



SPS Technologies Abington PA March 7, 2025 Daily Surface Water and Outfall Sampling Results Report

SPS Technologies

2025-03-10



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1. Executive Summary

WSP USA Inc. (WSP), on behalf of SPS Technologies Abington PA (SPS), collected five surface water samples and one outfall sample 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	0.001	0.002	0.002	ND
Free Cyanide	mg/L	ND	ND	ND	ND	ND
Oil & Grease	mg/L	ND	ND	ND	ND	ND
Total Chromium	mg/L	0.00033	0.00024	0.00031	0.00025	0.00043
Total Nickel	mg/L	0.00161	0.00484	0.00232	0.00343	0.00239
Dissolved Chromium	mg/L	0.0003	0.0002	0.0003	0.0003	0.0003
Dissolved Nickel	mg/L	0.0011	0.0037	0.0016	0.0028	0.0018
Hardness	mg/L	236.5	271.0	228.7	212.7	159.2
pH	SU	8.15	8.01	7.63	7.39	5.90

Outfall Samples:

		Outfall 006
Parameter	Units	Result
Toluene	mg/L	ND
2-Butanone (MEK)	mg/L	ND
Chromium, Trivalent	mg/L	ND
Chromium, Hexavalent	mg/L	ND
Total Cyanide	mg/L	ND
Free Cyanide	mg/L	ND
Oil & Grease	mg/L	ND
Total Suspended Solids	mg/L	ND
Nitrate/Nitrite as Nitrogen	mg/L	4
Chemical Oxygen Demand	mg/L	13
Total Aluminum	mg/L	0.01970
Total Chromium	mg/L	0.00020
Total Copper	mg/L	0.00177
Total Iron	mg/L	0.1907
Total Lead	mg/L	ND
Total Nickel	mg/L	0.00198

Total Zinc	mg/L	0.01586
Dissolved Chromium	mg/L	0.0002
Dissolved Nickel	mg/L	0.0014
Hardness	mg/L	214.4
pH	SU	6.01

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:

- pH (in-field measurement)
- 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

0 150' 300'

SCALE: 1" = 300'

PREPARED BY:
PJC

CHECKED BY:
KM

REVIEWED BY:
TK

CLIENT

PROJECT

TITLE

**SURFACE WATER AND
OUTFALL SAMPLING
RESULTS REPORT**

**SURFACE WATER AND
OUTFALL SAMPLE LOCATIONS**

PROJECT NO.:
US0043268.2150

REVISION NO.:
0

DATE:
FEBRUARY 2025

FIGURE NO.:
1





SOURCE GEOMAP IMAGERY, 2025.	 WSP USA Inc. 751 Arbor Way, Suite 180 Blue Bell, PA 19422 Tel. 610-828-8100 www.wsp.com	CLIENT	PROJECT SURFACE WATER AND OUTFALL SAMPLING RESULTS REPORT	PROJECT NO.: US0043268.2150
				REVISION NO.: 0
LEGEND SW = SURFACE WATER  SURFACE WATER SAMPLE LOCATION	PROJECTION / DATUM: PA83-SF 0 1,500' 3,000' SCALE: 1" = 3,000'	PREPARED BY: PJC CHECKED BY: KM REVIEWED BY: TK	TITLE OFF-SITE SURFACE WATER SAMPLE LOCATIONS	DATE: FEBRUARY 2025
				FIGURE NO.: 2

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_030725			SW1_030725			SW3_030725			SW4_030725			SW5_030725		
		L2513026-04			L2513026-05			L2513026-03			L2513026-02			L2513026-01		
		3/7/2025			3/7/2025			3/7/2025			3/7/2025			3/7/2025		
		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	0.001	J	0.005	0.002	J	0.005	0.002	J	0.005	ND		0.005
Free Cyanide	mg/L	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND		0.01
Oil & Grease	mg/L	ND		4.4	ND		4	ND		4	ND		4	ND		4.4
Total Metals																
Total Chromium	mg/L	0.00033	J	0.001	0.00024	J	0.001	0.00031	J	0.001	0.00025	J	0.001	0.00043	J	0.001
Total Nickel	mg/L	0.00161	J	0.002	0.00484		0.002	0.00232		0.002	0.00343		0.002	0.00239		0.002
Dissolved Metals																
Dissolved Chromium	mg/L	0.0003	J	0.001	0.0002	J	0.001	0.0003	J	0.001	0.0003	J	0.001	0.0003	J	0.001
Dissolved Nickel	mg/L	0.0011	J	0.002	0.0037		0.002	0.0016	J	0.002	0.0028		0.002	0.0018	J	0.002
Total Hardness																
Hardness	mg/L	236.5		0.54	271		0.54	228.7		0.54	212.7		0.54	159.2		0.54
Field Parameters																
pH ¹	SU	8.15			8.01			7.63			7.39			5.90		

