98.0	72-120			
<i>Surr: Toluene-d8</i>	980	<i>µg/kg</i>		1000		98.0	80-120			

The following samples were analyzed in this batch: HN2511277-001, HN2511277-002, HN2511277-003

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma

Work Order: HN2511277

Sample Name: 14002 SB01 (1-2)
Laboratory Code: HN2511277-001
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	001-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		001-AC	2162042		3405977	Dale Schipper
EPA 7471B		001-AC	2162145		3405106	Dale Schipper
EPA 8081B		001-AD			3456030	Bill Carey
EPA 8082A		001-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	001-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		001-AA	2166362		3410072	Dale Schipper
EPA 8260D		001-AA	2156052		3403304	Dale Schipper
EPA 8260D		001-AA	2156052		3404823	Dale Schipper
EPA 8270E		001-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	001-AC	2158565	Sage Hansen	3400098	Dale Schipper

Sample Name: 14002 SB02 (3-4)
Laboratory Code: HN2511277-002
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	002-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		002-AC	2162042		3405977	Dale Schipper
EPA 7471B		002-AC	2162145		3405106	Dale Schipper
EPA 8081B		002-AD			3456030	Bill Carey
EPA 8082A		002-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	002-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		002-AA	2166362		3410072	Dale Schipper
EPA 8260D		002-AA	2156052		3403304	Dale Schipper
EPA 8260D		002-AA	2156052		3404823	Dale Schipper
EPA 8270E		002-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	002-AC	2158565	Sage Hansen	3400098	Dale Schipper

ANALYST SUMMARY



Client: The Mannik & Smith Group, Inc.
Project: 14002_Tacoma

Work Order: HN2511277

Sample Name: 14002 SB03 (5-6)
Laboratory Code: HN2511277-003
Sample Matrix: SOIL/SOLID

Date Collected: 08/11/25
Date Received: 08/12/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C	EPA 3050B Method	003-AC	2158252	Chloe Patrick Maxx Richey	3397197	Nicole Maleski
EPA 6020B		003-AC	2162042		3405977	Dale Schipper
EPA 7471B		003-AC	2162145		3405106	Dale Schipper
EPA 8081B		003-AD			3456030	Bill Carey
EPA 8082A		003-AD			3456030	Bill Carey
EPA 8151A	EPA 5035A	003-AD		John Garvale Jonathan Vazquez Jonathan Vazquez	3456030	Bill Carey
EPA 8260D		003-AA	2166362		3410072	Dale Schipper
EPA 8260D		003-AA	2156052		3403304	Dale Schipper
EPA 8260D		003-AA	2156052		3404823	Dale Schipper
EPA 8270E		003-AD			3456030	Bill Carey
EPA 9056A	EPA 9056A	003-AC	2158565	Sage Hansen	3400098	Dale Schipper



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	14002_Tacoma			A	VOCs (U.S. EPA Method 8260C (or Method 8260))										
Work Order		Project Number	DETR0060			B	SVOCs (U.S. EPA Method 8270D (or Method 8270))										
Company Name	The Mannik and Smith Group	Bill To Company	The Mannik and Smith Group			C	PCBs (U.S. EPA Method 8082)										
Send Report To	Ryan Montri	Invoice Attn.				D	Mi 10 Metals (U.S. EPA 6000/7000 Series Methods)										
Address	2365 Haggerty Rd South Suite 100	Address	2365 Haggerty Rd South Suite 100			E	Chorides (U.S. EPA Method 9056A)										
						F	Pesticides (U.S. EPA Method 8081B (or Method 8081))										
City/State/Zip	Canton, MI 48188	City/State/Zip	Canton, MI 48188			G	Herbicides (U.S. EPA Method 8151A (or Method 8151))										
Phone	734-397-3100	Phone	734-397-3100			H											
Fax		Fax				I											
e-Mail Address	RMontri@manniksmithgroup.com	e-Mail Address				J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	14002 SB01 (1-2)	8/11/25	10:25	Soil	>	3	X	X	X	X	X	X	X				
2	14002 SB02 (3-4)	8/11/25	10:33	Soil	>	3	X	X	X	X	X	X	X				
3	14002 SB03 (5-6)	8/11/25	10:43	Soil	>	3	X	X	X	X	X	X	X				
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign <i>Shannon Kaczmarek</i>		Shipment Method:		Required Turnaround Time: ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour		Results Due Date:	
Relinquished by: <i>Shannon Kaczmarek</i>		Date: 8/11/25	Time: 12:45	Received by: <i>Colin</i>		Notes: Quote# HN-061825-M&S-MA	
Relinquished by: <i>[Signature]</i>		Date: 8/11/25	Time: 1700	Received by (Laboratory): <i>GS</i>		Cooler Temp. 5.6°C	
Logged by (Laboratory): <i>BC</i>		Date: 8/12/25	Time: 13:38	Checked by (Laboratory):		QC Package: (Check Box Below)	
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035						Level II: Standard QC TRRP-Checklist	
						Level III: Std QC + Raw Data TRRP Level IV	
						Level IV: SW846 CLP-Like	
						Other:	

Environmental Division
Holland
Work Order Reference
HN2511277

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: PC

Date/Time: 8/12/25 0800

Carrier Name: QS

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

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

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

Chain of Custody present? Yes / No

COC signed when relinquished and received? Yes / No

COC agrees with sample labels? Yes / No

Samples in proper container/bottle? Yes / No

Sample containers intact? Yes / No

Sufficient sample volume for indicated test? Yes / No

All samples received within holding time? Yes / No

Container/Temp Blank temperature in compliance? Yes / No

Temperature(s) (°C): 5.6°C

Thermometer(s): ±R6

Sample(s) received on ice? Yes / No

Matrix/Matrices: Soil

Cooler(s)/Kit(s): _____

Date/Time sample(s) sent to storage: 8/12/25 13:45

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

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

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

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

pH adjusted by: _____

Login Notes:



November 19, 2025

Service Request No:R2510152

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

Laboratory Results for: 14002_Tacoma

Dear Bill,

Enclosed are the results of the sample(s) submitted to our laboratory August 20, 2025
For your reference, these analyses have been assigned our service request number **R2510152**.

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Christopher Leavy
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE

+1 585 288 5380

FAX

+1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Received: 08/20/2025

CASE NARRATIVE

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

Sample Receipt:

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

Semivolatiles by GC/MS:

Method 8270E, 08/25/2025: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 891027: The reporting limit is elevated for one or more analytes. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and viscous, which indicated the need to perform a dilution prior to injection into the instrument. The result(s) are flagged to indicate the matrix interference.

Semivolatile GC:

Method 8081B, 08/25/2025: The control limits were exceeded for analytes in the Continuing Calibration Verification (CCV). The QC failure was most likely due to the composition of the sample(s) immediately preceding the failing CCV. In order to protect the integrity of the instrument, no further corrective action was taken. Results should be considered estimated.

