



SPS Technologies Abington PA
February 27, 2025 Daily Surface Water
and Outfall Sampling Results Report

SPS Technologies

2025-03-03



Table of Contents

1.	Executive Summary	2
2.	Introduction	3
3.	Site Background	3
4.	Tookany Creek Offsite Investigation	3
4.1	Sampling Locations	3
4.2	Surface Water and Outfall Sampling Field Methodology	3
4.3	Sample Analysis	4
4.4	Surface Water Sampling Daily Results	4
4.5	Outfall Sampling Daily Results	4
5.	Daily Quality Assurance/Quality Control and Management	5
5.1	Field Quality Assurance/Quality Control Requirements	5
5.2	Analytical QA/QC Samples	5
5.3	Data Evaluation	5
6.	References	5

TABLES

Table 1	Daily Surface Water Sampling Results
Table 2	Daily Outfall Sampling Results

FIGURES

Figure 1	Surface Water and Outfall Sample Locations
Figure 2	Downstream Surface Water Sample Locations

Appendices

Appendix A	Daily Surface Water Sampling Log
Appendix B	Data Validation Report
Appendix C	Laboratory Analytical Report

1. Executive Summary

WSP USA Inc. (WSP), on behalf of SPS Technologies Abington PA (SPS), collected five surface water samples and two outfall samples in accordance with SPS's Sampling Plan, which was submitted to the Philadelphia Water Department (PWD), the Pennsylvania Department of Environmental Protection (PADEP), and the United States Environmental Protection Agency (EPA). The samples were submitted to a Pennsylvania-certified analytical laboratory for analysis. The sample locations are shown in the attached **Figures 1** and **2** and the results of the analysis are shown below.

Surface Water Samples:

		Upstream Offsite SW Sample Location 1	Upstream Offsite SW Sample Location 2	SW Sample Location 3	High School Road Sample Location	Downstream SW Sample Location
Parameter	Units	Result	Result	Result	Result	Result
Toluene	mg/L	ND	ND	ND	ND	ND
2-Butanone (MEK)	mg/L	ND	ND	ND	ND	ND
Chromium, Trivalent	mg/L	ND	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND	ND
Total Cyanide	mg/L	ND	0.002	0.012	0.005	0.004
Free Cyanide	mg/L	ND	0.004	0.005	ND	ND
Oil & Grease	mg/L	ND	ND	5	ND	ND
Total Chromium	mg/L	0.0004	0.00031	0.00031	0.00018	0.00031
Total Nickel	mg/L	0.00092	0.00136	0.00566	0.00444	0.00289
Dissolved Chromium	mg/L	0.0003	0.0002	0.0003	0.0002	0.0002
Dissolved Nickel	mg/L	0.0008	0.0014	0.0062	0.0063	0.003
Hardness	mg/L	210.8	259.2	221.1	212.1	189.5
pH	SU	7.64	7.27	7.02	6.78	6.35

Outfall Samples:

		Outfall 004	Outfall 006	Outfall 006 Duplicate
Parameter	Units	Result	Result	Result
Toluene	mg/L	ND	ND	ND
2-Butanone (MEK)	mg/L	ND	ND	ND
Chromium, Trivalent	mg/L	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND
Total Cyanide	mg/L	0.002	0.002	0.002
Free Cyanide	mg/L	ND	ND	ND
Oil & Grease	mg/L	ND	ND	ND
Total Suspended Solids	mg/L	50	ND	ND
Nitrate/Nitrite as Nitrogen	mg/L	1.6	3.6	3.6
Chemical Oxygen Demand	mg/L	100	15	12
Total Aluminum	mg/L	0.2278	0.01544	0.01845
Total Chromium	mg/L	0.00292	0.00059	0.00062
Total Copper	mg/L	0.01584	0.00525	0.00481
Total Iron	mg/L	0.6174	0.1853	0.1983
Total Lead	mg/L	0.00965	0.00088	0.00092
Total Nickel	mg/L	0.2358	0.00184	0.00161

		Outfall 004	Outfall 006	Outfall 006 Duplicate
Total Zinc	mg/L	0.2498	0.06224	0.05814
Dissolved Chromium	mg/L	0.0007	0.0003	0.0003
Dissolved Nickel	mg/L	0.1928	0.0016	0.0051
Hardness	mg/L	535.9	191.5	183
pH	SU	6.65	7.40	7.40

A detailed description of the sampling procedure, results, and data evaluation are included in this Report. The laboratory data validation reports and the complete laboratory analytical reports, including Quality Assurance/Quality Control (QA/QC) are attached to the Report.

2. Introduction

This Daily Surface Water and Outfall Sampling Results Report (Report) has been prepared by WSP USA Inc. (WSP) on behalf of SPS Technologies Abington PA (SPS), which operates the facility located at 301 Highland Ave, Jenkintown, Pennsylvania, 19046 (the Facility). The purpose of the Report is to provide off-site surface water and outfall sampling results collected in accordance with SPS's Sampling Plan, as prepared by WSP, which was submitted to the Philadelphia Water Department (PWD), the Pennsylvania Department of Environmental Protection (PADEP), and the United States Environmental Protection Agency (EPA) on February 21, 2025 and revised on February 25, 2025 (Sampling Plan). Refer to Sampling Plan **Figures 1** and **2** for sampling locations.

3. Site Background

SPS Technologies currently owns the Site. Operations at the Site consist of manufacturing bolts, nuts, screws, rivets, washers, furniture, and fixtures. Tookany Creek is located south of the SPS building and north of Paxson Ave.

4. Tookany Creek Offsite Investigation

4.1 Sampling Locations

The sampling locations displayed on **Figure 1** and **Figure 2** were selected based on discussions with PWD and PADEP and were identified in the Sampling Plan.

4.2 Surface Water and Outfall Sampling Field Methodology

The surface water and outfall sampling methodology was in accordance with the Sampling Plan.

The surface water and outfall field data collected for the surface water and outfall samples at each sampling location included the following:

- Water depth (for surface water samples only)
- Weather conditions
- Water velocity (if visibly flowing)
- Sample characteristics (clarity, appearance, color, odor, etc.)
- Water quality measurements (DO, pH, salinity, ORP, turbidity, conductivity, and temperature)
- Additional observations (e.g., wildlife sightings)

This data is documented on the daily surface water sampling forms attached in **Appendix A**. The in-field measurements of pH are provided on **Table 1** and **2**.

4.3 Sample Analysis

All samples were submitted to Pace Analytical in Westborough, Massachusetts (Certification No. 68-03671) and Pace Analytical in Mansfield, Massachusetts (Certification No. 68-02089), following chain-of-custody protocols.

4.4 Surface Water Sampling Daily Results

In accordance with the Sampling Plan, surface water samples were analyzed for the following parameters.

- pH (in-field measurement)
- Oil & grease
- Free cyanide
- Total cyanide
- Total nickel
- Dissolved nickel
- Total chromium
- Dissolved chromium
- Hexavalent chromium (speciated)
- Methyl ethyl ketone (MEK)
- Toluene
- Total hardness

The validated daily analytical results from surface water sampling are presented in **Table 1**.

4.5 Outfall Sampling Daily Results

In accordance with the Sampling Plan and PADEP's comments, outfall samples were analyzed for the following parameters:

- Chemical Oxygen Demand
- Total Suspended Solids
- Nitrate-Nitrite as N
- Total aluminum
- Total copper
- Total iron
- Total lead
- Toluene
- Methyl ethyl ketone (MEK)
- Hexavalent chromium (speciated)
- Total cyanide
- Free cyanide
- Oil & grease
- Total chromium
- Total nickel

- Total zinc
- Dissolved chromium
- Dissolved nickel
- Hardness

The validated daily analytical results from outfall sampling are presented in **Table 2**.

5. Daily Quality Assurance/Quality Control and Management

5.1 Field Quality Assurance/Quality Control Requirements

Field personnel performed data quality control (QC) verification of field measurements in consultation with the Pennsylvania Department of Environmental Protection Sampling and Analysis Plan (PADEP, 2023). This process included reviewing calibration records and duplicate readings to ensure data accuracy. Field measurements were documented in notebooks or field information forms. pH readings are also summarized in **Table 1**.

All hand equipment used during the sampling event was cleaned with Alconox and distilled water. Disposable sampling cups were used to collect the samples. Field personnel wore disposable nitrile sampling gloves. Sampling gloves were discarded after processing at each sample location and replaced before handling decontaminated equipment or work surfaces.