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 006		
Field Sample ID		OF006_030725		
Lab Sample ID		L2513027-01		
Sampling Date		3/7/2025		
Matrix		Water		
Parameter	Units	Result	Q	RL
Volatile Organic Compounds				
Toluene	mg/L	ND		0.001
2-Butanone (MEK)	mg/L	ND		0.01
General Chemistry				
Chromium, Trivalent	mg/L	ND		0.01
Chromium, Hexavalent	mg/L	ND		0.01
Total Cyanide	mg/L	ND		0.005
Free Cyanide	mg/L	ND		0.01
Oil & Grease	mg/L	ND		4
Total Suspended Solids	mg/L	ND		5
Nitrate/Nitrite as Nitrogen	mg/L	4		0.1
Chemical Oxygen Demand	mg/L	13	J	20
Total Metals				
Total Aluminum	mg/L	0.0197		0.01
Total Chromium	mg/L	0.0002	J	0.001
Total Copper	mg/L	0.00177		0.001
Total Iron	mg/L	0.1907		0.05
Total Lead	mg/L	ND		0.001
Total Nickel	mg/L	0.00198	J	0.002
Total Zinc	mg/L	0.01586		0.005
Dissolved Metals				
Dissolved Chromium	mg/L	0.0002	J	0.001
Dissolved Nickel	mg/L	0.0014	J	0.002
Total Hardness				
Hardness	mg/L	214.4		0.54
Field Parameters				
pH ¹	SU	6.01		

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

APPENDIX A – DAILY SURFACE WATER AND OUTFALL SAMPLING LOGS

SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Additional Notes:

Site: SPS
 Location: Abington PA
 Project Number: V300-13262.2150
 Meter/Type/Serial #: Horiba U-52 # S/N: SV5R55TG
 Meter Calibrated @: 7/95
 Flow Meter: FH950 Meter # S/N: 1826411004154
 Sampling Date/Time: 3/7/25, SW5-030725 Clear no odor @ 10:00 3/7/25, SW4-030725 @ 10:25 3/7/25
 Sampler(s): SD1, EMR, RTM SW3-030725 @ 11:35 3/7/25, SW2-030725 @ 12:50 3/7/25
 Sampling Device: Telesco pole, Dipper, Ladle SW1-030725 @ 13:20 3/7/25
 Sample Characteristics: SW5-030725 Clear no odor, SW4-030725 Clear no odor, SW3-030725 Clear no odor
 Analytical Parameters: SW2-030725 Clear no odor, SW1-030725 Clear no odor

Weather Conditions: Clear 35°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
SW5-030725	creek	03/07/25	10:00	16.5	8.25	5.91	0.3	5.90	0.700	+170	0.0	9.66	0.62
Sample Characteristics: <u>Clear No odor</u>													
SW4-030725	creek	03/07/25	10:25	72	36	6.66	0.4	7.39	0.821	+191	0.0	8.63	2.58
Sample Characteristics: <u>Clear No odor</u>													
SW3-030725	creek	03/07/25	11:35	28	14	3.88	0.4	7.63	0.737	+173	0.0	11.27	0.53
Sample Characteristics: <u>Clear No odor</u>													
SW2-030725	creek	03/07/25	12:50	8	4	10.33	0.2	2.15	0.715	+189	0.0	11.39	0.33
Sample Characteristics: <u>Clear No odor</u>													
SW1-030725	creek	03/07/25	13:20	18	9	10.82	0.5	2.01	0.979	+203	0.0	8.72	1.21
Sample Characteristics: <u>Clear No odor</u>													

SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: SPS
 Location: Abingdon
 Project Number: US0043268.2150
 Meter/Type/Serial #: Horiba U-52 # S/N: SUSR5TG
 Meter Calibrated @: 7:45
 Flow Meter: FH950 Meter # S/N: 182641004154
 Sampling Date/Time: 3/7/25, OF006-030725 5:40 3/7/25
 Sampler(s): 3.5T, RTM, EMR
 Sampling Device: Dip Net
 Sample Characteristics: OF006-030725 3/7/25 Clear no odor
 Analytical Parameters:

Additional Notes:

 Weather Conditions: Clear 35°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
CF006-030725	Crash	3/7/25	9:10	—	—	6.15	0.4	6.01	0.839	+216	0.0	9.63	0.85
Sample Characteristics: Clear No odor													
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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: Candace Cocca

Data Evaluation Date: March 8, 2025

Checked by: Julie Lehrman

Review Date: March 10, 2025

Laboratory: Pace Analytical LLC

Lab SDG #: L2513026

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 |
| 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"/> | | |
| d) Were detected concentrations less than the QL qualified by the laboratory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

Analytical Assessment	YES	NO	NA	COMMENT
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 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"/>		SW5_030725 (total metals, total cyanide only); SW2_030725 (hex chrome only); SW4_030725 (oil & grease only)

MS/MSDs	YES	NO	NA	COMMENTS
b) Were proper analytes reported in the MS/MSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were project-specific MS/MSD recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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 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_030725 (total metals, total cyanide only); SW2_030725 (hex chrome only); SW4_030725 (oil & grease 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 type="checkbox"/>	<input checked="" 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 were 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.

