# SPS Technologies Abington PA

# March 6, 2025 Daily Surface Water and Outfall Sampling Results Report

SPS Technologies

2025-03-11

## Table of Contents

## 1. Executive Summary

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

Surface Water Samples:

| | | **Upstream Offsite SW Sample Location 1** | **Upstream Offsite SW Sample Location 2** | **SW Sample Location 3** | **High School Road Sample Location** | **High School Road Sample Location Duplicate** | **Downstream SW Sample Location** |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Units** | Result | Result | Result | Result | Result | Result |
| Toluene | mg/L | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | mg/L | ND | ND | ND | ND | ND | ND |
| Chromium, Trivalent | mg/L | ND | ND | ND | ND | ND | ND |
| Chromium, Hexavalent | mg/L | ND | ND | ND | ND | ND | 0.004 |
| Total Cyanide | mg/L | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Free Cyanide | mg/L | ND | ND | 0.005 | 0.005 | 0.004 | 0.006 |
| Oil & Grease | mg/L | ND | ND | ND | ND | ND | ND |
| Total Chromium | mg/L | 0.00047 | 0.00042 | 0.00049 | 0.00071 | 0.0008 | 0.00115 |
| Total Nickel | mg/L | 0.00106 | 0.00815 | 0.00162 | 0.00256 | 0.00258 | 0.00162 |
| Dissolved Chromium | mg/L | 0.0004 | 0.0004 | 0.0003 | 0.0005 | 0.0005 | 0.0006 |
| Dissolved Nickel | mg/L | 0.0011 | 0.0083 | 0.0017 | 0.0025 | 0.0026 | 0.0015 |
| Hardness | mg/L | 219 | 223.3 | 208.7 | 158.5 | 161.8 | 90.11 |
| pH | SU | 8.14 | 7.75 | 7.62 | 7.24 | 7.24 | 5.94 |

Outfall Samples:

| | | **Outfall 002** | **Outfall 006** |
|---|---|---|---|
| **Parameter** | **Units** | Result | Result |
| Toluene | mg/L | ND | ND |
| 2-Butanone (MEK) | mg/L | ND | ND |
| Chromium, Trivalent | mg/L | 0.006 | ND |
| Chromium, Hexavalent | mg/L | 0.014 | ND |
| Total Cyanide | mg/L | 0.029 | ND |
| Free Cyanide | mg/L | 0.007 | ND |
| Oil & Grease | mg/L | ND | ND |
| Total Suspended Solids | mg/L | ND | ND |
| Nitrate/Nitrite as Nitrogen | mg/L | 2.2 | 4.2 |
| Chemical Oxygen Demand | mg/L | 57 | 28 |
| Total Aluminum | mg/L | 0.06665 | 0.1286 |
| Total Chromium | mg/L | 0.02075 | 0.00054 |
| Total Copper | mg/L | 0.0098 | 0.0039 |
| Total Iron | mg/L | 2.002 | 0.4369 |
| Total Lead | mg/L | 0.00121 | 0.00067 |
| Total Nickel | mg/L | 0.01997 | 0.00145 |

| | | | |
|---|---|---|---|
| Total Zinc | mg/L | 0.1556 | 0.04159 |
| Dissolved Chromium | mg/L | 0.021 | 0.0003 |
| Dissolved Nickel | mg/L | 0.0206 | 0.0017 |
| Hardness | mg/L | 582.2 | 222.7 |
| pH | SU | 6.65 | 7.24 |

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.