5.2 Analytical QA/QC Samples

All quality assurance/quality control (QA/QC), field duplicates (FD), and matrix spikes/matrix spike duplicates (MS/MSD) were collected in accordance with the Sampling Plan.

Trip blanks (TBs) accompanied each shipment of toluene and MEK samples at a rate of one per day. The following QA/QC samples were collected at a rate of 1 per 20 primary samples during each monitoring event: field duplicates (FD) and matrix spikes/matrix spike duplicates (MS/MSD). No field (rinsate) blanks were collected because single-use sample cups were used to collect the samples.

5.3 Data Evaluation

The reliability of the analytical data were evaluated to assess its suitability for use in the monitoring. In particular, the data's precision, accuracy, and sensitivity were evaluated based on field sampling documentation, adherence to sample holding times, and analysis of the QC samples (duplicates, spikes, and blanks). Data validation of the laboratory data was in accordance with the Sampling Plan. The data validation report is attached as **Appendix B**.

6. References

1. SPS Technologies, Sampling Plan. 25 Feb. 2025.
2. Pennsylvania Department of Environmental Protection. Water Quality Monitoring Protocols for Surface Waters. 2023.

FIGURES & TABLES & APPENDICES



SOURCE
NEARMAP IMAGERY, JUNE 16, 2024.

LEGEND
 SW = SURFACE WATER
 ● SURFACE WATER SAMPLE LOCATION
 ● APPROXIMATE OUTFALL SAMPLE LOCATION



WSP USA Inc.
751 Arbor Way, Suite 180
Blue Bell, PA 19422
Tel. 610-828-8100
www.wsp.com

PROJECTION / DATUM: PA83-SF
 PREPARED BY: PJC
 CHECKED BY: KM
 REVIEWED BY: TK

CLIENT

PROJECT

**SURFACE WATER AND
OUTFALL SAMPLING
RESULTS REPORT**

PROJECT NO.:
US0043268.2150

REVISION NO.:
0

DATE:
FEBRUARY 2025

FIGURE NO.:

**SURFACE WATER AND
OUTFALL SAMPLE LOCATIONS**

1



SOURCE
 GEOMAP IMAGERY, 2025.

LEGEND
 SW = SURFACE WATER
 ● SURFACE WATER SAMPLE LOCATION



WSP USA Inc.
 751 Arbor Way, Suite 180
 Blue Bell, PA 19422
 Tel. 610-828-8100
 www.wsp.com

PROJECTION / DATUM: PA83-SF
 PREPARED BY: PJC
 CHECKED BY: KM
 REVIEWED BY: TK
 SCALE: 1" = 3,000'

CLIENT

PROJECT
**SURFACE WATER AND
 OUTFALL SAMPLING
 RESULTS REPORT**

TITLE
OFF-SITE SURFACE WATER SAMPLE LOCATIONS

PROJECT NO.: US0043268.2150
 REVISION NO.: 0
 DATE: FEBRUARY 2025
 FIGURE NO.:

Table 1
Surface Water Analytical Results
Daily Surface Water Sampling Results Report
SPS Technologies
Jenkintown, Pennsylvania

Sample Location Field Sample ID Lab Sample ID Sampling Date Matrix	Upstream Offsite SW Sample Location 1			Upstream Offsite SW Sample Location 2			SW Sample Location 3			High School Road Sample Location			Downstream SW Sample Location			
	SW2_022725			SW1_022725			SW3_022725			SW4_022725			SW5_022725			
	L2511023-04			L2511023-05			L2511023-03			L2511023-02			L2511023-01			
	2/27/2025			2/27/2025			2/27/2025			2/27/2025			2/27/2025			
	Water			Water			Water			Water			Water			
Parameter	Units	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Volatile Organic Compounds																
Toluene	mg/L	ND		0.001	ND		0.001	ND		0.001	ND		0.001	ND		0.001
2-Butanone (MEK)	mg/L	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND		0.01
General Chemistry																
Chromium, Trivalent	mg/L	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND		0.01
Chromium, Hexavalent	mg/L	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND		0.01
Total Cyanide	mg/L	ND		0.005	0.002	J	0.005	0.012		0.005	0.005		0.005	0.004	J	0.005
Free Cyanide	mg/L	ND		0.01	0.004	J	0.01	0.005	J	0.01	ND		0.01	ND		0.01
Oil & Grease	mg/L	ND		4	ND		4	5		4	ND		4	ND		4.4
Total Metals																
Total Chromium	mg/L	0.0004	J	0.001	0.00031	J	0.001	0.00031	J	0.001	0.00018	J	0.001	0.00031	J	0.001
Total Nickel	mg/L	0.00092	J	0.002	0.00136	J	0.002	0.00566		0.002	0.00444		0.002	0.00289		0.002
Dissolved Metals																
Dissolved Chromium	mg/L	0.0003	J	0.001	0.0002	J	0.001	0.0003	J	0.001	0.0002	J	0.001	0.0002	J	0.001
Dissolved Nickel	mg/L	0.0008	J	0.002	0.0014	J	0.002	0.0062		0.002	0.0063		0.002	0.003		0.002
Total Hardness																
Hardness	mg/L	210.8		0.54	259.2		0.54	221.1		0.54	212.1		0.54	189.5		0.54
Field Parameters																
pH ¹	SU	7.64			7.27			7.02			6.78			6.35		

Notes:

1.) Field measurements for pH were performed by WSP field personnel prior to sample collection using a Horiba U-52. Field measurements were not validated.

Abbreviations:

mg/L: milligrams per liter
 ND: Non-Detect
 Q: Qualifier
 RL: Reporting Limit
 SU: Standard Units

Qualifiers:

J - Estimated Result



Table 2
Outfall Analytical Results
Daily Surface Water Sampling Results Report
SPS Technologies
Jenkintown, Pennsylvania

Sample Location	Outfall 004			Outfall 006			Outfall 006 Duplicate			
Field Sample ID	OF004_022725			OF006_022725			FDOF_022625			
Lab Sample ID	L2511022-01			L2511022-02			L2511022-03			
Sampling Date	2/27/2025			2/27/2025			2/27/2025			
Matrix	Water			Water			Water			
Parameter	Units	Result	Q	RL	Result	Q	RL	Result	Q	RL
Volatile Organic Compounds										
Toluene	mg/L	ND		0.001	ND		0.001	ND		0.001
2-Butanone (MEK)	mg/L	ND		0.01	ND	UJ	0.01	ND		0.01
General Chemistry										
Chromium, Trivalent	mg/L	ND		0.01	ND		0.01	ND		0.01
Chromium, Hexavalent	mg/L	ND		0.01	ND		0.01	ND		0.01
Total Cyanide	mg/L	0.002	J	0.005	0.002	J	0.005	0.002	J	0.005
Free Cyanide	mg/L	ND		0.01	ND		0.01	ND		0.01
Oil & Grease	mg/L	ND		4	ND		4	ND		4
Total Suspended Solids	mg/L	50		5	ND		5	ND		5
Nitrate/Nitrite as Nitrogen	mg/L	1.6		0.1	3.6		0.1	3.6		0.1
Chemical Oxygen Demand	mg/L	100		20	15	J	20	12	J	20
Total Metals										
Total Aluminum	mg/L	0.2278		0.01	0.01544		0.01	0.01845		0.01
Total Chromium	mg/L	0.00292		0.001	0.00059	J	0.001	0.00062	J	0.001
Total Copper	mg/L	0.01584		0.001	0.00525		0.001	0.00481		0.001
Total Iron	mg/L	0.6174		0.05	0.1853		0.05	0.1983		0.05
Total Lead	mg/L	0.00965		0.001	0.00088	J	0.001	0.00092	J	0.001
Total Nickel	mg/L	0.2358		0.002	0.00184	J	0.002	0.00161	J	0.002
Total Zinc	mg/L	0.2498		0.005	0.06224		0.005	0.05814		0.005
Dissolved Metals										
Dissolved Chromium	mg/L	0.0007	J	0.001	0.0003	J	0.001	0.0003	J	0.001
Dissolved Nickel	mg/L	0.1928		0.002	0.0016	J	0.002	0.0051	J	0.002
Total Hardness										
Hardness	mg/L	535.9		0.54	191.5		0.54	183		0.54
Field Parameters										
pH ¹	SU	6.65			7.40			7.40		

Notes:

1.) Field measurements for pH were performed by WSP field personnel prior to sample collection using a Horiba U-52. Field measurements were not validated.