Data Qualification: No qualifications

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

					Analyses/Parameters									
Laboratory Job	Field Identification	Matrix	Lab Identification	QC Samples	Collection Date	MEK and Toluene	Oil and Grease	Total Metals	Dissolved Metals	Total Hardness	Free Cyanide	Total Cyanide	Trivalent Chromium	Hexavalent Chromium
						E624.1	E1664B	200.8	200.8	200.8	SM 4500CN-E(M)	4500CN-CE	SM 3500	3500CR-B
L2513026	SW5_030725	WS	L2513026-01	--	3/7/2025	X	X	X	X	X	X	X	X	X
L2513026	SW4_030725	WS	L2513026-02	--	3/7/2025	X	X	X	X	X	X	X	X	X
L2513026	SW3_030725	WS	L2513026-03	--	3/7/2025	X	X	X	X	X	X	X	X	X
L2513026	SW2_030725	WS	L2513026-04	--	3/7/2025	X	X	X	X	X	X	X	X	X
L2513026	SW1_030725	WS	L2513026-05	--	3/7/2025	X	X	X	X	X	X	X	X	X
L2513026	TBSW_030725	WQ	L2513026-06	TB	3/7/2025	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

Laboratory Job	Sample Name	Analyte	New Result	New MDL	New RL	Qualifier	Reason
L2513026	No qualifications required						
L2513026	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
RPD: Relative Percent Difference
SDG: Sample Delivery Group

Qualifiers:

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: Candace Cocca

Data Evaluation Date: March 8, 2025

Checked by: Julie Lehrman

Review Date: March 10, 2025

Laboratory: Pace Analytical LLC

Lab SDG #: L2513027

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 |
| 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"/> | | |
| d) Were detected concentrations less than the QL qualified by the laboratory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

Analytical Assessment	YES	NO	NA	COMMENT
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 type="checkbox"/>	<input checked="" 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_030725 (free cyanide & COD 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"/>	
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 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"/>	OF006_030725 (free cyanide & COD 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 type="checkbox"/>	<input checked="" 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.

Data Qualification: No qualifications

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	E1664B	200.8	200.8	200.8	4500CN-E(M)	4500CN-CE	SM 3500	3500CR-B
L2513027	OF006_030725	WS	L2513027-01	--	3/7/2025	X	X	X	X	X	X	X	X	X	X	X	X
L2513027	TBOF_030725	WQ	L2513027-02	TB	3/7/2025	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

<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>
L2513027	No qualifications required						
L2513027	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
RPD: Relative Percent Difference
SDG: Sample Delivery Group

Qualifiers:

APPENDIX C – LABORATORY ANALYTICAL REPORTS



ANALYTICAL REPORT

Lab Number:	L2513026
Client:	WSP USA Inc. 401 Route 73 North Suite 205 Marlton, NJ 08053
ATTN:	Stacy Mason
Phone:	(856) 793-2005
Project Name:	SPS TECHNOLOGIES
Project Number:	US0043268.2150
Report Date:	03/09/25

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: L2513026
Report Date: 03/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2513026-01	SW5_030725	WATER	JENKINTOWN, PA	03/07/25 10:00	03/07/25
L2513026-02	SW4_030725	WATER	JENKINTOWN, PA	03/07/25 10:25	03/07/25
L2513026-03	SW3_030725	WATER	JENKINTOWN, PA	03/07/25 11:35	03/07/25
L2513026-04	SW2_030725	WATER	JENKINTOWN, PA	03/07/25 12:50	03/07/25
L2513026-05	SW1_030725	WATER	JENKINTOWN, PA	03/07/25 13:20	03/07/25
L2513026-06	TBSW_030725	WATER	JENKINTOWN, PA	03/07/25 00:00	03/07/25

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

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: L2513026
Report Date: 03/09/25

Case Narrative (continued)

Report Submission

March 09, 2025: This final report includes the results of all requested analyses.

March 08, 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:



Caitlin Walukevich

Title: Technical Director/Representative

Date: 03/09/25

ORGANICS

VOLATILES

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-01
Client ID: SW5_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 10:00
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 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	83		60-140
Fluorobenzene	72		60-140
4-Bromofluorobenzene	110		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-02
Client ID: SW4_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 10:25
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 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	79		60-140
Fluorobenzene	75		60-140
4-Bromofluorobenzene	114		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-03
Client ID: SW3_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 11:35
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 10:24
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	80		60-140
Fluorobenzene	73		60-140
4-Bromofluorobenzene	118		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-04
Client ID: SW2_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 12:50
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 09:51
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	86		60-140
Fluorobenzene	72		60-140
4-Bromofluorobenzene	104		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-05
Client ID: SW1_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 13:20
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 09:17
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	84		60-140
Fluorobenzene	74		60-140
4-Bromofluorobenzene	112		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-06
Client ID: TBSW_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 00:00
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 08:44
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	84		60-140
Fluorobenzene	74		60-140
4-Bromofluorobenzene	113		60-140

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25

Method Blank Analysis Batch Quality Control

Analytical Method: 128,624.1

Analytical Date: 03/08/25 07:36

Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2038128-4					
Toluene	ND		mg/l	0.0010	0.00031
2-Butanone	ND		mg/l	0.010	0.0010

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	92		60-140
Fluorobenzene	78		60-140
4-Bromofluorobenzene	110		60-140

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Lab Number: L2513026

Project Number: US0043268.2150

Report Date: 03/09/25

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: WG2038128-3								
Toluene	115		-		70-130	-		41
2-Butanone	78		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	95				60-140
Fluorobenzene	90				60-140
4-Bromofluorobenzene	112				60-140