Method 8082A, 08/25/2025: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by  _____

Date 11/19/2025



SAMPLE DETECTION SUMMARY

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

CLIENT ID: 14002 SB01 (1-2)	Lab ID: R2510152-001
------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDD	4.3		1.5	2.9	ug/Kg	8081B
4,4'-DDE	43		1.5	2.9	ug/Kg	8081B
4,4'-DDT	3.9		1.5	2.9	ug/Kg	8081B
alpha-Chlordane	7.7		1.5	2.9	ug/Kg	8081B
gamma-Chlordane	6.6		1.5	2.9	ug/Kg	8081B
Total Solids	89.2				Percent	ALS SOP

CLIENT ID: 14002 SB02 (3-4)	Lab ID: R2510152-002
------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDE	31		1.5	2.9	ug/Kg	8081B
Total Solids	85.8				Percent	ALS SOP

CLIENT ID: 14002 SB03 (5-6)	Lab ID: R2510152-003
------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
4,4'-DDE	2.0	J	1.5	2.8	ug/Kg	8081B
Aroclor 1254	62		29	55	ug/Kg	8082A
gamma-Chlordane	1.6	JP	1.5	2.8	ug/Kg	8081B
Total Solids	88.4				Percent	ALS SOP



Sample Receipt Information

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: ALS Environmental - US
Project: 14002_Tacoma

Service Request:R2510152

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2510152-001	14002 SB01 (1-2)	8/11/2025	1025
R2510152-002	14002 SB02 (3-4)	8/11/2025	1033
R2510152-003	14002 SB03 (5-6)	8/11/2025	1043

ALS Group USA, Corp.3352 128th Ave Holland Michigan 49424 United States
T+1 616 399 6070 | Fright solutions.
right partner.**Subcontract Chain of Custody****SAMPLING STATE:****COC ID: HN2511277****Subcontract To:**Rochester - Environmental TEL: +1 585 288 5380
1565 Jefferson Road, Building 300, Suite 360 FAX:
Rochester New York 14623

Due Date: 08/21/2025

Analysis Report Format: ALS Standard – Level II

Electronic Data Deliverable:

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order		Project Name	14002_Tacoma	A	EPA 8081B-3546-S (INT SUB)										
Work Order	HN2511277			B	EPA 8082A-3546-S (INT SUB)										
Company Name	Holland - Environmental	Bill To Company	Holland - Environmental	C	EPA 8151A-S (INT SUB)										
Send Report To	Bill Carey	Inv Attn	Accounts Payable	D	EPA 8270E-TCL-3546-S (INT SUB)										
Address	3352 128th Ave	Address	3352 128th Ave	E											
				F											
City/State/Zip	Holland Michigan 49424	City/State/Zip	Holland Michigan 49424	G											
Phone	+1 616 399 6070	Phone	+1 616 399 6070	H											
Fax		Fax		I											
Email Address	bill.carey@alsglobal.com			J											
ALS Sample ID		Client Sample ID	Matrix	Collection Date	Bottle	A	B	C	D	E	F	G	H	I	J
HN2511277-001	14002 SB01 (1-2)	Soil/Solid	08/11/2025 10:25	001-AD	x	x	x	x							
HN2511277-002	14002 SB02 (3-4)	Soil/Solid	08/11/2025 10:33	002-AD	x	x	x	x							
HN2511277-003	14002 SB03 (5-6)	Soil/Solid	08/11/2025 10:43	003-AD	x	x	x	x							

Relinquished by	Date Time	Received by	Date Time	Cooler ID's
Relinquished by	Date Time	Received by	Date Time	
Sampled by				

R2510152ALS Environmental - Holland
14002_Tacoma**5**



R2510152
ALS Environmental - Holland
14002_Tacoma

5

Cooler Receipt and Preservation Check Form



Project/Client _____ Folder Number _____

Cooler received on 8/20/25 by: RM

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>
2	Custody papers properly completed (ink, signed)?	Y <u>(N)</u>
3	Did all bottles arrive in good condition (unbroken)?	Y <u>(N)</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	Y <u>(N)</u>

5a	Did VOA vials have sig* bubbles?	Y N <u>(NA)</u>
5b	Sig* bubbles: Alk? Y N <u>(NA)</u> Sulfide? Y N <u>(NA)</u>	
6	Where did the bottles originate?	ALS/ROC <u>(CLIENT)</u>
7	Soil VOA received as: Bulk Encore 5035set	<u>(NA)</u>

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

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

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by RM on 8/20 at 12:16
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/20/25 Time: 14:58 by: MM

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

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 062325-152

Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: MM

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



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

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REPORT QUALIFIERS AND DEFINITIONS

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

Rochester Lab ID # for State Accreditations¹



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

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

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

ALS Laboratory Group

Acronyms

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

Client: ALS Environmental - US
Project: 14002_Tacoma

Service Request: R2510152

Non-Certified Analytes

Certifying Agency: New York Department of Health

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

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: ALS Environmental - US
Project: 14002_Tacoma/

Service Request: R2510152

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003
Sample Matrix: Soil

Date Collected: 08/11/25
Date Received: 08/20/25

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



PREPARATION METHODS

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

INORGANIC

Water/Liquid Matrix

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

Solid/Soil/Non-Aqueous Matrix

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

ORGANIC

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

Regarding "Bulk/5035A":

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



Sample Results

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

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Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	82 U	370	82	1	08/21/25 15:00	8/21/25	
1-Methylnaphthalene	68 U	370	68	1	08/21/25 15:00	8/21/25	
2-Methylnaphthalene	130 U	370	130	1	08/21/25 15:00	8/21/25	
Acenaphthene	70 U	370	70	1	08/21/25 15:00	8/21/25	
Acenaphthylene	75 U	370	75	1	08/21/25 15:00	8/21/25	
Anthracene	62 U	370	62	1	08/21/25 15:00	8/21/25	
Benz(a)anthracene	55 U	370	55	1	08/21/25 15:00	8/21/25	
Benzo(a)pyrene	98 U	370	98	1	08/21/25 15:00	8/21/25	
Benzo(b)fluoranthene	62 U	370	62	1	08/21/25 15:00	8/21/25	
Benzo(g,h,i)perylene	85 U	370	85	1	08/21/25 15:00	8/21/25	
1,4-Dichlorobenzene	62 U	370	62	1	08/21/25 15:00	8/21/25	
Benzo(k)fluoranthene	60 U	370	60	1	08/21/25 15:00	8/21/25	
Biphenyl	110 U	370	110	1	08/21/25 15:00	8/21/25	
Chrysene	54 U	370	54	1	08/21/25 15:00	8/21/25	
Dibenz(a,h)anthracene	80 U	370	80	1	08/21/25 15:00	8/21/25	
1,4-Dioxane	36 U	75	36	1	08/21/25 15:00	8/21/25	
Dibenzofuran	67 U	370	67	1	08/21/25 15:00	8/21/25	
Fluoranthene	92 U	370	92	1	08/21/25 15:00	8/21/25	
Fluorene	69 U	370	69	1	08/21/25 15:00	8/21/25	
Indeno(1,2,3-cd)pyrene	120 U	370	120	1	08/21/25 15:00	8/21/25	
Naphthalene	69 U	370	69	1	08/21/25 15:00	8/21/25	
Phenanthrene	52 U	370	52	1	08/21/25 15:00	8/21/25	
Pyrene	61 U	370	61	1	08/21/25 15:00	8/21/25	
2,3,4,6-Tetrachlorophenol	130 U	370	130	1	08/21/25 15:00	8/21/25	
2,4,5-Trichlorophenol	91 U	370	91	1	08/21/25 15:00	8/21/25	
2,4,6-Trichlorophenol	82 U	370	82	1	08/21/25 15:00	8/21/25	
2,4-Dichlorophenol	71 U	370	71	1	08/21/25 15:00	8/21/25	
2,4-Dimethylphenol	66 U	370	66	1	08/21/25 15:00	8/21/25	
2,4-Dinitrophenol	630 U	1900	630	1	08/21/25 15:00	8/21/25	
2,4-Dinitrotoluene	150 U	370	150	1	08/21/25 15:00	8/21/25	
2,6-Dinitrotoluene	80 U	370	80	1	08/21/25 15:00	8/21/25	
2-Chloronaphthalene	74 U	370	74	1	08/21/25 15:00	8/21/25	
2-Chlorophenol	62 U	370	62	1	08/21/25 15:00	8/21/25	
2-Methylphenol	76 U	370	76	1	08/21/25 15:00	8/21/25	
2-Nitroaniline	87 U	1900	87	1	08/21/25 15:00	8/21/25	
2-Nitrophenol	85 U	370	85	1	08/21/25 15:00	8/21/25	
3,3'-Dichlorobenzidine	140 U	370	140	1	08/21/25 15:00	8/21/25	
3- and 4-Methylphenol Coelution	71 U	370	71	1	08/21/25 15:00	8/21/25	
3-Nitroaniline	74 U	1900	74	1	08/21/25 15:00	8/21/25	
4,6-Dinitro-2-methylphenol	210 U	1900	210	1	08/21/25 15:00	8/21/25	
4-Bromophenyl Phenyl Ether	97 U	370	97	1	08/21/25 15:00	8/21/25	
4-Chloro-3-methylphenol	74 U	370	74	1	08/21/25 15:00	8/21/25	
4-Chloroaniline	140 U	370	140	1	08/21/25 15:00	8/21/25	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Chlorophenyl Phenyl Ether	79 U	370	79	1	08/21/25 15:00	8/21/25	
4-Nitroaniline	80 U	1900	80	1	08/21/25 15:00	8/21/25	
4-Nitrophenol	190 U	1900	190	1	08/21/25 15:00	8/21/25	
Acetophenone	110 U	370	110	1	08/21/25 15:00	8/21/25	
Atrazine	110 U	370	110	1	08/21/25 15:00	8/21/25	
Benzaldehyde	89 U	1900	89	1	08/21/25 15:00	8/21/25	
Benzoic Acid	580 U	1900	580	1	08/21/25 15:00	8/21/25	
Bis(1-chloroisopropyl) Ether	76 U	370	76	1	08/21/25 15:00	8/21/25	
Bis(2-chloroethoxy)methane	90 U	370	90	1	08/21/25 15:00	8/21/25	
Bis(2-chloroethyl) Ether	73 U	370	73	1	08/21/25 15:00	8/21/25	
Bis(2-ethylhexyl) Phthalate	67 U	560	67	1	08/21/25 15:00	8/21/25	
Butyl Benzyl Phthalate	110 U	370	110	1	08/21/25 15:00	8/21/25	
Caprolactam	81 U	370	81	1	08/21/25 15:00	8/21/25	
Carbazole	60 U	370	60	1	08/21/25 15:00	8/21/25	
Di-n-butyl Phthalate	60 U	370	60	1	08/21/25 15:00	8/21/25	
Di-n-octyl Phthalate	130 U	370	130	1	08/21/25 15:00	8/21/25	
Diethyl Phthalate	66 U	370	66	1	08/21/25 15:00	8/21/25	
Dimethyl Phthalate	70 U	370	70	1	08/21/25 15:00	8/21/25	
Hexachlorobenzene	88 U	370	88	1	08/21/25 15:00	8/21/25	
Hexachlorobutadiene	130 U	370	130	1	08/21/25 15:00	8/21/25	
Hexachlorocyclopentadiene	120 U	370	120	1	08/21/25 15:00	8/21/25	
Hexachloroethane	69 U	370	69	1	08/21/25 15:00	8/21/25	
Isophorone	77 U	370	77	1	08/21/25 15:00	8/21/25	
N-Nitrosodi-n-propylamine	120 U	370	120	1	08/21/25 15:00	8/21/25	
N-Nitrosodiphenylamine	230 U	370	230	1	08/21/25 15:00	8/21/25	
Nitrobenzene	66 U	370	66	1	08/21/25 15:00	8/21/25	
Pentachlorophenol (PCP)	370 U	1900	370	1	08/21/25 15:00	8/21/25	
Phenol	74 U	370	74	1	08/21/25 15:00	8/21/25	
Pyridine	50 U	1900	50	1	08/21/25 15:00	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	69	18 - 104	08/21/25 15:00	
Nitrobenzene-d5	60	12 - 98	08/21/25 15:00	
p-Terphenyl-d14	89	26 - 134	08/21/25 15:00	