Abbreviations:

mg/L: milligrams per liter
 ND: Non-Detect
 Q: Qualifier
 RL: Reporting Limit
 SU: Standard Units

Qualifiers:

J - Estimated Result
 UJ - Non-Detect Result, RL is Estimated

Created By: SNM 3/1/2025
 Checked By: JKC 3/1/2025



APPENDIX A – DAILY SURFACE WATER AND OUTFALL SAMPLING LOGS

SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: SPS
 Location: Abington
 Project Number: US0043268-2150
 Meter/Type/Serial #: Horiba U-52 # S/N: SUSR3JT6
 Meter Calibrated @: 9:00 2/27/25
 Flow Meter: FH950 Meter # S/N: 182641009154
 Sampling Date/Time: SWS-022725 @ 9:35 2/27/25, SW4-022725 @ 10:15 2/27/25, SW3-022725 @ 10:55 2/27/25
 Sampler(s): JET, BL SW2-022725 @ 11:30 2/27/25, SW1-022725 @ 13:45 2/27/25
 Sampling Device: Telescope pole + Dipper Ladle
 Sample Characteristics: SWS-022725 clear no odor, SW4-022725 clear no odor, SW3-022725 clear no odor - 5244
 Analytical Parameters: SW2-022725 clear no odor, SW1-022725 clear no odor

Additional Notes: SW3-022725, clear no odor Sheen
-All PID readings 0.0 at all locations

Weather Conditions: cloudy slight Rain 46°F

STATION / SAMPLE	STATION DESCRIPTION (stream/lake/river)	DATE mm/dd/yy	TIME hr:min	TOTAL DEPTH inches	SAMPLE DEPTH	WATER TEMP Celsius	SALINITY ppt	pH SU	COND mS/cm	ORP mV	TURBIDITY NTU	DO mg/L	VELOCITY ft/sec
SWS-022725	Creek	2/27/25	9:35	14	7	10.13	0.3	6.35	0.723	+477	3.9	6.77	0.7
Sample Characteristics:		Clear No odor											
SW4-022725	Creek	2/27/25	10:15	72	36	9.71	0.4	6.78	0.813	+315	0	7.93	1.25
Sample Characteristics:		clear, no odor											
SW3-022725	Creek	2/27/25	10:55	25.5	12.75	9.65	0.3	7.02	0.704	+201	1.2	6.47	0.38
Sample Characteristics:		clear no odor, sheen.											
SW2-022725	Creek	2/27/25	11:30	6	3	9.85	0.3	7.64	0.687	+221	0.0	8.26	0.34
Sample Characteristics:		Clear No odor											
SW1-022725	Creek	2/27/25	13:45	13.5	6.75	10.45	0.5	7.27	1.04	+230	0.0	7.07	3.67
Sample Characteristics:		clear, no odor											

John Turner

Bob [Signature]

WSP

APPENDIX B – DATA VALIDATION REPORT

QA LEVEL 2A - DATA VERIFICATION/DATA VALIDATION CHECKLIST

Project Name: SPS Technologies

Project Number/Phase/Task: US0043268.2150-US-SPS Client Support. Task 01

Reviewing Company: WSP USA

Project Manager: Tovah Karl

Data Evaluator: Julia Campbell

Data Evaluation Date: February 28, 2025

Checked by: Julie Lehrman

Review Date: March 1, 2025

Laboratory: Pace Analytical LLC

Lab SDG #: L2511022

Matrix: Aqueous Soil Sediment Waste Air Other:

Analytical Methods: See Table B-1

Sample Information: See Table B-1

Work Plan or QAPP: SPS Technologies Abington PA Surface Water and Outfall Sampling Plan (WSP, 2025)

Data Validation Guidance:

USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (Nov. 2020)

USEPA NFG for Inorganic Superfund Methods Data Review (Nov. 2020)

COC and Sample Receipt	YES	NO	NA	COMMENT
a) COC complete and correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Note 1
b) COC documents release of custody (signed and dated)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Field QC types provided (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TB, FD, MS/MSD; See Table B-1
d) Did the cooler contents match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
e) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
f) Were cooler temperatures within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Data Package Information	YES	NO	NA	COMMENT
a) Laboratory name and location documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) All samples on COC reported in data package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Requested analytical methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d) Requested sample preparation methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Requested analyte list reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
f) Requested units reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g) Did the laboratory define the qualifiers used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
h) Data package contains all information necessary to complete the data quality review?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Analytical Assessment	YES	NO	NA	COMMENT
a) Solid samples reported on a dry-weight basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were solid samples percent moisture criteria acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Were sample dilutions noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
e) Were detected concentrations above the calibration range reported by the laboratory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
f) Did the laboratory satisfy the requested sensitivity requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes below
b) Were all deficiencies noted in the laboratory qualifiers or narrative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were holding times met for sample preparation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were holding times met for sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Blanks	YES	NO	NA	COMMENTS
a) Were blanks analyzed at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were any analytes detected in the associated preparation/method blank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
c) Were any analytes detected in the associated trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Were any analytes detected in the associated field or equipment/rinsate blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Were any analytes detected in the associated storage blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Surrogates or Deuterated Monitoring Compounds	YES	NO	NA	COMMENTS
a) Were the correct surrogate compounds added to each sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were surrogate recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) If not, were samples analyzed at dilution factors of 20x or greater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

LCS/LCSD	YES	NO	NA	COMMENTS
a) Were LCS/LCSD reported at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were proper analytes included in the LCS/LCSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Were LCS/LCSD recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d) Were RPD values within control limits (if LCSD was analyzed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
a) Were project-specific MS (and MSD) reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		OF006_022725
b) Were proper analytes reported in the MS/MSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
c) Were project-specific MS/MSD recoveries within control limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Note 2, 3
d) If not, were sample concentrations greater than 4x the spiking concentration?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f) Were project-specific post-digestion spikes analyzed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Were project-specific post-digestion spike recoveries within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Duplicates	YES	NO	NA	COMMENTS
a) Were project-specific laboratory duplicates reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OF006_022725 (nitrate-nitrite, COD, & TSS, cyanide only), OF004_022725 (hex chrom only)
b) Was laboratory duplicate RPD or absolute difference criteria acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were field duplicates reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OF006_022725/FDOF_022725
d) Was field duplicate RPD or absolute difference criteria acceptable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Note 4 30% RPD for results >5x RL
ICP Serial Dilution (SD)	YES	NO	NA	COMMENTS
a) Was project-specific ICP SD data provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were project-specific ICP SD within acceptable criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Overall Evaluation	YES	NO	NA	COMMENTS
a) Were there any other technical problems not previously addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
b) Were data acceptable and usable, except where noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Comments/Notes:

The reliability of the analytical data was evaluated to assess its suitability for use. In particular, a Stage 2A data validation was performed, which evaluates the data's precision, accuracy, and sensitivity based on adherence to sample holding times and analysis of the QC samples (duplicates, spikes, and blanks). Where appropriate, data qualifiers were applied following USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (Nov. 2020) and USEPA NFG for Inorganic Superfund Methods Data Review (Nov. 2020), as applicable to the analytical methods used by the laboratory. Based on the data review, while estimated qualifiers were applied to certain data as detailed in Table B-2, all data was deemed suitable for project decision making. Further detail can be found in the comments below and in Table B-2.

1. On the COC, the field duplicate sample ID was name FDOF_22725. The lab reported this sample ID as FDOF_022625 in the preliminary report. The lab was notified, and the sample ID was revised in the final report to reflect the sample ID on the COC. No further action is required.
2. The matrix spike and matrix spike duplicate performed on sample OF006_022725 had an 56% recovery for 2-butanone in both the matrix spike and duplicate, which was below QC criteria (60-140%). 2-Butanone was

not detected in the associated sample. Following the NFG, the sample result was qualified as estimated (UJ).

3. The matrix spike recovery performed on sample OF006_022725 had a 64% recovery for Hardness, which was below QC limits (70-130%). The matrix spike duplicate, and relative percent difference (RPD) were within QC criteria. The associated sample result was detected. Using professional judgment, when only one of the three QC criteria are outside limits no qualifications were applied.
4. Following NFG and using professional judgement for inorganics, when either the primary or duplicate results were less than 5x the RL and the absolute difference between results was greater than the RL, the associated results were qualified as estimated (J).