METALS

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513026-01

Date Collected: 03/07/25 10:00

Client ID: SW5_030725

Date Received: 03/07/25

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	0.00043	J	mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 11:40	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00239		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 11:40	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	159.2		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 11:40	EPA 3005A	3,200.8	MRC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		03/08/25 11:40	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 18:34	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0018	J	mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 18:34	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513026-02

Date Collected: 03/07/25 10:25

Client ID: SW4_030725

Date Received: 03/07/25

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	0.00025	J	mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 11:54	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00343		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 11:54	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	212.7		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 11:54	EPA 3005A	3,200.8	MRC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		03/08/25 11:54	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 18:38	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0028		mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 18:38	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513026-03

Date Collected: 03/07/25 11:35

Client ID: SW3_030725

Date Received: 03/07/25

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	03/08/25 08:06	03/08/25 11:59	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00232		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 11:59	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	228.7		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 11:59	EPA 3005A	3,200.8	MRC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		03/08/25 11:59	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 18:57	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0016	J	mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 18:57	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513026-04

Date Collected: 03/07/25 12:50

Client ID: SW2_030725

Date Received: 03/07/25

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	0.00033	J	mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 12:04	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00161	J	mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 12:04	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	236.5		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 12:04	EPA 3005A	3,200.8	MRC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		03/08/25 12:04	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 19:01	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0011	J	mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 19:01	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513026-05

Date Collected: 03/07/25 13:20

Client ID: SW1_030725

Date Received: 03/07/25

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	0.00024	J	mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 12:09	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00484		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 12:09	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	271.0		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 12:09	EPA 3005A	3,200.8	MRC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		03/08/25 12:09	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 19:07	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0037		mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 19:07	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES

Lab Number: L2513026

Project Number: US0043268.2150

Report Date: 03/09/25

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: WG2038043-1										
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC

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: WG2038043-1										
Hardness	ND		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC

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: WG2038295-1										
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 17:59	3,200.8	TAA
Nickel, Dissolved	ND		mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 17:59	3,200.8	TAA

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG2038043-2								
Chromium, Total	99		-		85-115	-		
Nickel, Total	106		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-05 Batch: WG2038043-2								
Hardness	100		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG2038295-2								
Chromium, Dissolved	101		-		85-115	-		
Nickel, Dissolved	103		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

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: WG2038043-3 QC Sample: L2513026-01 Client ID: SW5_030725												
Chromium, Total	0.00043J	0.2	0.2008	100		-	-		70-130	-		20
Nickel, Total	0.00239	0.5	0.5169	103		-	-		70-130	-		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038043-3 QC Sample: L2513026-01 Client ID: SW5_030725												
Hardness	159.2	66.2	234.0	113		-	-		70-130	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038295-3 WG2038295-4 QC Sample: L2513207-02 Client ID: MS Sample												
Chromium, Dissolved	ND	0.2	0.1996	100		0.1941	97		70-130	3		20
Nickel, Dissolved	0.0026	0.5	0.4965	99		0.4889	97		70-130	2		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038295-5 QC Sample: L2513207-03 Client ID: MS Sample												
Chromium, Dissolved	0.0002J	0.2	0.1873	94		-	-		70-130	-		20
Nickel, Dissolved	0.0013J	0.5	0.4771	95		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038043-4 QC Sample: L2513026-01 Client ID: SW5_030725						
Chromium, Total	0.00043J	0.00047J	mg/l	NC		20
Nickel, Total	0.00239	0.00235	mg/l	1		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038043-4 QC Sample: L2513026-01 Client ID: SW5_030725						
Hardness	159.2	164.6	mg/l	3		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2038295-6 QC Sample: L2513207-03 Client ID: DUP Sample						
Chromium, Dissolved	0.0002J	0.0003J	mg/l	NC		20
Nickel, Dissolved	0.0013J	0.0013J	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-01

Client ID: SW5_030725

Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 10:00

Date Received: 03/07/25

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	03/08/25 07:45	03/08/25 10:39	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.4	4.4	1.1	03/08/25 11:13	03/08/25 15:52	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:52	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-02

Client ID: SW4_030725

Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 10:25

Date Received: 03/07/25

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	03/08/25 07:45	03/08/25 10:44	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 15:53	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:53	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-03

Client ID: SW3_030725

Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 11:35

Date Received: 03/07/25

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	03/08/25 07:45	03/08/25 10:45	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 15:58	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:54	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-04

Client ID: SW2_030725

Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 12:50

Date Received: 03/07/25

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	03/08/25 07:45	03/08/25 10:46	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.4	4.4	1.1	03/08/25 11:13	03/08/25 15:59	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:55	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES

Lab Number: L2513026

Project Number: US0043268.2150

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513026-05

Date Collected: 03/07/25 13:20

Client ID: SW1_030725

Date Received: 03/07/25

Sample Location: JENKINTOWN, PA

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.001	J	mg/l	0.005	0.001	1	03/08/25 07:45	03/08/25 10:47	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 16:00	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:58	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

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: WG2038022-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/08/25 07:45	03/08/25 10:35	121,4500CN-CE	JER
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2038028-1										
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2038046-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:50	121,3500CR-B	DMO
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG2038095-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 15:30	140,1664B	IYM



Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2038022-2								
Cyanide, Total	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2038028-2								
Cyanide, Free	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2038046-2								
Chromium, Hexavalent	103		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG2038095-2								
Oil & Grease, Hem-Grav	86		-		78-114	-		18

Matrix Spike Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513026

Report Date: 03/09/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05				QC Batch ID: WG2038022-3			QC Sample: L2513026-01			Client ID: SW5_030725		
Cyanide, Total	ND	0.2	0.197	98		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01-05				QC Batch ID: WG2038028-4			QC Sample: L2513027-01			Client ID: MS Sample		
Cyanide, Free	ND	0.25	0.225	90		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05				QC Batch ID: WG2038046-4			QC Sample: L2513026-04			Client ID: SW2_030725		
Chromium, Hexavalent	ND	0.1	0.097	97		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05				QC Batch ID: WG2038095-4			QC Sample: L2513026-02			Client ID: SW4_030725		
Oil & Grease, Hem-Grav	ND	38.5	31	81		-	-		78-114	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513026
Report Date: 03/09/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2038022-4 QC Sample: L2513026-01 Client ID: SW5_030725						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2038028-3 QC Sample: L2513027-01 Client ID: DUP Sample						
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2038046-3 QC Sample: L2513026-04 Client ID: SW2_030725						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG2038095-3 QC Sample: L2513026-01 Client ID: SW5_030725						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25**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

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513026-01A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-01B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-01C	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-01D	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2513026-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2513026-01F	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2513026-01G	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2513026-01H	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2513026-01J	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2513026-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2513026-02A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-02B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-02C	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-02D	Plastic 250ml unpreserved	A	7	7	2.5	Y	Present/Intact		-
L2513026-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2513026-02F	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Present/Intact		TCN-4500(14)
L2513026-02G	Plastic 500ml unpreserved	A	7	7	2.5	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2513026-02H	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2513026-02J	Amber 1L HCl preserved	A	NA		2.5	Y	Present/Intact		OG-1664(28)
L2513026-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.5	Y	Present/Intact		CR-2008S(180),NI-2008S(180)

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Lab Number: L2513026
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513026-03A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-03B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-03C	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-03D	Plastic 250ml unpreserved	C	7	7	2.3	Y	Present/Intact		-
L2513026-03E	Plastic 250ml HNO3 preserved	C	<2	<2	2.3	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2513026-03F	Plastic 250ml NaOH preserved	C	>12	>12	2.3	Y	Present/Intact		TCN-4500(14)
L2513026-03G	Plastic 500ml unpreserved	C	7	7	2.3	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2513026-03H	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-03J	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-03X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.3	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2513026-04A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-04B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-04C	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-04D	Plastic 250ml unpreserved	C	7	7	2.3	Y	Present/Intact		-
L2513026-04E	Plastic 250ml HNO3 preserved	C	<2	<2	2.3	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2513026-04F	Plastic 250ml NaOH preserved	C	>12	>12	2.3	Y	Present/Intact		TCN-4500(14)
L2513026-04G	Plastic 500ml unpreserved	C	7	7	2.3	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2513026-04H	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-04J	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-04X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.3	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2513026-05A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-05B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-05C	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-05D	Plastic 250ml unpreserved	C	7	7	2.3	Y	Present/Intact		-
L2513026-05E	Plastic 250ml HNO3 preserved	C	<2	<2	2.3	Y	Present/Intact		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2513026-05F	Plastic 250ml NaOH preserved	C	>12	>12	2.3	Y	Present/Intact		TCN-4500(14)
L2513026-05G	Plastic 500ml unpreserved	C	7	7	2.3	Y	Present/Intact		HEXCR-3500(1),FCN(1)

Project Name: SPS TECHNOLOGIES
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513026-05H	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-05J	Amber 1L HCl preserved	C	NA		2.3	Y	Present/Intact		OG-1664(28)
L2513026-05X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.3	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2513026-06A	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)
L2513026-06B	Vial Na2S2O3 preserved	C	NA		2.3	Y	Present/Intact		624.1-PPM(7)

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513026**Project Number:** US0043268.2150**Report Date:** 03/09/25

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.

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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, Dibenzo(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

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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
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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.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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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 LLCID 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.



WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

CHAIN OF CUSTODY

PAGE 1 OF 1

Project Information

Project Name: SPS Technologies

Project Location: Jenkintown, PA

Project #: US0043268.2150

Project Manager: Tovah Karl

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: Time: 1 Day

Date Rec'd in Lab: 3/8/25

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

ALPHA

L2513026

GOLDER - NJ - ER

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program

Criteria

PA

Client Information

Client: WSP USA Inc.

Address: 10 Lake Center Dr.