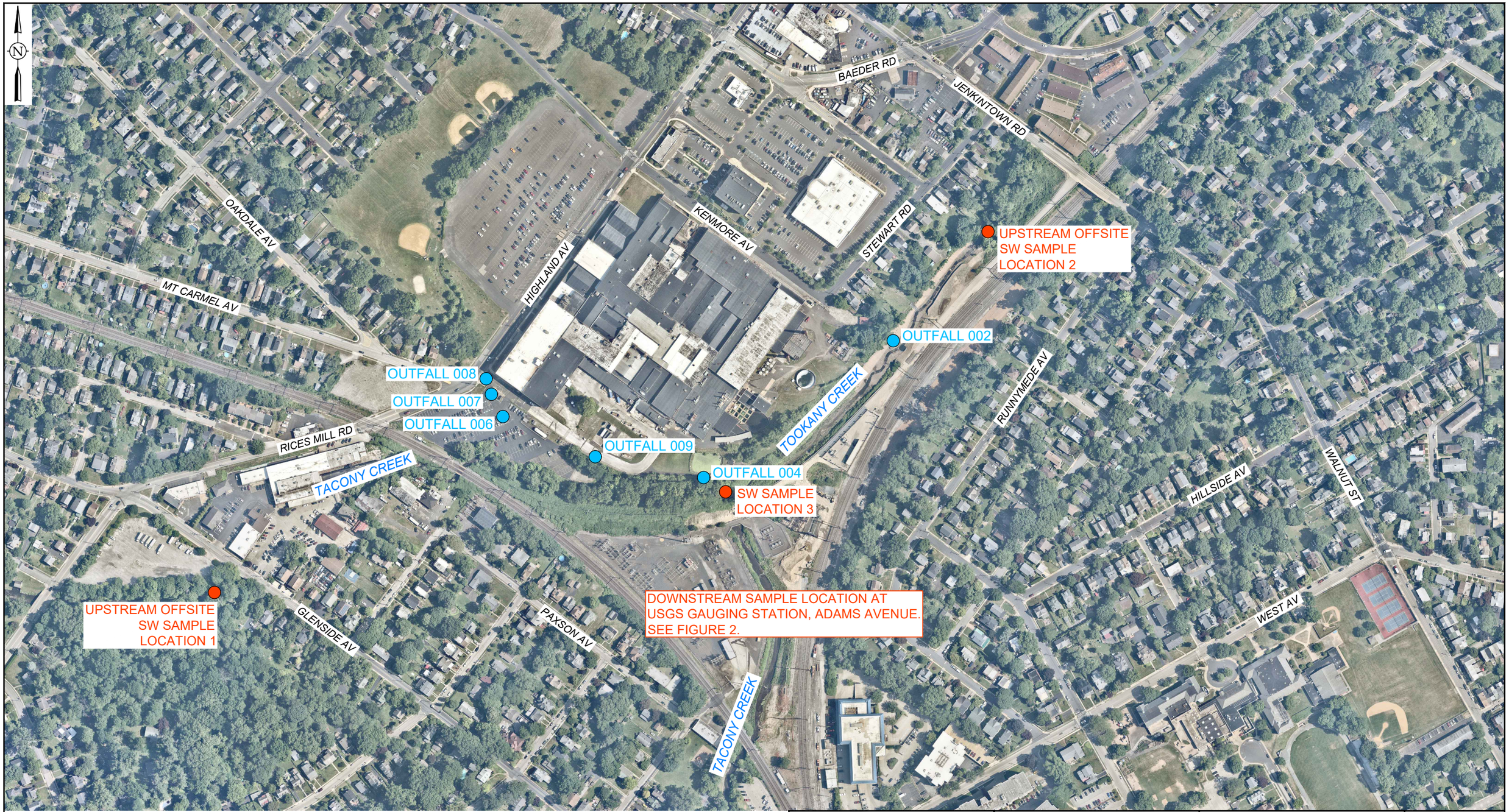
### 5.3 Data Evaluation

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

**SURFACE WATER AND OUTFALL SAMPLING RESULTS REPORT**

PROJECT NO.: US0043268.2150

REVISION NO.: 0

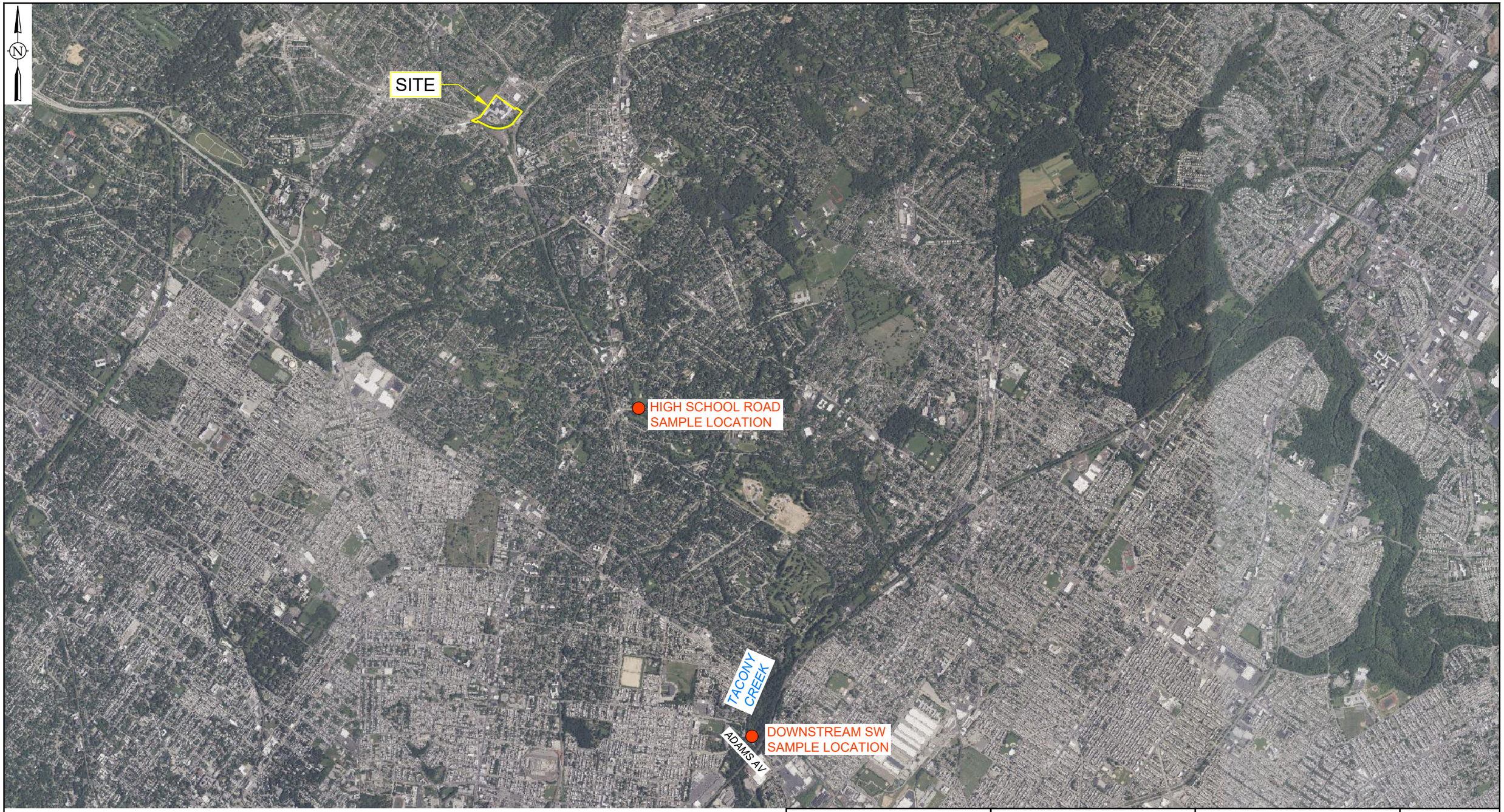
DATE: FEBRUARY 2025

TITLE

# SURFACE WATER AND OUTFALL SAMPLE LOCATIONS

FIGURE NO.: 1

C:\Users\USPC714485\OneDrive - WSP O365\Documents\TEMP_SPS\05 Daily SW-OF Sampling Results Report\Fig 1-2 SW-OF Sampling Results Report.dwg Thu, 27 Feb 2025 - 6:05pm USPC714485 Layout: Fig 1 SW-OF Sampling Results Report




SOURCE

GEOMAP IMAGERY, 2025.