Data Qualification: See Table B-2

**Table B-1
Sample Collection and Analysis Summary
SPS Technologies
Jenkintown, PA**

Laboratory Job	Field Identification	Matrix	Lab Identification	QC Samples	Collection Date	Analyses/Parameters												
						MEK and Toluene	Chemical Oxygen Demand	Total Suspended Solids	Nitrate-Nitrite as N	Oil and Grease	Total Metals	Dissolved Metals	Total Hardness	Free Cyanide	Total Cyanide	Trivalent Chromium	Hexavalent Chromium	
						E624.1	E410.4	SM 2540D	E353.2	E1664 B	200.8	200.8	200.8	SM 4500C	SM 4500C	SM 3500	SM 3500C	
L2511022	OF004_022725	WS	L2511022-01	--	2/27/2025	X	X	X	X	X	X	X	X	X	X	X	X	
L2511022	OF006_022725	WS	L2511022-02	MS/MSD	2/27/2025	X	X	X	X	X	X	X	X	X	X	X	X	
L2511022	FDOF_022725	WS	L2511022-03	FD (SW4_022625)	2/27/2025	X	X	X	X	X	X	X	X	X	X	X	X	
L2511022	TRIP BLANK	WQ	L2511022-04	TB	2/27/2025	X	--	--	--	--	--	--	--	--	--	--	--	

Notes:

- 1) Metal analyses were performed by Pace Analytical Mansfield Lab, all other parameters were performed at Pace Analytical Westborough Lab.
- 2) Total Metals include: aluminum, copper, chromium, iron, nickel, and zinc
- 3) Dissolved Metals include: chromium and nickel

Abbreviations:

MEK: methyl ethyl ketone (2-butanone)
 MS/MSD: Matrix Spike/Matrix Spike Duplicate
 QC: Quality Control
 SM: Standard Methods
 TB: Trip Blank
 WS: Surface Water
 WQ: Quality Control Water

**Table B-2
Qualifier Summary Table
SPS Technologies
Jenkintown, PA**

<i>Laboratory Job</i>	<i>Sample Name</i>	<i>Analyte</i>	<i>New Result</i>	<i>New MDL</i>	<i>New RL</i>	<i>Qualifier</i>	<i>Reason</i>
L2511022	OF006_022725	2-butanone	--	--	--	UJ	MS/MSD recovery below QC criteria
L2511022	OF006_022725	Nickel, Dissolved	--	--	--	J	Field duplicate absolute difference criteria exceeded
L2511022	FDOF_022725	Nickel, Dissolved	--	--	--	J	Field duplicate absolute difference criteria exceeded
L2511022	All samples	--	--	--	--	--	Laboratory applied U-qualifiers indicating non-detect results and J-qualifiers indicating results below the reporting limit are retained unless other qualifications are indicated in this table. All other laboratory qualifiers are removed.

Abbreviations:

MDL: Method Detection Limit
 MS/MSD: Matrix Spike/Matrix Spike Duplicate
 RL: Reporting Limit
 SDG: Sample Delivery Group

Qualifiers:

UJ: Estimated, non-detect result
 J: Estimated result

QA LEVEL 2A - DATA VERIFICATION/DATA VALIDATION CHECKLIST

Project Name: SPS Technologies

Project Number/Phase/Task: US0043268.2150-US-SPS Client Support. Task 01

Reviewing Company: WSP USA

Project Manager: Tovah Karl

Data Evaluator: Julia Campbell

Data Evaluation Date: February 28, 2025

Checked by: Julie Lehrman

Review Date: March 1, 2025

Laboratory: Pace Analytical LLC

Lab SDG #: L2511023

Matrix: Aqueous Soil Sediment Waste Air Other:

Analytical Methods: See Table B-1

Sample Information: See Table B-1

Work Plan or QAPP: SPS Technologies Abington PA Surface Water and Outfall Sampling Plan (WSP, 2025)

Data Validation Guidance:

USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (Nov. 2020)

USEPA NFG for Inorganic Superfund Methods Data Review (Nov. 2020)

COC and Sample Receipt	YES	NO	NA	COMMENT
a) COC complete and correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) COC documents release of custody (signed and dated)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Field QC types provided (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TB, See Table B-1
d) Did the cooler contents match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
e) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
f) Were cooler temperatures within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Data Package Information	YES	NO	NA	COMMENT
a) Laboratory name and location documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) All samples on COC reported in data package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Requested analytical methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d) Requested sample preparation methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Requested analyte list reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Note 1
f) Requested units reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g) Did the laboratory define the qualifiers used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
h) Data package contains all information necessary to complete the data quality review?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Analytical Assessment	YES	NO	NA	COMMENT
a) Solid samples reported on a dry-weight basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were solid samples percent moisture criteria acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Were sample dilutions noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
e) Were detected concentrations above the calibration range reported by the laboratory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
f) Did the laboratory satisfy the requested sensitivity requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Were all deficiencies noted in the laboratory qualifiers or narrative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were holding times met for sample preparation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were holding times met for sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Blanks	YES	NO	NA	COMMENTS
a) Were blanks analyzed at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were any analytes detected in the associated preparation/method blank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
c) Were any analytes detected in the associated trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Were any analytes detected in the associated field or equipment/rinsate blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Were any analytes detected in the associated storage blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Surrogates or Deuterated Monitoring Compounds	YES	NO	NA	COMMENTS
a) Were the correct surrogate compounds added to each sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were surrogate recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) If not, were samples analyzed at dilution factors of 20x or greater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

LCS/LCSD	YES	NO	NA	COMMENTS
a) Were LCS/LCSD reported at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were proper analytes included in the LCS/LCSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Were LCS/LCSD recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d) Were RPD values within control limits (if LCSD was analyzed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
a) Were project-specific MS (and MSD) reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		SW5_022725 (Hex chrom only)
b) Were proper analytes reported in the MS/MSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
c) Were project-specific MS/MSD recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SW5_022725 (Hex chrom only)
d) If not, were sample concentrations greater than 4x the spiking concentration?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Were project-specific post-digestion spikes analyzed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Were project-specific post-digestion spike recoveries within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were project-specific laboratory duplicates reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SW5_022725 (Hex chrom only)
b) Was laboratory duplicate RPD or absolute difference criteria acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were field duplicates reported?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Was field duplicate RPD or absolute difference criteria acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

ICP Serial Dilution (SD)	YES	NO	NA	COMMENTS
a) Was project-specific ICP SD data provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were project-specific ICP SD within acceptable criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Overall Evaluation	YES	NO	NA	COMMENTS
a) Were there any other technical problems not previously addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
b) Were data acceptable and usable, except where noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Comments/Notes:

The reliability of the analytical data was evaluated to assess its suitability for use. In particular, a Stage 2A data validation was performed, which evaluates the data's precision, accuracy, and sensitivity based on adherence to sample holding times and analysis of the QC samples (duplicates, spikes, and blanks). Where appropriate, data qualifiers were applied following USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (Nov. 2020) and USEPA NFG for Inorganic Superfund Methods Data Review (Nov. 2020), as applicable to the analytical methods used by the laboratory. Based on the data review, the data was deemed suitable for project decision making as reported by the laboratory. Further detail can be found in the comments below and in Table B-2.

1. The COC submitted with the samples requested total zinc analysis, however this analyte was not required and was canceled by the client. A revised chain of custody was provided to the laboratory, and the final data package does not include total zinc analysis for the surface water samples. No further action is required.