Suite 205, Marlton, NJ 08053

Phone: 856-793-2005

Fax: 856-793-2006

Email: tovah.karl@wsp.com
stacy.mason@wsp.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

* Attorney-Client Privileged + Confidential

All VOAs in one coder

Dissolved metals will be lab filtered

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS														SAMPLE HANDLING		TOTAL # BOTTLES
		Date	Time			Oil and Grease E1661B	Free Cyanide SM4500-Cl	Speciate Hex. Cyanide SM4500-Cl	Total Cyanide SM4500-Cl	Total Nickel E200.8	Dissolved Chromium E200.8	Dissolved Nickel E200.8	Dissolved Chromium E200.8	MPK E624.1	Toluene E624.1	Total Hardness E200.8	Filtration	Done	Not needed	Lab to do Preservation	Lab to do	
13026-01	SW5-030725	3/7/25	10:00	SW	JET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
02	SW4-030725	3/7/25	10:25	SW	JET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
03	SW3-030725	3/7/25	11:35	SW	JET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
04	SW2-030725	3/7/25	12:50	SW	JET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
05	SW1-030725	3/7/25	13:20	SW	JET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
06	TB54-030725	3/7/25	—	W	—																	2

Container Type

Preservative

A P P P P P P P U U

B X X E C C X A H H

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

CUSTODY SEAL

Date 3/7/2025
Signature Emma Rosenberg

Thermo
SCIENTIFIC

90009

CUSTODY SEAL

Date 3/7/2025
Signature Emma Rosenberg

Thermo
SCIENTIFIC

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Date 3/7/2025
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Signature Emma Rosenberg

Thermo
SCIENTIFIC

90009

CUSTODY SEAL

Date 3/7/2025

Signature Emma Rosenheim

Thermo
SCIENTIFIC

90009

CUSTODY SEAL

Date 3/7/2025

Signature Emma Rosenheim

Thermo
SCIENTIFIC

90009



ANALYTICAL REPORT

Lab Number:	L2513027
Client:	WSP USA Inc. 401 Route 73 North Suite 205 Marlton, NJ 08053
ATTN:	Stacy Mason
Phone:	(856) 793-2005
Project Name:	SPS TECHNOLOGIES
Project Number:	US0043268.2150
Report Date:	03/09/25

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: L2513027
Report Date: 03/09/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2513027-01	OF006_030725	WATER	JENKINTOWN, PA	03/07/25 09:10	03/07/25
L2513027-02	TBOF_030725	WATER	JENKINTOWN, PA	03/07/25 00:00	03/07/25

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513027
Report Date: 03/09/25

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: L2513027
Report Date: 03/09/25

Case Narrative (continued)

Report Submission

March 09, 2025: This final report includes the results of all requested analyses.

March 08, 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:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 03/09/25

ORGANICS

VOLATILES

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513027
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513027-01
Client ID: OF006_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 09:10
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 12:07
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	82		60-140
Fluorobenzene	77		60-140
4-Bromofluorobenzene	114		60-140

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513027
Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513027-02
Client ID: TBOF_030725
Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 00:00
Date Received: 03/07/25
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/08/25 08:10
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	83		60-140
Fluorobenzene	75		60-140
4-Bromofluorobenzene	114		60-140

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513027**Project Number:** US0043268.2150**Report Date:** 03/09/25

Method Blank Analysis Batch Quality Control

Analytical Method: 128,624.1
 Analytical Date: 03/08/25 07:36
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2038128-4					
Toluene	ND		mg/l	0.0010	0.00031
2-Butanone	ND		mg/l	0.010	0.0010

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	92		60-140
Fluorobenzene	78		60-140
4-Bromofluorobenzene	110		60-140

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Lab Number: L2513027

Project Number: US0043268.2150

Report Date: 03/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG2038128-3								
Toluene	115		-		70-130	-		41
2-Butanone	78		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	95				60-140
Fluorobenzene	90				60-140
4-Bromofluorobenzene	112				60-140

METALS

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513027**Project Number:** US0043268.2150**Report Date:** 03/09/25**SAMPLE RESULTS**

Lab ID: L2513027-01

Date Collected: 03/07/25 09:10

Client ID: OF006_030725

Date Received: 03/07/25

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	0.01970		mg/l	0.01000	0.00327	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Chromium, Total	0.00020	J	mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Copper, Total	0.00177		mg/l	0.00100	0.00038	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Iron, Total	0.1907		mg/l	0.05000	0.01910	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Nickel, Total	0.00198	J	mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Zinc, Total	0.01586		mg/l	0.00500	0.00341	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC
Total Hardness (by calculation) - Mansfield Lab											
Hardness	214.4		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 12:13	EPA 3005A	3,200.8	MRC

General Chemistry - Mansfield Lab

Chromium, Trivalent	ND		mg/l	0.010	0.003	1	03/08/25 12:13	NA	107,-
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Dissolved Metals - Mansfield Lab

Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 19:12	EPA 3005A	3,200.8	TAA
Nickel, Dissolved	0.0014	J	mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 19:12	EPA 3005A	3,200.8	TAA



Project Name: SPS TECHNOLOGIES

Lab Number: L2513027

Project Number: US0043268.2150

Report Date: 03/09/25

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 Batch: WG2038043-1										
Aluminum, Total	ND		mg/l	0.01000	0.00327	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Iron, Total	ND		mg/l	0.05000	0.01910	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC
Zinc, Total	ND		mg/l	0.00500	0.00341	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC

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 Batch: WG2038043-1										
Hardness	ND		mg/l	0.5400	NA	1	03/08/25 08:06	03/08/25 11:31	3,200.8	MRC