ALS Group USA, Corp.
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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	700 U	3800	700	10	08/25/25 10:14	8/21/25	
1,2,4,5-Tetrachlorobenzene	850 U	3800	850	10	08/25/25 10:14	8/21/25	
2-Methylnaphthalene	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	
Acenaphthene	720 U	3800	720	10	08/25/25 10:14	8/21/25	
Acenaphthylene	770 U	3800	770	10	08/25/25 10:14	8/21/25	
Anthracene	640 U	3800	640	10	08/25/25 10:14	8/21/25	
Benz(a)anthracene	570 U	3800	570	10	08/25/25 10:14	8/21/25	
Benzo(a)pyrene	1100 U	3800	1100	10	08/25/25 10:14	8/21/25	
Benzo(b)fluoranthene	640 U	3800	640	10	08/25/25 10:14	8/21/25	
Benzo(g,h,i)perylene	870 U	3800	870	10	08/25/25 10:14	8/21/25	
1,4-Dichlorobenzene	640 U	3800	640	10	08/25/25 10:14	8/21/25	
Benzo(k)fluoranthene	620 U	3800	620	10	08/25/25 10:14	8/21/25	
Biphenyl	1200 U	3800	1200	10	08/25/25 10:14	8/21/25	
Chrysene	560 U	3800	560	10	08/25/25 10:14	8/21/25	
1,4-Dioxane	370 U	770	370	10	08/25/25 10:14	8/21/25	
Dibenz(a,h)anthracene	830 U	3800	830	10	08/25/25 10:14	8/21/25	
Dibenzofuran	690 U	3800	690	10	08/25/25 10:14	8/21/25	
Fluoranthene	960 U	3800	960	10	08/25/25 10:14	8/21/25	
Fluorene	710 U	3800	710	10	08/25/25 10:14	8/21/25	
Indeno(1,2,3-cd)pyrene	1300 U	3800	1300	10	08/25/25 10:14	8/21/25	
Naphthalene	710 U	3800	710	10	08/25/25 10:14	8/21/25	
Phenanthrene	540 U	3800	540	10	08/25/25 10:14	8/21/25	
Pyrene	630 U	3800	630	10	08/25/25 10:14	8/21/25	
2,3,4,6-Tetrachlorophenol	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	
2,4,5-Trichlorophenol	940 U	3800	940	10	08/25/25 10:14	8/21/25	
2,4,6-Trichlorophenol	850 U	3800	850	10	08/25/25 10:14	8/21/25	
2,4-Dichlorophenol	730 U	3800	730	10	08/25/25 10:14	8/21/25	
2,4-Dimethylphenol	680 U	3800	680	10	08/25/25 10:14	8/21/25	
2,4-Dinitrophenol	6500 U	20000	6500	10	08/25/25 10:14	8/21/25	
2,4-Dinitrotoluene	1500 U	3800	1500	10	08/25/25 10:14	8/21/25	
2,6-Dinitrotoluene	830 U	3800	830	10	08/25/25 10:14	8/21/25	
2-Chloronaphthalene	760 U	3800	760	10	08/25/25 10:14	8/21/25	
2-Chlorophenol	640 U	3800	640	10	08/25/25 10:14	8/21/25	
2-Methylphenol	790 U	3800	790	10	08/25/25 10:14	8/21/25	
2-Nitroaniline	900 U	20000	900	10	08/25/25 10:14	8/21/25	
2-Nitrophenol	880 U	3800	880	10	08/25/25 10:14	8/21/25	
3,3'-Dichlorobenzidine	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	
3- and 4-Methylphenol Coelution	730 U	3800	730	10	08/25/25 10:14	8/21/25	
3-Nitroaniline	770 U	20000	770	10	08/25/25 10:14	8/21/25	
4,6-Dinitro-2-methylphenol	2200 U	20000	2200	10	08/25/25 10:14	8/21/25	
4-Bromophenyl Phenyl Ether	1000 U	3800	1000	10	08/25/25 10:14	8/21/25	
4-Chloro-3-methylphenol	770 U	3800	770	10	08/25/25 10:14	8/21/25	
4-Chloroaniline	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Chlorophenyl Phenyl Ether	810 U	3800	810	10	08/25/25 10:14	8/21/25	
4-Nitroaniline	820 U	20000	820	10	08/25/25 10:14	8/21/25	
4-Nitrophenol	2000 U	20000	2000	10	08/25/25 10:14	8/21/25	
Acetophenone	1100 U	3800	1100	10	08/25/25 10:14	8/21/25	
Atrazine	1200 U	3800	1200	10	08/25/25 10:14	8/21/25	
Benzaldehyde	920 U	20000	920	10	08/25/25 10:14	8/21/25	
Benzoic Acid	6000 U	20000	6000	10	08/25/25 10:14	8/21/25	
Bis(1-chloroisopropyl) Ether	780 U	3800	780	10	08/25/25 10:14	8/21/25	
Bis(2-chloroethoxy)methane	930 U	3800	930	10	08/25/25 10:14	8/21/25	
Bis(2-chloroethyl) Ether	750 U	3800	750	10	08/25/25 10:14	8/21/25	
Bis(2-ethylhexyl) Phthalate	700 U	5800	700	10	08/25/25 10:14	8/21/25	
Butyl Benzyl Phthalate	1200 U	3800	1200	10	08/25/25 10:14	8/21/25	
Caprolactam	840 U	3800	840	10	08/25/25 10:14	8/21/25	
Carbazole	620 U	3800	620	10	08/25/25 10:14	8/21/25	
Di-n-butyl Phthalate	620 U	3800	620	10	08/25/25 10:14	8/21/25	
Di-n-octyl Phthalate	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	
Diethyl Phthalate	680 U	3800	680	10	08/25/25 10:14	8/21/25	
Dimethyl Phthalate	720 U	3800	720	10	08/25/25 10:14	8/21/25	
Hexachlorobenzene	910 U	3800	910	10	08/25/25 10:14	8/21/25	
Hexachlorobutadiene	1400 U	3800	1400	10	08/25/25 10:14	8/21/25	
Hexachlorocyclopentadiene	1300 U	3800	1300	10	08/25/25 10:14	8/21/25	
Hexachloroethane	710 U	3800	710	10	08/25/25 10:14	8/21/25	
Isophorone	790 U	3800	790	10	08/25/25 10:14	8/21/25	
N-Nitrosodi-n-propylamine	1200 U	3800	1200	10	08/25/25 10:14	8/21/25	
N-Nitrosodiphenylamine	2400 U	3800	2400	10	08/25/25 10:14	8/21/25	
Nitrobenzene	680 U	3800	680	10	08/25/25 10:14	8/21/25	
Pentachlorophenol (PCP)	3800 U	20000	3800	10	08/25/25 10:14	8/21/25	
Phenol	770 U	3800	770	10	08/25/25 10:14	8/21/25	
Pyridine	510 U	20000	510	10	08/25/25 10:14	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	69	18 - 104	08/25/25 10:14	
Nitrobenzene-d5	71	12 - 98	08/25/25 10:14	
p-Terphenyl-d14	82	26 - 134	08/25/25 10:14	