Data Qualification: See Table B-2

Table B-1
Sample Collection and Analysis Summary
SPS Technologies
Jenkintown, PA

Laboratory Job	Field Identification	Matrix	Lab Identification	QC Samples	Collection Date	Analyses/Parameters								
						MEK and Toluene	Oil and Grease	Total Metals	Dissolved Metals	Total Hardness	Free Cyanide	Total Cyanide	Trivalent Chromium	Hexavalent Chromium
						E624.1	E1664 B	200.8	200.8	200.8	SM 4500C	SM 4500C	SM 3500	SM 3500C
L2511023	SW5_022725	WS	L2511023-01	--	2/27/2025	X	X	X	X	X	X	X	X	X
L2511023	SW4_022725	WS	L2511023-02	--	2/27/2025	X	X	X	X	X	X	X	X	X
L2511023	SW3_022725	WS	L2511023-03	--	2/27/2025	X	X	X	X	X	X	X	X	X
L2511023	SW2_022725	WS	L2511023-04	--	2/27/2025	X	X	X	X	X	X	X	X	X
L2511023	SW1_022725	WS	L2511023-05	--	2/27/2025	X	X	X	X	X	X	X	X	X
L2511023	TBSW_022725	WQ	L2511023-06	TB	2/27/2025	X	--	--	--	--	--	--	--	--

Notes:

- 1) Metal analyses were performed by Pace Analytical Mansfield Lab, all other parameters were performed at Pace Analytical Westborough Lab.
- 2) Total Metals include: chromium and nickel
- 3) Dissolved Metals include: chromium and nickel

Abbreviations:

- MEK: methyl ethyl ketone (2-butanone)
- MS/MSD: Matrix Spike/Matrix Spike Duplicate
- QC: Quality Control
- SM: Standard Methods
- TB: Trip Blank
- WS: Surface Water
- WQ: Quality Control Water

**Table B-2
Qualifier Summary Table
SPS Technologies
Jenkintown, PA**

<i>Laboratory Job</i>	<i>Sample Name</i>	<i>Analyte</i>	<i>New Result</i>	<i>New MDL</i>	<i>New RL</i>	<i>Qualifier</i>	<i>Reason</i>
L2511023	No Qualifiers Required						
L2511023	All samples	--	--		--	--	Laboratory applied U-qualifiers indicating non-detect results and J-qualifiers indicating results below the reporting limit are retained unless other qualifications are indicated in this table. All other laboratory qualifiers are removed.

Abbreviations:

MDL: Method Detection Limit
 RL: Reporting Limit
 SDG: Sample Delivery Group

Qualifiers:

APPENDIX C – LABORATORY ANALYTICAL REPORTS



ANALYTICAL REPORT

Lab Number:	L2511022
Client:	WSP USA Inc. 10 Lake Center Drive Suite 205 Marlton, NJ 08053
ATTN:	Julie Lehrman
Phone:	(856) 793-2005
Project Name:	SPS TECHNOLOGIES
Project Number:	US0043268.2150
Report Date:	03/01/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511022-01	OF004_022725	WATER	JENKINTOWN, PA	02/27/25 13:40	02/27/25
L2511022-02	OF006_022725	WATER	JENKINTOWN, PA	02/27/25 14:24	02/27/25
L2511022-03	FDOF_022725	WATER	JENKINTOWN, PA	02/27/25 00:00	02/27/25
L2511022-04	TRIP BLANK	WATER	JENKINTOWN, PA	02/27/25 00:00	02/27/25

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Case Narrative (continued)

Report Submission

March 01, 2025: This final report includes the results of all requested analyses.

February 28, 2025: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics by Method 624


The WG2035351-5/-6 MS/MSD recoveries, performed on L2511022-02, are below the acceptance criteria for 2-butanone (56%/56%); however, the associated LCS recovery is within overall method allowances.

Total Metals

The WG2035076-3 MS recovery for hardness (64%), performed on L2511022-02, recovered outside the 70-130% acceptance criteria. The result for this analyte is considered suspect due to either the heterogeneous nature of the sample or matrix interference.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Ashaley Moynihan

Title: Technical Director/Representative

Date: 03/01/25

ORGANICS

VOLATILES

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-01
 Client ID: OF004_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 13:40
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 13:54
 Analyst: GMT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		60-140
Fluorobenzene	111		60-140
4-Bromofluorobenzene	123		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-02
 Client ID: OF006_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 14:24
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 13:19
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	104		60-140
Fluorobenzene	109		60-140
4-Bromofluorobenzene	126		60-140

Project Name: SPS TECHNOLOGIES**Lab Number:** L2511022**Project Number:** US0043268.2150**Report Date:** 03/01/25**SAMPLE RESULTS**

Lab ID: L2511022-03
 Client ID: FDOF_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 00:00
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 12:44
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	103		60-140
Fluorobenzene	109		60-140
4-Bromofluorobenzene	122		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-04
 Client ID: TRIP BLANK
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 00:00
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 08:37
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
-----------	------------	-----------	---------------------

Pentafluorobenzene	101		60-140
--------------------	-----	--	--------

Fluorobenzene	109		60-140
---------------	-----	--	--------

4-Bromofluorobenzene	119		60-140
----------------------	-----	--	--------

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 02/28/25 08:03
Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2035351-4					
Toluene	ND		mg/l	0.0010	0.00031
2-Butanone	ND		mg/l	0.010	0.0010

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	106		60-140
4-Bromofluorobenzene	115		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2035351-3								
Toluene	100		-		70-130	-		41
2-Butanone	66		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	99				60-140
Fluorobenzene	108				60-140
4-Bromofluorobenzene	113				60-140

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2035351-5 WG2035351-6 QC Sample: L2511022-02 Client ID: OF006_022725												
Toluene	ND	0.00002	0.028	140		0.029	145		47-150	4		41
2-Butanone	ND	0.00005	0.028	56	Q	0.028	56	Q	60-140	0		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
4-Bromofluorobenzene	128		128		60-140
Fluorobenzene	111		112		60-140
Pentafluorobenzene	103		105		60-140

METALS



Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-01

Date Collected: 02/27/25 13:40

Client ID: OF004_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.2278		mg/l	0.01000	0.00327	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Chromium, Total	0.00292		mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Copper, Total	0.01584		mg/l	0.00100	0.00038	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Iron, Total	0.6174		mg/l	0.05000	0.01910	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Lead, Total	0.00965		mg/l	0.00100	0.00034	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Nickel, Total	0.2358		mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Zinc, Total	0.2498		mg/l	0.00500	0.00341	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	535.9		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:44	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 12:44	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0007	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:37	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.1928		mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:37	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-02

Date Collected: 02/27/25 14:24

Client ID: OF006_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.01544		mg/l	0.01000	0.00327	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Chromium, Total	0.00059	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Copper, Total	0.00525		mg/l	0.00100	0.00038	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Iron, Total	0.1853		mg/l	0.05000	0.01910	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Lead, Total	0.00088	J	mg/l	0.00100	0.00034	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00184	J	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Zinc, Total	0.06224		mg/l	0.00500	0.00341	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	191.5		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:30	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 12:30	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:23	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0016	J	mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:23	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-03

Date Collected: 02/27/25 00:00

Client ID: FDOF_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.01845		mg/l	0.01000	0.00327	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Chromium, Total	0.00062	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Copper, Total	0.00481		mg/l	0.00100	0.00038	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Iron, Total	0.1983		mg/l	0.05000	0.01910	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Lead, Total	0.00092	J	mg/l	0.00100	0.00034	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00161	J	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Zinc, Total	0.05814		mg/l	0.00500	0.00341	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	183.0		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:49	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 12:49	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:42	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0051		mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:42	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG2035076-1									
Aluminum, Total	ND	mg/l	0.01000	0.00327	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Chromium, Total	ND	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Copper, Total	ND	mg/l	0.00100	0.00038	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Iron, Total	ND	mg/l	0.05000	0.01910	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Lead, Total	ND	mg/l	0.00100	0.00034	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Nickel, Total	ND	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Zinc, Total	ND	mg/l	0.00500	0.00341	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness (by calculation) - Mansfield Lab for sample(s): 01-03 Batch: WG2035076-1									
Hardness	ND	mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG2035164-1									
Chromium, Dissolved	ND	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:14	3,200.8	MRC
Nickel, Dissolved	ND	mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:14	3,200.8	MRC