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 Batch: WG2038295-1										
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	03/09/25 14:02	03/09/25 17:59	3,200.8	TAA
Nickel, Dissolved	ND		mg/l	0.0020	0.0006	1	03/09/25 14:02	03/09/25 17:59	3,200.8	TAA

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513027

Report Date: 03/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2038043-2								
Aluminum, Total	98		-		85-115	-		
Chromium, Total	99		-		85-115	-		
Copper, Total	106		-		85-115	-		
Iron, Total	109		-		85-115	-		
Lead, Total	98		-		85-115	-		
Nickel, Total	106		-		85-115	-		
Zinc, Total	101		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01 Batch: WG2038043-2								
Hardness	100		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2038295-2								
Chromium, Dissolved	101		-		85-115	-		
Nickel, Dissolved	103		-		85-115	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513027
Report Date: 03/09/25

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 QC Batch ID: WG2038043-3 QC Sample: L2513026-01 Client ID: MS Sample												
Aluminum, Total	0.070	2	2.042	99		-	-		70-130	-		20
Chromium, Total	0.00043J	0.2	0.2008	100		-	-		70-130	-		20
Copper, Total	0.0039	0.25	0.2609	103		-	-		70-130	-		20
Iron, Total	0.1632	1	1.267	110		-	-		70-130	-		20
Lead, Total	0.0005J	0.53	0.5051	95		-	-		70-130	-		20
Nickel, Total	0.00239	0.5	0.5169	103		-	-		70-130	-		20
Zinc, Total	0.0100	0.5	0.5312	104		-	-		70-130	-		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038043-3 QC Sample: L2513026-01 Client ID: MS Sample												
Hardness	159.2	66.2	234.0	113		-	-		70-130	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038295-3 WG2038295-4 QC Sample: L2513207-02 Client ID: MS Sample												
Chromium, Dissolved	ND	0.2	0.1996	100		0.1941	97		70-130	3		20
Nickel, Dissolved	0.0026	0.5	0.4965	99		0.4889	97		70-130	2		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038295-5 QC Sample: L2513207-03 Client ID: MS Sample												
Chromium, Dissolved	0.0002J	0.2	0.1873	94		-	-		70-130	-		20
Nickel, Dissolved	0.0013J	0.5	0.4771	95		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: US0043268.2150

Lab Number: L2513027
Report Date: 03/09/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038043-4 QC Sample: L2513026-01 Client ID: DUP Sample						
Chromium, Total	0.00043J	0.00047J	mg/l	NC		20
Nickel, Total	0.00239	0.00235	mg/l	1		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038043-4 QC Sample: L2513026-01 Client ID: DUP Sample						
Hardness	159.2	164.6	mg/l	3		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2038295-6 QC Sample: L2513207-03 Client ID: DUP Sample						
Chromium, Dissolved	0.0002J	0.0003J	mg/l	NC		20
Nickel, Dissolved	0.0013J	0.0013J	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513027

Report Date: 03/09/25

SAMPLE RESULTS

Lab ID: L2513027-01

Client ID: OF006_030725

Sample Location: JENKINTOWN, PA

Date Collected: 03/07/25 09:10

Date Received: 03/07/25

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	-	03/08/25 06:20	121,2540D	MRM
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/08/25 07:45	03/08/25 10:48	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	4.0		mg/l	0.10	0.046	1	-	03/08/25 07:07	44,353.2	KAF
Chemical Oxygen Demand	13.	J	mg/l	20	6.0	1	03/08/25 11:10	03/08/25 14:58	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 16:01	140,1664B	IYM
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:59	121,3500CR-B	DMO



Project Name: SPS TECHNOLOGIES

Lab Number: L2513027

Project Number: US0043268.2150

Report Date: 03/09/25

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 Batch: WG2037991-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.046	1	-	03/08/25 02:29	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038016-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/08/25 06:20	121,2540D	MRM
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038022-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/08/25 07:45	03/08/25 10:35	121,4500CN-CE	JER
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038028-1										
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	03/08/25 07:26	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038046-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/08/25 08:34	03/08/25 08:50	121,3500CR-B	DMO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038067-1										
Chemical Oxygen Demand	ND		mg/l	20	6.0	1	03/08/25 11:10	03/08/25 14:55	44,410.4	CVN
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG2038095-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	03/08/25 11:13	03/08/25 15:30	140,1664B	IYM



Lab Control Sample Analysis **Batch Quality Control**

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513027

Report Date: 03/09/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2037991-2								
Nitrogen, Nitrate/Nitrite	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038016-2								
Solids, Total Suspended	93		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038022-2								
Cyanide, Total	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038028-2								
Cyanide, Free	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038046-2								
Chromium, Hexavalent	103		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038067-2								
Chemical Oxygen Demand	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG2038095-2								
Oil & Grease, Hem-Grav	86		-		78-114	-		18