LEGEND

SW = SURFACE WATER

SURFACE WATER SAMPLE LOCATION

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

PROJECTION / DATUM: PA83-SF

0 1,500' 3,000'

SCALE: 1" = 3,000'

PREPARED BY: PJC

CHECKED BY: KM

REVIEWED BY: TK

CLIENT

PROJECT

**SURFACE WATER AND OUTFALL SAMPLING RESULTS REPORT**

PROJECT NO.: US0043268.2150

REVISION NO.: 0

DATE: FEBRUARY 2025

TITLE

# OFF-SITE SURFACE WATER SAMPLE LOCATIONS

FIGURE NO.: 2

C:\Users\USPC714485\OneDrive - WSP O365\Documents\TEMP_SPS\05 Daily SW-OF Sampling Results Report\Fig 1-2 SW-OF Sampling Results Report.dwg Thu, 27 Feb 2025 - 6:06pm USPC714485 Layout: Fig 2 SW-OF Sampling Results Report

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



| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Location** | | **Upstream Offsite SW Sample Location 1** | | | **Upstream Offsite SW Sample Location 2** | | | **SW Sample Location 3** | | | **High School Road Sample Location** | | | **High School Road Sample Location Duplicate** | | | **Downstream SW Sample Location** | | |
| **Field Sample ID** | | SW2_030625 | | | SW1_030625 | | | SW3_030625 | | | SW4_030625 | | | FDGW_030625 | | | SW5_030625 | | |
| **Lab Sample ID** | | L2512807-04 | | | L2512807-05 | | | L2512807-03 | | | L2512807-02 | | | L2512807-06 | | | L2512807-01 | | |
| **Sampling Date** | | 3/6/2025 | | | 3/6/2025 | | | 3/6/2025 | | | 3/6/2025 | | | 3/6/2025 | | | 3/6/2025 | | |
| **Matrix** | | Water | | | Water | | | Water | | | Water | | | Water | | | Water | | |
| **Parameter** | **Units** | Result | Q | RL | 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 | ND | | 0.001 |
| 2-Butanone (MEK) | mg/L | ND | | 0.01 | 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 | ND | | 0.01 |
| Chromium, Hexavalent | mg/L | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | 0.004 | J | 0.01 |
| Total Cyanide | mg/L | 0.002 | J | 0.005 | 0.002 | J | 0.005 | 0.002 | J | 0.005 | 0.002 | J | 0.005 | 0.002 | J | 0.005 | 0.002 | J | 0.005 |
| Free Cyanide | mg/L | ND | | 0.01 | ND | | 0.01 | 0.005 | J | 0.01 | 0.005 | J | 0.01 | 0.004 | J | 0.01 | 0.006 | J | 0.01 |
| Oil & Grease | mg/L | ND | | 4 | ND | | 4 | ND | | 4.4 | ND | | 4.4 | ND | | 4.4 | ND | | 4 |
| **Total Metals** | | | | | | | | | | | | | | | | | | | |
| Total Chromium | mg/L | 0.00047 | J | 0.001 | 0.00042 | J | 0.001 | 0.00049 | J | 0.001 | 0.00071 | J | 0.001 | 0.0008 | J | 0.001 | 0.00115 | | 0.001 |
| Total Nickel | mg/L | 0.00106 | J | 0.002 | 0.00815 | | 0.002 | 0.00162 | J | 0.002 | 0.00256 | | 0.002 | 0.00258 | | 0.002 | 0.00162 | J | 0.002 |
| **Dissolved Metals** | | | | | | | | | | | | | | | | | | | |
| Dissolved Chromium | mg/L | 0.0004 | J | 0.001 | 0.0004 | J | 0.001 | 0.0003 | J | 0.001 | 0.0005 | J | 0.001 | 0.0005 | J | 0.001 | 0.0006 | J | 0.001 |
| Dissolved Nickel | mg/L | 0.0011 | J | 0.002 | 0.0083 | | 0.002 | 0.0017 | J | 0.002 | 0.0025 | | 0.002 | 0.0026 | | 0.002 | 0.0015 | J | 0.002 |
| **Total Hardness** | | | | | | | | | | | | | | | | | | | |
| Hardness | mg/L | 219 | | 0.54 | 223.3 | | 0.54 | 208.7 | | 0.54 | 158.5 | | 0.54 | 161.8 | | 0.54 | 90.11 | | 0.54 |
| **Field Parameters** | | | | | | | | | | | | | | | | | | | |
| pH[1] | SU | 8.14 | | | 7.75 | | | 7.62 | | | 7.24 | | | 7.24 | | | 5.94 | | |