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG2035076-2								
Aluminum, Total	96		-		85-115	-		
Chromium, Total	97		-		85-115	-		
Copper, Total	104		-		85-115	-		
Iron, Total	102		-		85-115	-		
Lead, Total	92		-		85-115	-		
Nickel, Total	102		-		85-115	-		
Zinc, Total	100		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-03 Batch: WG2035076-2								
Hardness	85		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG2035164-2								
Chromium, Dissolved	100		-		85-115	-		
Nickel, Dissolved	100		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2035076-3 WG2035076-4 QC Sample: L2511022-02 Client ID: OF006_022725												
Aluminum, Total	0.01544	2	1.976	98		1.953	97		70-130	1		20
Chromium, Total	0.00059J	0.2	0.2028	101		0.1945	97		70-130	4		20
Copper, Total	0.00525	0.25	0.2653	104		0.2590	102		70-130	2		20
Iron, Total	0.1853	1	1.288	110		1.232	105		70-130	4		20
Lead, Total	0.00088J	0.53	0.4882	92		0.5007	94		70-130	3		20
Nickel, Total	0.00184J	0.5	0.5337	107		0.5123	102		70-130	4		20
Zinc, Total	0.06224	0.5	0.5815	104		0.5786	103		70-130	0		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2035076-3 WG2035076-4 QC Sample: L2511022-02 Client ID: OF006_022725												
Hardness	191.5	66.2	234.0	64	Q	241.0	75		70-130	3		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2035164-3 WG2035164-4 QC Sample: L2511022-02 Client ID: OF006_022725												
Chromium, Dissolved	0.0003J	0.2	0.1916	96		0.1947	97		70-130	2		20
Nickel, Dissolved	0.0016J	0.5	0.4988	100		0.5028	100		70-130	1		20

INORGANICS & MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-01
Client ID: OF004_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 13:40
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	50.		mg/l	5.0	NA	1	-	02/28/25 08:26	121,2540D	CVN
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:25	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	1.6		mg/l	0.10	0.046	1	-	02/28/25 06:18	44,353.2	KAF
Chemical Oxygen Demand	100		mg/l	20	6.0	1	02/28/25 10:00	02/28/25 13:14	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 11:17	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:51	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-02
Client ID: OF006_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 14:24
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	02/28/25 08:26	121,2540D	CVN
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:26	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.6		mg/l	0.10	0.046	1	-	02/28/25 06:19	44,353.2	KAF
Chemical Oxygen Demand	15.	J	mg/l	20	6.0	1	02/28/25 10:00	02/28/25 13:15	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 10:08	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:52	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

SAMPLE RESULTS

Lab ID: L2511022-03
Client ID: FDOF_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 00:00
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	02/28/25 08:26	121,2540D	CVN
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:32	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.6		mg/l	0.10	0.046	1	-	02/28/25 06:23	44,353.2	KAF
Chemical Oxygen Demand	12.	J	mg/l	20	6.0	1	02/28/25 10:00	02/28/25 13:15	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 11:15	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:52	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035028-1									
Nitrogen, Nitrate/Nitrite	ND	mg/l	0.10	0.046	1	-	02/28/25 03:03	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035060-1									
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:51	121,3500CR-B	CAR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035096-1									
Cyanide, Free	ND	mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035123-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:21	121,4500CN-CE	JER
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035127-1									
Solids, Total Suspended	ND	mg/l	5.0	NA	1	-	02/28/25 08:26	121,2540D	CVN
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035132-1									
Oil & Grease, Hem-Grav	ND	mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 10:06	140,1664B	TPR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2035166-1									
Chemical Oxygen Demand	ND	mg/l	20	6.0	1	02/28/25 10:00	02/28/25 13:12	44,410.4	CVN



Lab Control Sample Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035028-2								
Nitrogen, Nitrate/Nitrite	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035060-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035096-2								
Cyanide, Free	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035123-2								
Cyanide, Total	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035127-2								
Solids, Total Suspended	93		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035132-2								
Oil & Grease, Hem-Grav	100		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2035166-2								
Chemical Oxygen Demand	99		-		90-110	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511022

Project Number: US0043268.2150

Report Date: 03/01/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035028-4 QC Sample: L2510712-01 Client ID: MS Sample												
Nitrogen, Nitrate/Nitrite	1.1	4	5.0	98	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035028-6 QC Sample: L2510742-01 Client ID: MS Sample												
Nitrogen, Nitrate/Nitrite	2.8	4	6.4	90	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035060-4 WG2035060-5 QC Sample: L2511022-02 Client ID: OF006_022725												
Chromium, Hexavalent	ND	0.1	0.099	99	0.097	0.097	97	-	85-115	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035096-4 WG2035096-5 QC Sample: L2511022-02 Client ID: OF006_022725												
Cyanide, Free	ND	0.25	0.219	88	0.223	0.223	89	-	80-120	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035123-3 WG2035123-4 QC Sample: L2511022-02 Client ID: OF006_022725												
Cyanide, Total	0.002J	0.2	0.212	106	0.201	0.201	100	-	90-110	5	-	30
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035132-4 WG2035132-5 QC Sample: L2511022-02 Client ID: OF006_022725												
Oil & Grease, Hem-Grav	ND	39.2	35	90	38	38	98	-	78-114	8	-	18
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2035166-3 QC Sample: L2511022-02 Client ID: OF006_022725												
Chemical Oxygen Demand	15.J	238	250	107	-	-	-	-	90-110	-	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2511022

Report Date: 03/01/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035028-3	QC Sample: L2510712-01	Client ID: DUP Sample		
Nitrogen, Nitrate/Nitrite	1.1	1.1	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035028-5	QC Sample: L2510742-01	Client ID: DUP Sample		
Nitrogen, Nitrate/Nitrite	2.8	2.8	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035060-3	QC Sample: L2511022-01	Client ID: OF004_022725		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035096-3	QC Sample: L2511022-02	Client ID: OF006_022725		
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035123-5	QC Sample: L2511022-02	Client ID: OF006_022725		
Cyanide, Total	0.002J	0.002J	mg/l	NC		30
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035127-3	QC Sample: L2511022-02	Client ID: OF006_022725		
Solids, Total Suspended	ND	ND	mg/l	NC		32
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035132-3	QC Sample: L2511022-02	Client ID: OF006_022725		
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG2035166-4	QC Sample: L2511022-02	Client ID: OF006_022725		
Chemical Oxygen Demand	15.J	15.J	mg/l	NC		20

Project Name: SPS TECHNOLOGIES**Lab Number:** L2511022**Project Number:** US0043268.2150**Report Date:** 03/01/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact
B	Present/Intact
C	Present/Intact
D	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511022-01A	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-01B	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-01C	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-01D	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2511022-01E	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Present/Intact		NO3/NO2-353(28),COD-410(28)
L2511022-01F	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2511022-01G	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),HARDT-2008(180),CU-2008T(180),FE-2008T(180),PB-2008T(180),CR-2008T(180)
L2511022-01H	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511022-01J	Plastic 950ml unpreserved	A	7	7	2.5	Y	Present/Intact		TSS-2540(7)
L2511022-01K	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-01L	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511022-02A	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02A1	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02A2	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02B	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02B1	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02B2	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)

Project Name: SPS TECHNOLOGIES**Lab Number:** L2511022**Project Number:** US0043268.2150**Report Date:** 03/01/25**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511022-02C	Vial Na ₂ S ₂ O ₃ preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02C1	Vial Na ₂ S ₂ O ₃ preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02C2	Vial Na ₂ S ₂ O ₃ preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-02D	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2511022-02D1	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2511022-02D2	Plastic 250ml NaOH preserved	B	>12	>12	2.8	Y	Present/Intact		TCN-4500(14)
L2511022-02E	Plastic 250ml H ₂ SO ₄ preserved	A	<2	<2	2.5	Y	Present/Intact		NO ₃ /NO ₂ -353(28),COD-410(28)
L2511022-02E1	Plastic 250ml H ₂ SO ₄ preserved	A	<2	<2	2.5	Y	Present/Intact		NO ₃ /NO ₂ -353(28),COD-410(28)
L2511022-02E2	Plastic 250ml H ₂ SO ₄ preserved	B	<2	<2	2.8	Y	Present/Intact		NO ₃ /NO ₂ -353(28),COD-410(28)
L2511022-02F	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2511022-02F1	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2511022-02F2	Plastic 250ml unpreserved	B	7	7	2.8	Y	Present/Intact		-
L2511022-02G	Plastic 250ml HNO ₃ preserved	A	<2	<2	2.5	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),CR-2008T(180),PB-2008T(180)
L2511022-02G1	Plastic 250ml HNO ₃ preserved	A	<2	<2	2.5	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),CR-2008T(180),PB-2008T(180)
L2511022-02G2	Plastic 250ml HNO ₃ preserved	B	<2	<2	2.8	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),CR-2008T(180),PB-2008T(180)
L2511022-02H	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511022-02H1	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511022-02H2	Plastic 500ml unpreserved	B	7	7	2.8	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511022-02J	Plastic 950ml unpreserved	A	7	7	2.5	Y	Present/Intact		TSS-2540(7)
L2511022-02J1	Plastic 950ml unpreserved	A	7	7	2.5	Y	Present/Intact		TSS-2540(7)
L2511022-02J2	Plastic 950ml unpreserved	B	7	7	2.8	Y	Present/Intact		TSS-2540(7)
L2511022-02K	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-02K1	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-02K2	Amber 1L HCl preserved	B	NA		2.8	Y	Present/Intact		OG-1664(28)