Matrix Spike Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513027

Report Date: 03/09/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2037991-4 QC Sample: L2512686-02 Client ID: MS Sample												
Nitrogen, Nitrate/Nitrite	15.	4	18	75	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2038022-3 QC Sample: L2513026-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.197	98		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2038028-4 QC Sample: L2513027-01 Client ID: OF006_030725												
Cyanide, Free	ND	0.25	0.225	90		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2038046-4 QC Sample: L2513026-04 Client ID: MS Sample												
Chromium, Hexavalent	ND	0.1	0.097	97		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2038067-3 QC Sample: L2513027-01 Client ID: OF006_030725												
Chemical Oxygen Demand	13.J	238	240	102		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2038095-4 QC Sample: L2513026-02 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	38.5	31	81		-	-		78-114	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES

Project Number: US0043268.2150

Lab Number: L2513027

Report Date: 03/09/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2037991-3	QC Sample: L2512686-02	Client ID: DUP	Sample	
Nitrogen, Nitrate/Nitrite	15.	15	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038016-3	QC Sample: L2511982-01	Client ID: DUP	Sample	
Solids, Total Suspended	1600	1700	mg/l	6		32
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038022-4	QC Sample: L2513026-01	Client ID: DUP	Sample	
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038028-3	QC Sample: L2513027-01	Client ID: OF006_030725		
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038046-3	QC Sample: L2513026-04	Client ID: DUP	Sample	
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038067-4	QC Sample: L2513027-01	Client ID: OF006_030725		
Chemical Oxygen Demand	13.J	17.J	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG2038095-3	QC Sample: L2513026-01	Client ID: DUP	Sample	
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513027**Project Number:** US0043268.2150**Report Date:** 03/09/25**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

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2513027-01A	Vial Na2S2O3 preserved	B	NA		3.1	Y	Present/Intact		624.1-PPM(7)
L2513027-01B	Vial Na2S2O3 preserved	B	NA		3.1	Y	Present/Intact		624.1-PPM(7)
L2513027-01C	Vial Na2S2O3 preserved	B	NA		3.1	Y	Present/Intact		624.1-PPM(7)
L2513027-01D	Plastic 250ml unpreserved	B	7	7	3.1	Y	Present/Intact		-
L2513027-01E	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Present/Intact		AL-2008T(180),NI-2008T(180),ZN-2008T(180),HARDT-2008(180),CU-2008T(180),FE-2008T(180),CR-2008T(180),PB-2008T(180)
L2513027-01F	Plastic 250ml H2SO4 preserved	B	<2	<2	3.1	Y	Present/Intact		NO3/NO2-353(28),COD-410(28)
L2513027-01G	Plastic 250ml NaOH preserved	B	>12	>12	3.1	Y	Present/Intact		TCN-4500(14)
L2513027-01H	Plastic 500ml unpreserved	B	7	7	3.1	Y	Present/Intact		HEXCR-3500(1),FCN(1)
L2513027-01J	Plastic 950ml unpreserved	B	7	7	3.1	Y	Present/Intact		TSS-2540(7)
L2513027-01K	Amber 1L HCl preserved	B	NA		3.1	Y	Present/Intact		OG-1664(28)
L2513027-01L	Amber 1L HCl preserved	B	NA		3.1	Y	Present/Intact		OG-1664(28)
L2513027-01X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Present/Intact		CR-2008S(180),NI-2008S(180)
L2513027-02A	Vial Na2S2O3 preserved	B	NA		3.1	Y	Present/Intact		624.1-PPM(7)
L2513027-02B	Vial Na2S2O3 preserved	B	NA		3.1	Y	Present/Intact		624.1-PPM(7)

Project Name: SPS TECHNOLOGIES**Lab Number:** L2513027**Project Number:** US0043268.2150**Report Date:** 03/09/25

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

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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

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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
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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 LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**Revision **27**Published Date: **01/24/2025**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 LLCID 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.



CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client:	WSP USA Inc.
Address:	10 Lake Center Dr. Suite 205, Marlton, NJ 08053
Phone:	856-793-2005
Fax:	856-793-2006
Email:	toivah.karl@wsp.com stacy.mason@wsp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: SPS Technologies

Project Location: Jenkintown, PA

Project #: US0043268.2150

Project Manager: Tovah Karl

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: Time: 1 Day

Other Project Specific Requirements/Comments/Detection Limits:

* Attorney-Client Privileged + Confidential

ALL VOA's in one coder

Dissolved metals will be lab filtered

Date Rec'd in Lab: 3/8/25

ALPHA

L2513027
GOLDER - NJ

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

<input type="checkbox"/> Same as Client info	PO #:
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Regulatory Requirements/Report Limits

State /Fed Program	Criteria
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PA

ANALYSIS		CP-Metal	CM
Chemical Oxygen demand	E4110.4		
Total Suspended Solids	SMY25400		
Oil and Grease	E11614D		
Nitrate-Nitrite as N	E353.2		
Total Aluminium	E200.8		
Total Copper	E200.8		
Total Iron	E200.8		
Total Lead	E200.8		
Total Cyanide	SMY500 -		
Total Cyanide	SMY500 -		
Total Nickel	E200.8		
Total Zinc	E200.8		

SAMPLE HANDLING

Filtration _____

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

C
 A
 E
 S
 E
 C
 T
 I
 O
 N
 S

[illegible]

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

CUSTODY SEAL

Date 3/7/2025

Signature Emma Rosenbush

Thermo
SCIENTIFIC

90009

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Date 3/7/2025

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