**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.
2.) Field duplicate sample FDSW_030625 was collected from the High School Road SW4 sampling location.

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

**Qualifiers:**
J - Estimated Result

Created By: SNM 3/8/2025
Checked By: CCC 3/9/2025

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | | Outfall 002 | | | Outfall 006 | | |
| **Field Sample ID** | | OF002_030625 | | | OF006_030625 | | |
| **Lab Sample ID** | | L2513323-01 | | | L2513323-02 | | |
| **Sampling Date** | | 3/6/2025 | | | 3/6/2025 | | |
| **Matrix** | | Water | | | Water | | |
| **Parameter** | **Units** | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds** | | | | | | | |
| Toluene | mg/L | ND | | 0.001 | ND | | 0.001 |
| 2-Butanone (MEK) | mg/L | ND | | 0.01 | ND | | 0.01 |
| **General Chemistry** | | | | | | | |
| Chromium, Trivalent | mg/L | 0.006 | J | 0.01 | ND | | 0.01 |
| Chromium, Hexavalent | mg/L | 0.014 | | 0.01 | ND | | 0.01 |
| Total Cyanide | mg/L | 0.029 | | 0.005 | ND | | 0.005 |
| Free Cyanide | mg/L | 0.007 | J | 0.01 | ND | | 0.01 |
| Oil & Grease | mg/L | ND | | 4 | ND | | 4 |
| Total Suspended Solids | mg/L | ND | | 5 | ND | | 5 |
| Nitrate/Nitrite as Nitrogen | mg/L | 2.2 | | 0.1 | 4.2 | | 0.1 |
| Chemical Oxygen Demand | mg/L | 57 | | 20 | 28 | | 20 |
| **Total Metals** | | | | | | | |
| Total Aluminum | mg/L | 0.06665 | | 0.01 | 0.1286 | | 0.01 |
| Total Chromium | mg/L | 0.02075 | | 0.001 | 0.00054 | J | 0.001 |
| Total Copper | mg/L | 0.0098 | | 0.001 | 0.0039 | | 0.001 |
| Total Iron | mg/L | 2.002 | | 0.05 | 0.4369 | | 0.05 |
| Total Lead | mg/L | 0.00121 | | 0.001 | 0.00067 | J | 0.001 |
| Total Nickel | mg/L | 0.01997 | | 0.002 | 0.00145 | J | 0.002 |
| Total Zinc | mg/L | 0.1556 | | 0.005 | 0.04159 | | 0.005 |
| **Dissolved Metals** | | | | | | | |
| Dissolved Chromium | mg/L | 0.021 | | 0.001 | 0.0003 | J | 0.001 |
| Dissolved Nickel | mg/L | 0.0206 | | 0.002 | 0.0017 | J | 0.002 |
| **Total Hardness** | | | | | | | |
| Hardness | mg/L | 582.2 | | 0.54 | 222.7 | | 0.54 |
| **Field Parameters** | | | | | | | |
| pH[1] | SU | 6.65 | | | 7.24 | | |