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	82 U	370	82	1	08/21/25 15:48	8/21/25	
1-Methylnaphthalene	68 U	370	68	1	08/21/25 15:48	8/21/25	
2-Methylnaphthalene	140 U	370	140	1	08/21/25 15:48	8/21/25	
Acenaphthene	70 U	370	70	1	08/21/25 15:48	8/21/25	
Acenaphthylene	75 U	370	75	1	08/21/25 15:48	8/21/25	
Anthracene	62 U	370	62	1	08/21/25 15:48	8/21/25	
Benz(a)anthracene	55 U	370	55	1	08/21/25 15:48	8/21/25	
Benzo(a)pyrene	99 U	370	99	1	08/21/25 15:48	8/21/25	
Benzo(b)fluoranthene	62 U	370	62	1	08/21/25 15:48	8/21/25	
Benzo(g,h,i)perylene	85 U	370	85	1	08/21/25 15:48	8/21/25	
1,4-Dichlorobenzene	62 U	370	62	1	08/21/25 15:48	8/21/25	
Benzo(k)fluoranthene	60 U	370	60	1	08/21/25 15:48	8/21/25	
Biphenyl	110 U	370	110	1	08/21/25 15:48	8/21/25	
Chrysene	55 U	370	55	1	08/21/25 15:48	8/21/25	
Dibenz(a,h)anthracene	81 U	370	81	1	08/21/25 15:48	8/21/25	
1,4-Dioxane	36 U	75	36	1	08/21/25 15:48	8/21/25	
Dibenzofuran	68 U	370	68	1	08/21/25 15:48	8/21/25	
Fluoranthene	93 U	370	93	1	08/21/25 15:48	8/21/25	
Fluorene	70 U	370	70	1	08/21/25 15:48	8/21/25	
Indeno(1,2,3-cd)pyrene	120 U	370	120	1	08/21/25 15:48	8/21/25	
Naphthalene	70 U	370	70	1	08/21/25 15:48	8/21/25	
Phenanthrene	53 U	370	53	1	08/21/25 15:48	8/21/25	
Pyrene	62 U	370	62	1	08/21/25 15:48	8/21/25	
2,3,4,6-Tetrachlorophenol	130 U	370	130	1	08/21/25 15:48	8/21/25	
2,4,5-Trichlorophenol	92 U	370	92	1	08/21/25 15:48	8/21/25	
2,4,6-Trichlorophenol	83 U	370	83	1	08/21/25 15:48	8/21/25	
2,4-Dichlorophenol	72 U	370	72	1	08/21/25 15:48	8/21/25	
2,4-Dimethylphenol	67 U	370	67	1	08/21/25 15:48	8/21/25	
2,4-Dinitrophenol	630 U	1900	630	1	08/21/25 15:48	8/21/25	
2,4-Dinitrotoluene	150 U	370	150	1	08/21/25 15:48	8/21/25	
2,6-Dinitrotoluene	81 U	370	81	1	08/21/25 15:48	8/21/25	
2-Chloronaphthalene	74 U	370	74	1	08/21/25 15:48	8/21/25	
2-Chlorophenol	62 U	370	62	1	08/21/25 15:48	8/21/25	
2-Methylphenol	77 U	370	77	1	08/21/25 15:48	8/21/25	
2-Nitroaniline	88 U	1900	88	1	08/21/25 15:48	8/21/25	
2-Nitrophenol	86 U	370	86	1	08/21/25 15:48	8/21/25	
3,3'-Dichlorobenzidine	140 U	370	140	1	08/21/25 15:48	8/21/25	
3- and 4-Methylphenol Coelution	71 U	370	71	1	08/21/25 15:48	8/21/25	
3-Nitroaniline	75 U	1900	75	1	08/21/25 15:48	8/21/25	
4,6-Dinitro-2-methylphenol	210 U	1900	210	1	08/21/25 15:48	8/21/25	
4-Bromophenyl Phenyl Ether	98 U	370	98	1	08/21/25 15:48	8/21/25	
4-Chloro-3-methylphenol	75 U	370	75	1	08/21/25 15:48	8/21/25	
4-Chloroaniline	140 U	370	140	1	08/21/25 15:48	8/21/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Chlorophenyl Phenyl Ether	79 U	370	79	1	08/21/25 15:48	8/21/25	
4-Nitroaniline	80 U	1900	80	1	08/21/25 15:48	8/21/25	
4-Nitrophenol	200 U	1900	200	1	08/21/25 15:48	8/21/25	
Acetophenone	110 U	370	110	1	08/21/25 15:48	8/21/25	
Atrazine	110 U	370	110	1	08/21/25 15:48	8/21/25	
Benzaldehyde	90 U	1900	90	1	08/21/25 15:48	8/21/25	
Benzoic Acid	580 U	1900	580	1	08/21/25 15:48	8/21/25	
Bis(1-chloroisopropyl) Ether	76 U	370	76	1	08/21/25 15:48	8/21/25	
Bis(2-chloroethoxy)methane	91 U	370	91	1	08/21/25 15:48	8/21/25	
Bis(2-chloroethyl) Ether	73 U	370	73	1	08/21/25 15:48	8/21/25	
Bis(2-ethylhexyl) Phthalate	68 U	560	68	1	08/21/25 15:48	8/21/25	
Butyl Benzyl Phthalate	110 U	370	110	1	08/21/25 15:48	8/21/25	
Caprolactam	82 U	370	82	1	08/21/25 15:48	8/21/25	
Carbazole	60 U	370	60	1	08/21/25 15:48	8/21/25	
Di-n-butyl Phthalate	60 U	370	60	1	08/21/25 15:48	8/21/25	
Di-n-octyl Phthalate	130 U	370	130	1	08/21/25 15:48	8/21/25	
Diethyl Phthalate	66 U	370	66	1	08/21/25 15:48	8/21/25	
Dimethyl Phthalate	71 U	370	71	1	08/21/25 15:48	8/21/25	
Hexachlorobenzene	89 U	370	89	1	08/21/25 15:48	8/21/25	
Hexachlorobutadiene	140 U	370	140	1	08/21/25 15:48	8/21/25	
Hexachlorocyclopentadiene	120 U	370	120	1	08/21/25 15:48	8/21/25	
Hexachloroethane	70 U	370	70	1	08/21/25 15:48	8/21/25	
Isophorone	78 U	370	78	1	08/21/25 15:48	8/21/25	
N-Nitrosodi-n-propylamine	120 U	370	120	1	08/21/25 15:48	8/21/25	
N-Nitrosodiphenylamine	240 U	370	240	1	08/21/25 15:48	8/21/25	
Nitrobenzene	66 U	370	66	1	08/21/25 15:48	8/21/25	
Pentachlorophenol (PCP)	370 U	1900	370	1	08/21/25 15:48	8/21/25	
Phenol	75 U	370	75	1	08/21/25 15:48	8/21/25	
Pyridine	50 U	1900	50	1	08/21/25 15:48	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	64	18 - 104	08/21/25 15:48	
Nitrobenzene-d5	56	12 - 98	08/21/25 15:48	
p-Terphenyl-d14	84	26 - 134	08/21/25 15:48	