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Serial_No:03012517:45
Lab Number: L2511022
Report Date: 03/01/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511022-02L	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-02L1	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-02L2	Amber 1L HCl preserved	B	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511022-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511022-02X1	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511022-02X2	Plastic 120ml HNO3 preserved Filtrates	B	NA		2.8	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511022-03A	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-03B	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-03C	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-03D	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2511022-03E	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Present/Intact		NO3/NO2-353(28),COD-410(28)
L2511022-03F	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2511022-03G	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),PB-2008T(180),CR-2008T(180)
L2511022-03H	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511022-03J	Plastic 950ml unpreserved	A	7	7	2.5	Y	Present/Intact		TSS-2540(7)
L2511022-03K	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-03L	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2511022-03X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511022-04A	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)
L2511022-04B	Vial Na2S2O3 preserved	A	NA		2.5	Y	Present/Intact		624.1-PPM(7)



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511022
Report Date: 03/01/25

REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 107 Calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.
- 140 Method 1664, Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at its own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 1 of 2

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** EPA RSK-175 Dissolved Gases**Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)**

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CUSTODY SEAL

Date 2/27/25
Signature [Signature]

Thermo
SCIEN

CUSTODY SEAL

Date 2/27/25
Signature [Signature]

1 of 4

CUSTODY SEAL

Date

2/22/15

Signature

[Handwritten Signature]

Thermo
SCIENTIFIC

CUSTODY SEAL

Date

2/22/15

Signature

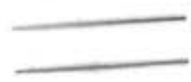
[Handwritten Signature]

[Handwritten Signature]

CUSTODY SEAL

Date 2/27/2025

Signature [Signature]



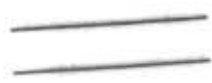
Thermo
SCIENTIFIC

80009

CUSTODY SEAL

Date 2/27/2025

Signature [Signature]



Thermo
SCIENTIFIC

80009

39H

CUSTODY SEAL

Date 2/27/2025

Signature [Handwritten Signature]



CUSTODY SEAL

Date 2/27/2025

Signature [Handwritten Signature]



61074



ANALYTICAL REPORT

Lab Number:	L2511023
Client:	WSP USA Inc. 10 Lake Center Drive Suite 205 Marlton, NJ 08053
ATTN:	Julie Lehrman
Phone:	(856) 793-2005
Project Name:	SPS TECHNOLOGIES
Project Number:	US0043268.2150
Report Date:	03/03/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2511023-01	SW5_022725	WATER	JENKINTOWN, PA	02/27/25 09:35	02/27/25
L2511023-02	SW4_022725	WATER	JENKINTOWN, PA	02/27/25 10:15	02/27/25
L2511023-03	SW3_022725	WATER	JENKINTOWN, PA	02/27/25 10:55	02/27/25
L2511023-04	SW2_022725	WATER	JENKINTOWN, PA	02/27/25 11:30	02/27/25
L2511023-05	SW1_022725	WATER	JENKINTOWN, PA	02/27/25 13:45	02/27/25
L2511023-06	TBSW_022725	WATER	JENKINTOWN, PA	02/27/25 00:00	02/27/25

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Case Narrative (continued)

Report Revision

March 03, 2025: The Total Metals element list has been amended on WG2035076-1/-2/-3/-4.

Report Submission

March 01, 2025: This final report includes the results of all requested analyses.

February 28, 2025: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 03/03/25

ORGANICS

VOLATILES

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-01
 Client ID: SW5_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 09:35
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 12:08
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
-----------	------------	-----------	---------------------

Pentafluorobenzene	104		60-140
--------------------	-----	--	--------

Fluorobenzene	110		60-140
---------------	-----	--	--------

4-Bromofluorobenzene	125		60-140
----------------------	-----	--	--------

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-02
 Client ID: SW4_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 10:15
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 11:33
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		60-140
Fluorobenzene	108		60-140
4-Bromofluorobenzene	121		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-03
 Client ID: SW3_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 10:55
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 10:58
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	101		60-140
Fluorobenzene	108		60-140
4-Bromofluorobenzene	117		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-04
 Client ID: SW2_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 11:30
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 10:23
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
-----------	------------	-----------	---------------------

Pentafluorobenzene	102		60-140
--------------------	-----	--	--------

Fluorobenzene	108		60-140
---------------	-----	--	--------

4-Bromofluorobenzene	121		60-140
----------------------	-----	--	--------

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-05
 Client ID: SW1_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 13:45
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 09:48
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
--	--	--	--	--	--	--

Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		60-140
Fluorobenzene	110		60-140
4-Bromofluorobenzene	118		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-06
 Client ID: TBSW_022725
 Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 00:00
 Date Received: 02/27/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 02/28/25 09:12
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		mg/l	0.0010	0.00031	1
2-Butanone	ND		mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	101		60-140
Fluorobenzene	109		60-140
4-Bromofluorobenzene	118		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 128,624.1
Analytical Date: 02/28/25 08:03
Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2035351-4					
Toluene	ND		mg/l	0.0010	0.00031
2-Butanone	ND		mg/l	0.010	0.0010

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	106		60-140
4-Bromofluorobenzene	115		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511023

Project Number: US0043268.2150

Report Date: 03/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2035351-3								
Toluene	100		-		70-130	-		41
2-Butanone	66		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	99				60-140
Fluorobenzene	108				60-140
4-Bromofluorobenzene	113				60-140

METALS



Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**SAMPLE RESULTS**

Lab ID: L2511023-01

Date Collected: 02/27/25 09:35

Client ID: SW5_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00031	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:54	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00289		mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:54	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	189.5		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:54	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 12:54	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:46	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0030		mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:46	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**SAMPLE RESULTS**

Lab ID: L2511023-02

Date Collected: 02/27/25 10:15

Client ID: SW4_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00018	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:58	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00444		mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:58	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	212.1		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:58	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 12:58	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:51	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0063		mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:51	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**SAMPLE RESULTS**

Lab ID: L2511023-03

Date Collected: 02/27/25 10:55

Client ID: SW3_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00031	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 13:03	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00566		mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 13:03	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	221.1		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 13:03	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 13:03	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:56	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0062		mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:56	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**SAMPLE RESULTS**

Lab ID: L2511023-04

Date Collected: 02/27/25 11:30

Client ID: SW2_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00040	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 13:18	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00092	J	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 13:18	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	210.8		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 13:18	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 13:18	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 12:14	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0008	J	mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 12:14	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**SAMPLE RESULTS**

Lab ID: L2511023-05

Date Collected: 02/27/25 13:45

Client ID: SW1_022725

Date Received: 02/27/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00031	J	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 13:23	EPA 3005A	3,200.8	NTB
Nickel, Total	0.00136	J	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 13:23	EPA 3005A	3,200.8	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	259.2		mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 13:23	EPA 3005A	3,200.8	NTB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		02/28/25 13:23	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 12:19	EPA 3005A	3,200.8	MRC
Nickel, Dissolved	0.0014	J	mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 12:19	EPA 3005A	3,200.8	MRC



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG2035076-1									
Chromium, Total	ND	mg/l	0.00100	0.00017	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB
Nickel, Total	ND	mg/l	0.00200	0.00055	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness (by calculation) - Mansfield Lab for sample(s): 01-05 Batch: WG2035076-1									
Hardness	ND	mg/l	0.5400	NA	1	02/28/25 08:56	02/28/25 12:21	3,200.8	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG2035164-1									
Chromium, Dissolved	ND	mg/l	0.0010	0.0002	1	03/01/25 06:36	03/01/25 11:14	3,200.8	MRC
Nickel, Dissolved	ND	mg/l	0.0020	0.0006	1	03/01/25 06:36	03/01/25 11:14	3,200.8	MRC