**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

Created By: SNM 3/8/2025
Checked By: CCC 3/9/2025

# APPENDIX A – DAILY SURFACE WATER AND OUTFALL SAMPLING LOGS

Project Number: US0043268.2150

## SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: SPS
Location: Abington
Project Number: US0043268.2150
Meter/Type/Serial #: Horiba U-52 # S/N: PVXUM1AA
Meter Calibrated @: 8:20 3/6/25
Flow Meter FH950 Meter # S/N: 18264105 1154
Sampling Date/Time: SW5-030625 3/6/25 @10:00, SW4-030625 @10:55 3/6/25, SW3-030625 @ 12:55 3/6/25 (present)
Sampler(s): JET, KW SW2-030625 @ 13:10 3/6/25, SW1-030625 @ 13:45 3/6/25
Sampling Device: Telescope pole & dipper ladle
Sample Characteristics: SW5-030625 Clear No odor, SW4-030625 Clear No odor, SW3-030625 Clear No odor Sheen
SW2-030625 Clear No odor, SW1-030625 Clear No odor
Analytical Parameters:

Weather Conditions: Cloudy, 46°

**Additional Notes:**
-SW5-030625 MS/MSD
-SW4-030625 → FD-GW-030625 collected
-SW3-030625 Clear No odor Sheen

| 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_030625 | creek | 03/06/25 | 10:00 | 15.5 | 7.75 | 10.37 | 0.18 | 5.94 | 0.378 | +270 | 1.8 | 4.86 | 1.70 |
| Sample Characteristics: | Clear No odor | | | | | | | | | | | | |
| SW4_030625 | Creek | 03/06/25 | 10:55 | 72 | 36 | 9.63 | 0.25 | 7.24 | 0.528 | +254 | 0.0 | 5.86 | 0.96 |
| Sample Characteristics: | Clear No odor | | | | | | | | | | | | |
| SW3_030625 | Creek | 03/06/25 | 12:55 | 24.4 | 12.2 | 11.75 | 0.27 | 7.62 | 0.565 | +233 | 0.0 | 6.35 | 1.5 |
| Sample Characteristics: | Clear No odor Sheen | | | | | | | | | | | | |
| SW2_030625 | Creek | 3/6/25 | 13:10 | 8 | 4 | 11.73 | 0.27 | 6.14 | 0.571 | +226 | 0.0 | 6.22 | 0.25 |
| Sample Characteristics: | Clear No odor | | | | | | | | | | | | |
| SW1_030625 | Creek | 3/6/25 | 13:45 | 18 | 9 | 11.65 | 0.36 | 7.75 | 0.740 | +220 | 0.0 | 5.64 | 4.38 |
| Sample Characteristics: | Clear no odor | | | | | | | | | | | | |

Peter Montagna

## SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: SPS
Location: Jenkinstown, PA
Project Number: US0043268.2150
Meter/Type/Serial #: **Horiba U-52 #** **S/N:** SV5RSJTG
Meter Calibrated @: 0800
Flow Meter **FH950 Meter #** **S/N:** 19108100431
Sampling Date/Time: 3/6/25 1045
Sampler(s): RM, ZM
Sampling Device: Dipper ladle
Sample Characteristics: OF002 clear odorless w/sheen PID 0.0, OF006 clear odorless w/sheen PID 0.0
Analytical Parameters: Oil & Grease, Chem. Oxygen demand, total suspended solids, Nitrate-nitrite, total Aluminum Total copper, total iron, total lead, total zinc free cyanide, total cyanide, total nickel, total chromium, Dissolved nickle, Dissolved chromium, MEK, Toluene, total hardness, Speciate Hex Chromium

**Additional Notes:**

Weather Conditions: 48°, Partly Cloudy

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Outfall 002 | outfall | 03/06/25 | 10:45 | | | 10.31 | 1.9 | 6.65 | 3.58 | 235 | 0.0 | 10.15 | 600 mL/min (trickle) |
| Sample Characteristics: | PID: 0.0 ppm, clear, odorless, grab sample with sheen | | | | | | | | | | | | |
| Outfall 006 | outfall | 03/06/25 | 11:30 | | | 10.77 | 0.4 | 7.24 | 0.905 | 134 | 0.0 | 11.46 | 1.46 |
| Sample Characteristics: | PID 0.0 ppm clear, odorless grab sample with sheen | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Sample Characteristics: | | | | | | | | | | | | | |
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| Sample Characteristics: | | | | | | | | | | | | | |
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| Sample Characteristics: | | | | | | | | | | | | | |
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RM 03/06/25