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	4.3	2.9	1.5	1	08/25/25 13:35	8/21/25	
4,4'-DDE	43	2.9	1.5	1	08/25/25 13:35	8/21/25	
4,4'-DDT	3.9	2.9	1.5	1	08/25/25 13:35	8/21/25	
Aldrin	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Chlordane	7.1 U	14	7.1	1	08/25/25 13:35	8/21/25	
Dieldrin	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endosulfan I	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endosulfan II	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endosulfan Sulfate	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endrin	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endrin Aldehyde	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Endrin Ketone	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Heptachlor	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Heptachlor Epoxide	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Methoxychlor	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
Toxaphene	32 U	55	32	1	08/25/25 13:35	8/21/25	
alpha-BHC	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
alpha-Chlordane	7.7	2.9	1.5	1	08/25/25 13:35	8/21/25	
beta-BHC	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
delta-BHC	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
gamma-BHC (Lindane)	1.5 U	2.9	1.5	1	08/25/25 13:35	8/21/25	
gamma-Chlordane	6.6	2.9	1.5	1	08/25/25 13:35	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	56	10 - 159	08/25/25 13:35	
Tetrachloro-m-xylene	65	10 - 132	08/25/25 13:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
4,4'-DDE	31	2.9	1.5	1	08/25/25 13:53	8/21/25	
4,4'-DDT	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Aldrin	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Chlordane	7.3 U	14	7.3	1	08/25/25 13:53	8/21/25	
Dieldrin	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endosulfan I	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endosulfan II	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endosulfan Sulfate	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endrin	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endrin Aldehyde	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Endrin Ketone	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Heptachlor	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Heptachlor Epoxide	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Methoxychlor	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
Toxaphene	33 U	57	33	1	08/25/25 13:53	8/21/25	
alpha-BHC	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
alpha-Chlordane	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
beta-BHC	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
delta-BHC	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
gamma-BHC (Lindane)	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	
gamma-Chlordane	1.5 U	2.9	1.5	1	08/25/25 13:53	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	33	10 - 159	08/25/25 13:53	
Tetrachloro-m-xylene	40	10 - 132	08/25/25 13:53	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
4,4'-DDE	2.0 J	2.8	1.5	1	08/25/25 14:10	8/21/25	
4,4'-DDT	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Aldrin	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Chlordane	7.1 U	14	7.1	1	08/25/25 14:10	8/21/25	
Dieldrin	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endosulfan I	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endosulfan II	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endosulfan Sulfate	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endrin	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endrin Aldehyde	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Endrin Ketone	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Heptachlor	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Heptachlor Epoxide	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Methoxychlor	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
Toxaphene	32 U	55	32	1	08/25/25 14:10	8/21/25	
alpha-BHC	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
alpha-Chlordane	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
beta-BHC	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
delta-BHC	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
gamma-BHC (Lindane)	1.5 U	2.8	1.5	1	08/25/25 14:10	8/21/25	
gamma-Chlordane	1.6 JP	2.8	1.5	1	08/25/25 14:10	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	53	10 - 159	08/25/25 14:10	
Tetrachloro-m-xylene	50	10 - 132	08/25/25 14:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	29 U	55	29	1	08/25/25 00:30	8/21/25	
Aroclor 1221	44 U	110	44	1	08/25/25 00:30	8/21/25	
Aroclor 1232	32 U	55	32	1	08/25/25 00:30	8/21/25	
Aroclor 1242	29 U	55	29	1	08/25/25 00:30	8/21/25	
Aroclor 1248	31 U	55	31	1	08/25/25 00:30	8/21/25	
Aroclor 1254	29 U	55	29	1	08/25/25 00:30	8/21/25	
Aroclor 1260	29 U	55	29	1	08/25/25 00:30	8/21/25	
Aroclor 1262	29 U	55	29	1	08/25/25 00:30	8/21/25	
Aroclor 1268	29 U	55	29	1	08/25/25 00:30	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	73	10 - 138	08/25/25 00:30	
Tetrachloro-m-xylene	64	11 - 122	08/25/25 00:30	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	30 U	57	30	1	08/25/25 00:44	8/21/25	
Aroclor 1221	45 U	120	45	1	08/25/25 00:44	8/21/25	
Aroclor 1232	33 U	57	33	1	08/25/25 00:44	8/21/25	
Aroclor 1242	30 U	57	30	1	08/25/25 00:44	8/21/25	
Aroclor 1248	31 U	57	31	1	08/25/25 00:44	8/21/25	
Aroclor 1254	30 U	57	30	1	08/25/25 00:44	8/21/25	
Aroclor 1260	30 U	57	30	1	08/25/25 00:44	8/21/25	
Aroclor 1262	30 U	57	30	1	08/25/25 00:44	8/21/25	
Aroclor 1268	30 U	57	30	1	08/25/25 00:44	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	47	10 - 138	08/25/25 00:44	
Tetrachloro-m-xylene	46	11 - 122	08/25/25 00:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	29 U	55	29	1	08/25/25 00:57	8/21/25	
Aroclor 1221	44 U	110	44	1	08/25/25 00:57	8/21/25	
Aroclor 1232	32 U	55	32	1	08/25/25 00:57	8/21/25	
Aroclor 1242	29 U	55	29	1	08/25/25 00:57	8/21/25	
Aroclor 1248	31 U	55	31	1	08/25/25 00:57	8/21/25	
Aroclor 1254	62	55	29	1	08/25/25 00:57	8/21/25	
Aroclor 1260	29 U	55	29	1	08/25/25 00:57	8/21/25	
Aroclor 1262	29 U	55	29	1	08/25/25 00:57	8/21/25	
Aroclor 1268	29 U	55	29	1	08/25/25 00:57	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	62	10 - 138	08/25/25 00:57	
Tetrachloro-m-xylene	47	11 - 122	08/25/25 00:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	9.1 U	18	9.1	1	08/26/25 20:11	8/22/25	
2,4,5-TP	8.2 U	18	8.2	1	08/26/25 20:11	8/22/25	
2,4-D	12 U	18	12	1	08/26/25 20:11	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	64	10 - 151	08/26/25 20:11	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	5.9 U	12	5.9	1	08/26/25 20:29	8/22/25	
2,4,5-TP	5.3 U	12	5.3	1	08/26/25 20:29	8/22/25	
2,4-D	7.6 U	12	7.6	1	08/26/25 20:29	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	69	10 - 151	08/26/25 20:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	5.7 U	11	5.7	1	08/26/25 20:47	8/22/25	
2,4,5-TP	5.1 U	11	5.1	1	08/26/25 20:47	8/22/25	
2,4-D	7.4 U	11	7.4	1	08/26/25 20:47	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	50	10 - 151	08/26/25 20:47	