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2511023

Report Date: 03/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG2035076-2								
Chromium, Total	97		-		85-115	-		
Nickel, Total	102		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-05 Batch: WG2035076-2								
Hardness	85		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG2035164-2								
Chromium, Dissolved	100		-		85-115	-		
Nickel, Dissolved	100		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2035076-3 WG2035076-4 QC Sample: L2511022-02 Client ID: MS Sample												
Chromium, Total	0.00059J	0.2	0.2028	101		0.1945	97		70-130	4		20
Nickel, Total	0.00184J	0.5	0.5337	107		0.5123	102		70-130	4		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2035076-3 WG2035076-4 QC Sample: L2511022-02 Client ID: MS Sample												
Hardness	191.5	66.2	234.0	64	Q	241.0	75		70-130	3		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2035164-3 WG2035164-4 QC Sample: L2511022-02 Client ID: MS Sample												
Chromium, Dissolved	0.0003J	0.2	0.1916	96		0.1947	97		70-130	2		20
Nickel, Dissolved	0.0016J	0.5	0.4988	100		0.5028	100		70-130	1		20



INORGANICS & MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-01
Client ID: SW5_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 09:35
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:33	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.4	4.4	1.1	02/28/25 08:22	02/28/25 11:13	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:54	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-02
Client ID: SW4_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 10:15
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:34	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 11:07	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:54	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-03
Client ID: SW3_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 10:55
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.012		mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:35	121,4500CN-CE	JER
Cyanide, Free	0.005	J	mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	5.0		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 12:19	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:54	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-04
Client ID: SW2_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 11:30
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:36	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 12:21	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:54	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

SAMPLE RESULTS

Lab ID: L2511023-05
Client ID: SW1_022725
Sample Location: JENKINTOWN, PA

Date Collected: 02/27/25 13:45
Date Received: 02/27/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:37	121,4500CN-CE	JER
Cyanide, Free	0.004	J	mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 12:22	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:55	121,3500CR-B	CAR



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2035061-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	02/28/25 05:10	02/28/25 05:53	121,3500CR-B	CAR
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2035096-1										
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	02/28/25 07:35	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2035123-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	02/28/25 07:45	02/28/25 11:21	121,4500CN-CE	JER
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2035132-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	02/28/25 08:22	02/28/25 10:06	140,1664B	TPR



Lab Control Sample Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2511023

Report Date: 03/03/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2035061-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2035096-2								
Cyanide, Free	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2035123-2								
Cyanide, Total	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2035132-2								
Oil & Grease, Hem-Grav	100		-		78-114	-		18

Matrix Spike Analysis Batch Quality Control

Project Name: SPS TECHNOLOGIES

Lab Number: L2511023

Project Number: US0043268.2150

Report Date: 03/03/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035061-4 QC Sample: L2511023-01 Client ID: SW5_022725												
Chromium, Hexavalent	ND	0.1	0.099	99	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035096-4 WG2035096-5 QC Sample: L2511022-02 Client ID: MS Sample												
Cyanide, Free	ND	0.25	0.219	88	0.223	0.223	89	-	80-120	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035123-3 WG2035123-4 QC Sample: L2511022-02 Client ID: MS Sample												
Cyanide, Total	0.002J	0.2	0.212	106	0.201	0.201	100	-	90-110	5	-	30
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035132-4 WG2035132-5 QC Sample: L2511022-02 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	39.2	35	90	38	38	98	-	78-114	8	-	18

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2511023

Report Date: 03/03/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035061-3 QC Sample: L2511023-01 Client ID: SW5_022725						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035096-3 QC Sample: L2511022-02 Client ID: DUP Sample						
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035123-5 QC Sample: L2511022-02 Client ID: DUP Sample						
Cyanide, Total	0.002J	0.002J	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2035132-3 QC Sample: L2511022-02 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18

Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact
B	Present/Intact
C	Present/Intact
D	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511023-01A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-01B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-01C	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-01D	Plastic 250ml NaOH preserved	C	>12	>12	2.8	Y	Present/Intact		TCN-4500(14)
L2511023-01E	Plastic 250ml unpreserved	C	7	7	2.8	Y	Present/Intact		-
L2511023-01F	Plastic 250ml HNO3 preserved	C	<2	<2	2.8	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2511023-01G	Plastic 500ml unpreserved	C	7	7	2.8	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511023-01H	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511023-01I	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511023-01X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.8	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511023-02A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-02B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-02C	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-02D	Plastic 250ml NaOH preserved	C	>12	>12	2.8	Y	Present/Intact		TCN-4500(14)
L2511023-02E	Plastic 250ml unpreserved	C	7	7	2.8	Y	Present/Intact		-
L2511023-02F	Plastic 250ml HNO3 preserved	C	<2	<2	2.8	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2511023-02G	Plastic 500ml unpreserved	C	7	7	2.8	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511023-02H	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511023-02I	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)

Project Name: SPS TECHNOLOGIES**Lab Number:** L2511023**Project Number:** US0043268.2150**Report Date:** 03/03/25**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511023-02X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.8	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511023-03A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-03B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-03C	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-03D	Plastic 250ml NaOH preserved	C	>12	>12	2.8	Y	Present/Intact		TCN-4500(14)
L2511023-03E	Plastic 250ml unpreserved	C	7	7	2.8	Y	Present/Intact		-
L2511023-03F	Plastic 250ml HNO3 preserved	C	<2	<2	2.8	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2511023-03G	Plastic 500ml unpreserved	C	7	7	2.8	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511023-03H	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511023-03I	Amber 1L HCl preserved	C	NA		2.8	Y	Present/Intact		OG-1664(28)
L2511023-03X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.8	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511023-04A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-04B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-04C	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-04D	Plastic 250ml NaOH preserved	D	>12	>12	2.3	Y	Present/Intact		TCN-4500(14)
L2511023-04E	Plastic 250ml unpreserved	D	7	7	2.3	Y	Present/Intact		-
L2511023-04F	Plastic 250ml HNO3 preserved	D	<2	<2	2.3	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2511023-04G	Plastic 500ml unpreserved	D	7	7	2.3	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511023-04H	Amber 1L HCl preserved	D	NA		2.3	Y	Present/Intact		OG-1664(28)
L2511023-04I	Amber 1L HCl preserved	D	NA		2.3	Y	Present/Intact		OG-1664(28)
L2511023-04X	Plastic 120ml HNO3 preserved Filtrates	D	NA		2.3	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511023-05A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-05B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-05C	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-05D	Plastic 250ml NaOH preserved	D	>12	>12	2.3	Y	Present/Intact		TCN-4500(14)
L2511023-05E	Plastic 250ml unpreserved	D	7	7	2.3	Y	Present/Intact		-
L2511023-05F	Plastic 250ml HNO3 preserved	D	<2	<2	2.3	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Serial_No:03032517:24
Lab Number: L2511023
Report Date: 03/03/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2511023-05G	Plastic 500ml unpreserved	D	7	7	2.3	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2511023-05H	Amber 1L HCl preserved	D	NA		2.3	Y	Present/Intact		OG-1664(28)
L2511023-05I	Amber 1L HCl preserved	D	NA		2.3	Y	Present/Intact		OG-1664(28)
L2511023-05X	Plastic 120ml HNO3 preserved Filtrates	D	NA		2.3	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2511023-06A	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)
L2511023-06B	Vial Na2S2O3 preserved	C	NA		2.8	Y	Present/Intact		624.1-PPM(7)

Container Comments

L2511023-04E labeled as SW1_022725
L2511023-04F labeled as SW1_022725



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2511023
Report Date: 03/03/25

REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 107 Calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.
- 140 Method 1664, Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at its own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

CUSTODY SEAL

Date 2/27/25
Signature [Signature]

Thermo
SCIEN

CUSTODY SEAL

Date 2/27/25
Signature [Signature]

1 of 4

CUSTODY SEAL

Date 2/22/25
Signature [Signature]

Thermo
SCIENTIFIC

90009

CUSTODY SEAL

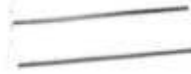
Date 2/22/25
Signature [Signature]

[Handwritten signature]

CUSTODY SEAL

Date 2/27/2025

Signature [Signature]



Thermo
SCIENTIFIC

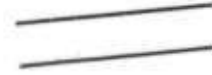
90009

3dH

CUSTODY SEAL

Date 2/27/2025

Signature [Signature]



Thermo
SCIENTIFIC

90009

CUSTODY SEAL

Date 2/27/2025

Signature [Handwritten Signature]

Thermo
SCIENTIFIC

90009

CUSTODY SEAL

Date 2/27/2025

Signature [Handwritten Signature]

Thermo
SCIENTIFIC

6044