General Chemistry

ALS Environmental—Rochester Laboratory

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB01 (1-2)
Lab Code: R2510152-001

Service Request: R2510152
Date Collected: 08/11/25 10:25
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

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

ALS Group USA, Corp.
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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB02 (3-4)
Lab Code: R2510152-002

Service Request: R2510152
Date Collected: 08/11/25 10:33
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	85.8	Percent	-	-	1	08/29/25 10:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Sample Name: 14002 SB03 (5-6)
Lab Code: R2510152-003

Service Request: R2510152
Date Collected: 08/11/25 10:43
Date Received: 08/20/25 09:30

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	88.4	Percent	-	-	1	08/29/25 10:00	



QC Summary Forms

ALS Environmental—Rochester Laboratory

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Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Extraction Method: EPA 3546

Sample Name	Lab Code	2-Fluorobiphenyl	Nitrobenzene-d5	p-Terphenyl-d14
		18 - 104	12 - 98	26 - 134
14002 SB01 (1-2)	R2510152-001	69	60	89
14002 SB02 (3-4)	R2510152-002	69	71	82
14002 SB03 (5-6)	R2510152-003	64	56	84
Method Blank	RQ2511066-01	54	51	70
Lab Control Sample	RQ2511066-02	61	52	75
Duplicate Lab Control Sample	RQ2511066-03	58	50	74

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511066-01

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	61 U	330	61	1	08/21/25 13:25	8/21/25	
1,2,4,5-Tetrachlorobenzene	74 U	330	74	1	08/21/25 13:25	8/21/25	
2-Methylnaphthalene	120 U	330	120	1	08/21/25 13:25	8/21/25	
Acenaphthene	63 U	330	63	1	08/21/25 13:25	8/21/25	
Acenaphthylene	67 U	330	67	1	08/21/25 13:25	8/21/25	
Anthracene	55 U	330	55	1	08/21/25 13:25	8/21/25	
Benz(a)anthracene	49 U	330	49	1	08/21/25 13:25	8/21/25	
Benzo(a)pyrene	88 U	330	88	1	08/21/25 13:25	8/21/25	
Benzo(b)fluoranthene	55 U	330	55	1	08/21/25 13:25	8/21/25	
Benzo(g,h,i)perylene	76 U	330	76	1	08/21/25 13:25	8/21/25	
Benzo(k)fluoranthene	54 U	330	54	1	08/21/25 13:25	8/21/25	
1,4-Dichlorobenzene	55 U	330	55	1	08/21/25 13:25	8/21/25	
Biphenyl	98 U	330	98	1	08/21/25 13:25	8/21/25	
Chrysene	49 U	330	49	1	08/21/25 13:25	8/21/25	
Dibenz(a,h)anthracene	72 U	330	72	1	08/21/25 13:25	8/21/25	
1,4-Dioxane	32 U	67	32	1	08/21/25 13:25	8/21/25	
Dibenzofuran	60 U	330	60	1	08/21/25 13:25	8/21/25	
Fluoranthene	83 U	330	83	1	08/21/25 13:25	8/21/25	
Fluorene	62 U	330	62	1	08/21/25 13:25	8/21/25	
Indeno(1,2,3-cd)pyrene	110 U	330	110	1	08/21/25 13:25	8/21/25	
Naphthalene	62 U	330	62	1	08/21/25 13:25	8/21/25	
Phenanthrene	47 U	330	47	1	08/21/25 13:25	8/21/25	
Pyrene	55 U	330	55	1	08/21/25 13:25	8/21/25	
2,3,4,6-Tetrachlorophenol	120 U	330	120	1	08/21/25 13:25	8/21/25	
2,4,5-Trichlorophenol	82 U	330	82	1	08/21/25 13:25	8/21/25	
2,4,6-Trichlorophenol	74 U	330	74	1	08/21/25 13:25	8/21/25	
2,4-Dichlorophenol	64 U	330	64	1	08/21/25 13:25	8/21/25	
2,4-Dimethylphenol	59 U	330	59	1	08/21/25 13:25	8/21/25	
2,4-Dinitrophenol	560 U	1700	560	1	08/21/25 13:25	8/21/25	
2,4-Dinitrotoluene	130 U	330	130	1	08/21/25 13:25	8/21/25	
2,6-Dinitrotoluene	72 U	330	72	1	08/21/25 13:25	8/21/25	
2-Chloronaphthalene	66 U	330	66	1	08/21/25 13:25	8/21/25	
2-Chlorophenol	55 U	330	55	1	08/21/25 13:25	8/21/25	
2-Methylphenol	69 U	330	69	1	08/21/25 13:25	8/21/25	
2-Nitroaniline	78 U	1700	78	1	08/21/25 13:25	8/21/25	
2-Nitrophenol	77 U	330	77	1	08/21/25 13:25	8/21/25	
3,3'-Dichlorobenzidine	120 U	330	120	1	08/21/25 13:25	8/21/25	
3- and 4-Methylphenol Coelution	63 U	330	63	1	08/21/25 13:25	8/21/25	
3-Nitroaniline	67 U	1700	67	1	08/21/25 13:25	8/21/25	
4,6-Dinitro-2-methylphenol	190 U	1700	190	1	08/21/25 13:25	8/21/25	
4-Bromophenyl Phenyl Ether	87 U	330	87	1	08/21/25 13:25	8/21/25	
4-Chloro-3-methylphenol	67 U	330	67	1	08/21/25 13:25	8/21/25	
4-Chloroaniline	120 U	330	120	1	08/21/25 13:25	8/21/25	

ALS Group USA, Corp.
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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511066-01

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS using Microwave Digestion

Analysis Method: 8270E
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Chlorophenyl Phenyl Ether	71 U	330	71	1	08/21/25 13:25	8/21/25	
4-Nitroaniline	71 U	1700	71	1	08/21/25 13:25	8/21/25	
4-Nitrophenol	170 U	1700	170	1	08/21/25 13:25	8/21/25	
Acetophenone	95 U	330	95	1	08/21/25 13:25	8/21/25	
Atrazine	98 U	330	98	1	08/21/25 13:25	8/21/25	
Benzaldehyde	80 U	1700	80	1	08/21/25 13:25	8/21/25	
Benzoic Acid	520 U	1700	520	1	08/21/25 13:25	8/21/25	
Bis(1-chloroisopropyl) Ether	68 U	330	68	1	08/21/25 13:25	8/21/25	
Bis(2-chloroethoxy)methane	81 U	330	81	1	08/21/25 13:25	8/21/25	
Bis(2-chloroethyl) Ether	65 U	330	65	1	08/21/25 13:25	8/21/25	
Bis(2-ethylhexyl) Phthalate	61 U	500	61	1	08/21/25 13:25	8/21/25	
Butyl Benzyl Phthalate	96 U	330	96	1	08/21/25 13:25	8/21/25	
Caprolactam	73 U	330	73	1	08/21/25 13:25	8/21/25	
Carbazole	54 U	330	54	1	08/21/25 13:25	8/21/25	
Di-n-butyl Phthalate	54 U	330	54	1	08/21/25 13:25	8/21/25	
Di-n-octyl Phthalate	120 U	330	120	1	08/21/25 13:25	8/21/25	
Diethyl Phthalate	59 U	330	59	1	08/21/25 13:25	8/21/25	
Dimethyl Phthalate	63 U	330	63	1	08/21/25 13:25	8/21/25	
Hexachlorobenzene	79 U	330	79	1	08/21/25 13:25	8/21/25	
Hexachlorobutadiene	120 U	330	120	1	08/21/25 13:25	8/21/25	
Hexachlorocyclopentadiene	110 U	330	110	1	08/21/25 13:25	8/21/25	
Hexachloroethane	62 U	330	62	1	08/21/25 13:25	8/21/25	
Isophorone	69 U	330	69	1	08/21/25 13:25	8/21/25	
N-Nitrosodi-n-propylamine	110 U	330	110	1	08/21/25 13:25	8/21/25	
N-Nitrosodiphenylamine	210 U	330	210	1	08/21/25 13:25	8/21/25	
Nitrobenzene	59 U	330	59	1	08/21/25 13:25	8/21/25	
Pentachlorophenol (PCP)	330 U	1700	330	1	08/21/25 13:25	8/21/25	
Phenol	67 U	330	67	1	08/21/25 13:25	8/21/25	
Pyridine	45 U	1700	45	1	08/21/25 13:25	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	54	18 - 104	08/21/25 13:25	
Nitrobenzene-d5	51	12 - 98	08/21/25 13:25	
p-Terphenyl-d14	70	26 - 134	08/21/25 13:25	

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Analyte Name	Lab Control Sample RQ2511066-02				Duplicate Lab Control Sample RQ2511066-03				RPD	RPD Limit
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
1-Methylnaphthalene	8270E	1630	3320	49	1740	3330	52	29-100	6	30
1,2,4,5-Tetrachlorobenzene	8270E	1830	3320	55	1650	3330	49	20-126	10	30
2-Methylnaphthalene	8270E	1540	3320	46	1660	3330	50	29-99	7	30
Acenaphthene	8270E	1850	3320	56	1990	3330	60	41-110	7	30
Acenaphthylene	8270E	2090	3320	63	2230	3330	67	44-122	6	30
Anthracene	8270E	1950	3320	59	2070	3330	62	41-123	6	30
Benz(a)anthracene	8270E	1990	3320	60	2140	3330	64	44-116	8	30
Benzo(a)pyrene	8270E	2270	3320	68	2420	3330	73	56-146	7	30
Benzo(b)fluoranthene	8270E	1860	3320	56	2000	3330	60	47-120	7	30
Benzo(g,h,i)perylene	8270E	1920	3320	58	2060	3330	62	41-129	7	30
Benzo(k)fluoranthene	8270E	2020	3320	61	2170	3330	65	49-124	7	30
1,4-Dichlorobenzene	8270E	1430	3320	43	1610	3330	48	16-83	12	30
Biphenyl	8270E	1920	3320	58	1720	3330	52	24-112	11	30
Chrysene	8270E	2030	3320	61	2180	3330	65	44-119	7	30
1,4-Dioxane	8270E	1070	3320	32	1050	3330	32	10-58	2	30
Dibenz(a,h)anthracene	8270E	2030	3320	61	2160	3330	65	18-146	6	30
Dibenzofuran	8270E	1940	3320	58	2070	3330	62	43-113	7	30
Fluoranthene	8270E	2000	3320	60	2140	3330	64	39-128	6	30
Fluorene	8270E	1960	3320	59	2070	3330	62	40-117	5	30
Indeno(1,2,3-cd)pyrene	8270E	2120	3320	64	2290	3330	69	43-129	8	30
Naphthalene	8270E	1550	3320	47	1660	3330	50	31-93	7	30
Phenanthrene	8270E	1810	3320	54	1920	3330	58	39-120	6	30
Pyrene	8270E	1960	3320	59	2130	3330	64	45-125	8	30
2,3,4,6-Tetrachlorophenol	8270E	2300	3320	69	2440	3330	73	42-117	6	30
2,4,5-Trichlorophenol	8270E	2080	3320	63	2180	3330	66	40-114	5	30
2,4,6-Trichlorophenol	8270E	1970	3320	59	2130	3330	64	33-108	8	30
2,4-Dichlorophenol	8270E	1820	3320	55	1930	3330	58	30-103	6	30
2,4-Dimethylphenol	8270E	1810	3320	54	1900	3330	57	32-100	5	30
2,4-Dinitrophenol	8270E	1540 J	3320	46	1700 J	3330	51	10-97	9	30
2,4-Dinitrotoluene	8270E	2060	3320	62	2210	3330	67	53-120	7	30
2,6-Dinitrotoluene	8270E	2060	3320	62	2220	3330	67	48-119	7	30
2-Chloronaphthalene	8270E	1850	3320	56	1980	3330	60	33-103	7	30
2-Chlorophenol	8270E	1780	3320	53	1910	3330	57	26-90	7	30

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Lab Control Sample RQ2511066-02					Duplicate Lab Control Sample RQ2511066-03					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2-Methylphenol	8270E	1950	3320	59	2080	3330	63	33-99	7	30
2-Nitroaniline	8270E	1970	3320	59	2110	3330	63	41-119	7	30
2-Nitrophenol	8270E	1660	3320	50	1780	3330	53	24-98	7	30
3- and 4-Methylphenol Coelution	8270E	2030	3320	61	2210	3330	66	32-100	9	30
3-Nitroaniline	8270E	1700	3320	51	1750	3330	53	29-105	3	30
4,6-Dinitro-2-methylphenol	8270E	1960	3320	59	2110	3330	64	20-105	7	30
4-Bromophenyl Phenyl Ether	8270E	2000	3320	60	2130	3330	64	37-116	7	30
4-Chloro-3-methylphenol	8270E	1900	3320	57	2000	3330	60	40-116	5	30
4-Chloroaniline	8270E	1330	3320	40	1230	3330	37	10-87	8	30
4-Chlorophenyl Phenyl Ether	8270E	1920	3320	58	2050	3330	62	42-111	6	30
4-Nitroaniline	8270E	1600 J	3320	48	1880	3330	57	43-120	16	30
4-Nitrophenol	8270E	1760	3320	53	1810	3330	54	34-116	2	30
Acetophenone	8270E	1830	3320	55	1640	3330	49	23-87	11	30
Benzoic Acid	8270E	1960	3320	59	2120	3330	64	10-126	8	30
Bis(1-chloroisopropyl) Ether	8270E	1760	3320	53	1930	3330	58	22-99	9	30
Bis(2-chloroethoxy)methane	8270E	1820	3320	55	1930	3330	58	38-119	6	30
Bis(2-chloroethyl) Ether	8270E	1630	3320	49	1780	3330	53	23-94	9	30
Bis(2-ethylhexyl) Phthalate	8270E	2190	3320	66	2370	3330	71	38-139	8	30
Butyl Benzyl Phthalate	8270E	2080	3320	63	2240	3330	67	40-134	8	30
Caprolactam	8270E	1890	3320	57	1630	3330	49	21-128	15	30
Carbazole	8270E	1960	3320	59	2140	3330	64	42-131	9	30
Di-n-butyl Phthalate	8270E	2170	3320	65	2340	3330	70	42-141	8	30
Di-n-octyl Phthalate	8270E	2290	3320	69	2470	3330	74	38-143	8	30
Diethyl Phthalate	8270E	1980	3320	60	2100	3330	63	43-118	6	30
Dimethyl Phthalate	8270E	1990	3320	60	2140	3330	64	40-118	7	30
Hexachlorobenzene	8270E	1940	3320	59	2070	3330	62	35-122	6	30
Hexachlorobutadiene	8270E	1510	3320	45	1650	3330	49	28-96	9	30
Hexachlorocyclopentadiene	8270E	1670	3320	50	1850	3330	55	10-111	10	30
Hexachloroethane	8270E	1460	3320	44	1660	3330	50	18-85	13	30
Isophorone	8270E	1800	3320	54	1920	3330	58	39-104	6	30
N-Nitrosodi-n-propylamine	8270E	1790	3320	54	1910	3330	57	30-98	7	30
N-Nitrosodiphenylamine	8270E	2220	3320	67	2380	3330	72	43-130	7	30
Nitrobenzene	8270E	1640	3320	49	1760	3330	53	31-99	7	30

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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/21/25

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

Units:ug/Kg
Basis:Dry

Analyte Name	Lab Control Sample				Duplicate Lab Control Sample					
	RQ2511066-02				RQ2511066-03					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Pentachlorophenol (PCP)	8270E	1680 J	3320	51	1770	3330	53	36-138	5	30
Phenol	8270E	1850	3320	56	1980	3330	60	31-100	7	30
Pyridine	8270E	2760	6640	42	2910	6660	44	12-80	5	30



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Extraction Method: EPA 3546

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 159	10 - 132
14002 SB01 (1-2)	R2510152-001	56	65
14002 SB02 (3-4)	R2510152-002	33	40
14002 SB03 (5-6)	R2510152-003	53	50
Method Blank	RQ2511079-01	64	54
Lab Control Sample	RQ2511079-02	68	61
Duplicate Lab Control Sample	RQ2511079-03	69	58

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Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511079-01

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography using Microwave Extraction

Analysis Method: 8081B
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
4,4'-DDE	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
4,4'-DDT	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Aldrin	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Chlordane	4.2 U	8.3	4.2	1	08/25/25 12:41	8/21/25	
Dieldrin	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endosulfan I	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endosulfan II	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endosulfan Sulfate	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endrin	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endrin Aldehyde	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Endrin Ketone	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Heptachlor	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Heptachlor Epoxide	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Methoxychlor	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
Toxaphene	19 U	33	19	1	08/25/25 12:41	8/21/25	
alpha-BHC	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
alpha-Chlordane	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
beta-BHC	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
delta-BHC	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
gamma-BHC (Lindane)	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	
gamma-Chlordane	0.84 U	1.7	0.84	1	08/25/25 12:41	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	64	10 - 159	08/25/25 12:41	
Tetrachloro-m-xylene	54	10 - 132	08/25/25 12:41	

ALS Group USA, Corp.
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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/25/25

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

Units:ug/Kg
Basis:Dry

Lab Control Sample RQ2511079-02					Duplicate Lab Control Sample RQ2511079-03					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4,4'-DDD	8081B	5.86	6.57	89	5.89	6.64	89	48-121	<1	30
4,4'-DDE	8081B	5.52	6.57	84	5.24	6.64	79	51-119	5	30
4,4'-DDT	8081B	6.01	6.57	92	6.09	6.64	92	51-126	1	30
Aldrin	8081B	4.95	6.57	75	4.64	6.64	70	45-109	6	30
Dieldrin	8081B	5.28	6.57	80	5.11	6.64	77	56-111	3	30
Endosulfan I	8081B	4.60	6.57	70	4.55	6.64	68	54-109	1	30
Endosulfan II	8081B	5.12	6.57	78	5.16	6.64	78	50-116	<1	30
Endosulfan Sulfate	8081B	5.30	6.57	81	5.31	6.64	80	55-115	<1	30
Endrin	8081B	5.41	6.57	82	5.24	6.64	79	49-124	3	30
Endrin Aldehyde	8081B	5.42	6.57	83	5.44	6.64	82	21-139	<1	30
Endrin Ketone	8081B	5.52	6.57	84	5.44	6.64	82	50-124	1	30
Heptachlor	8081B	5.17	6.57	79	4.88	6.64	73	43-115	6	30
Heptachlor Epoxide	8081B	5.38	6.57	82	5.07	6.64	76	53-113	6	30
Methoxychlor	8081B	6.41	6.57	98	6.17	6.64	93	47-141	4	30
alpha-BHC	8081B	5.00	6.57	76	4.55	6.64	68	44-109	10	30
alpha-Chlordane	8081B	5.23	6.57	80	5.09	6.64	77	52-114	3	30
beta-BHC	8081B	5.76	6.57	88	5.22	6.64	79	49-119	10	30
delta-BHC	8081B	5.50	6.57	84	5.32	6.64	80	49-113	3	30
gamma-BHC (Lindane)	8081B	4.88	6.57	74	4.55	6.64	69	43-112	7	30
gamma-Chlordane	8081B	5.37	6.57	82	5.12	6.64	77	51-117	5	30

ALS Group USA, Corp.
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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

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

Analysis Method: 8082A
Extraction Method: EPA 3546

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 138	11 - 122
14002 SB01 (1-2)	R2510152-001	73	64
14002 SB02 (3-4)	R2510152-002	47 P	46
14002 SB03 (5-6)	R2510152-003	62	47
Method Blank	RQ2511079-01	71	54
Lab Control Sample	RQ2511079-04	77	65
Duplicate Lab Control Sample	RQ2511079-05	84	62

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511079-01

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	17 U	32	17	1	08/24/25 23:50	8/21/25	
Aroclor 1221	26 U	66	26	1	08/24/25 23:50	8/21/25	
Aroclor 1232	19 U	32	19	1	08/24/25 23:50	8/21/25	
Aroclor 1242	17 U	32	17	1	08/24/25 23:50	8/21/25	
Aroclor 1248	18 U	32	18	1	08/24/25 23:50	8/21/25	
Aroclor 1254	17 U	32	17	1	08/24/25 23:50	8/21/25	
Aroclor 1260	17 U	32	17	1	08/24/25 23:50	8/21/25	
Aroclor 1262	17 U	32	17	1	08/24/25 23:50	8/21/25	
Aroclor 1268	17 U	32	17	1	08/24/25 23:50	8/21/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	71	10 - 138	08/24/25 23:50	
Tetrachloro-m-xylene	54	11 - 122	08/24/25 23:50	

ALS Group USA, Corp.
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QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/25/25

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

Units:ug/Kg
Basis:Dry

			Lab Control Sample			Duplicate Lab Control Sample				
			RQ2511079-04			RQ2511079-05				
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	8082A	131	166	79	126	166	76	34-141	4	30
Aroclor 1260	8082A	140	166	85	144	166	87	30-158	3	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152

SURROGATE RECOVERY SUMMARY
Chlorinated Herbicides by GC

Analysis Method: 8151A
Extraction Method: Method

Sample Name	Lab Code	DCAA
		10 - 151
14002 SB01 (1-2)	R2510152-001	64
14002 SB02 (3-4)	R2510152-002	69
14002 SB03 (5-6)	R2510152-003	50
Method Blank	RQ2511152-01	63
Lab Control Sample	RQ2511152-02	59
Duplicate Lab Control Sample	RQ2511152-03	65

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2511152-01

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-T	5.0 U	9.9	5.0	1	08/26/25 19:16	8/22/25	
2,4,5-TP	4.5 U	9.9	4.5	1	08/26/25 19:16	8/22/25	
2,4-D	6.5 U	9.9	6.5	1	08/26/25 19:16	8/22/25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	63	10 - 151	08/26/25 19:16	

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dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: 14002_Tacoma
Sample Matrix: Soil

Service Request: R2510152
Date Analyzed: 08/26/25

Duplicate Lab Control Sample Summary
Chlorinated Herbicides by GC

Units:ug/Kg
Basis:Dry

Lab Control Sample
RQ2511152-02

Duplicate Lab Control Sample
RQ2511152-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2,4,5-T	8151A	16.3	25.0	65	19.0	25.2	75	19-127	15	30
2,4,5-TP	8151A	13.9	25.0	56	16.4	25.2	65	18-122	16	30
2,4-D	8151A	12.7	25.0	51	14.7	25.2	58	31-119	15	30

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dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Lab Control Sample
Lab Code: RQ2511152-02

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analytical Method: 8151A
Prep Method: Method

	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
2,4,5-T	5.1	16.3	16.7	2		1	08/26/25 19:34
2,4,5-TP	4.6	13.9	14.4	4		1	08/26/25 19:34
2,4-D	6.6	12.7	15.2	18		1	08/26/25 19:34

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: ALS Environmental - US
Project: 14002_Tacoma
Matrix: Soil

Service Request: R2510152
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: RQ2511152-03

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analytical Method: 8151A
Prep Method: Method

	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
2,4,5-T	5.1	19.0	18.1	5		1	08/26/25 19:52
2,4,5-TP	4.6	16.4	16.5	<1		1	08/26/25 19:52
2,4-D	6.6	14.7	17.7	19		1	08/26/25 19:52