Reagan Montagna



wsp

# APPENDIX B – DATA VALIDATION REPORT

**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, revised March 11, 2025

**Checked by:** Julie Lehrman

**Review Date:** March 11, 2025

**Laboratory:** Pace Analytical LLC

**Lab SDG #:** L2512807

**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? | ☐ | ☒ | | See Note 1 |
| b) COC documents release of custody (signed and dated)? | ☐ | ☒ | | See Note 2 |
| c) Field QC types provided (note types)? | ☒ | ☐ | ☐ | TB, FB |
| d) Did the cooler contents match the COC? | ☒ | ☐ | | |
| e) Were samples received in good condition? | ☒ | ☐ | | |
| f) Were cooler temperatures within control limits? | ☒ | ☐ | | |

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

| Analytical Assessment | YES | NO | NA | COMMENT |
|---|---|---|---|---|
| a) Solid samples reported on a dry-weight basis? | ☐ | ☐ | ☒ | |
| b) Were solid samples percent moisture criteria acceptable? | ☐ | ☐ | ☒ | |
| c) Were sample dilutions noted? | ☒ | ☐ | | |

| **Analytical Assessment** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| d) Were detected concentrations less than the QL qualified by the laboratory? | ☒ | ☐ | | |
| e) Were detected concentrations above the calibration range reported by the laboratory? | ☐ | ☒ | | |
| f) Did the laboratory satisfy the requested sensitivity requirements? | ☒ | ☐ | | |

| **Laboratory Case Narrative** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies? | ☒ | ☐ | ☐ | See Notes below |
| b) Were all deficiencies noted in the laboratory qualifiers or narrative? | ☒ | ☐ | ☐ | |

| **Sample Preservation and Holding Time** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| a) Were samples properly preserved? | ☒ | ☐ | | |
| b) Were holding times met for sample preparation? | ☒ | ☐ | ☐ | |
| c) Were holding times met for sample analysis? | ☒ | ☐ | | |

| **Blanks** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were blanks analyzed at the appropriate frequency? | ☒ | ☐ | | |
| b) Were any analytes detected in the associated preparation/method blank? | ☐ | ☒ | | |
| c) Were any analytes detected in the associated trip blanks? | ☐ | ☒ | ☐ | |
| d) Were any analytes detected in the associated field or equipment/rinsate blanks? | ☐ | ☐ | ☒ | |
| e) Were any analytes detected in the associated storage blanks? | ☐ | ☐ | ☒ | |

| **Surrogates or Deuterated Monitoring Compounds** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were the correct surrogate compounds added to each sample? | ☒ | ☐ | ☐ | |
| b) Were surrogate recoveries within control limits? | ☒ | ☐ | ☐ | |
| c) If not, were samples analyzed at dilution factors of 20x or greater? | ☐ | ☐ | ☒ | |

| **LCS/LCSD** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were LCS/LCSD reported at the appropriate frequency? | ☒ | ☐ | | |
| b) Were proper analytes included in the LCS/LCSD? | ☒ | ☐ | | |
| c) Were LCS/LCSD recoveries within control limits? | ☒ | ☐ | | |
| d) Were RPD values within control limits (if LCSD was analyzed)? | ☒ | ☐ | ☐ | |

| **MS/MSDs** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were project-specific MS (and MSD) reported? | ☒ | ☐ | | SW5_030625 |

| **MS/MSDs** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| b) Were proper analytes reported in the MS/MSD? | ☒ | ☐ | ☐ | |
| c) Were project-specific MS/MSD recoveries within control limits? | ☒ | ☐ | ☐ | |
| d) If not, were sample concentrations greater than 4x the spiking concentration? | ☐ | ☐ | ☒ | |
| e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)? | ☒ | ☐ | ☐ | |
| f) Were project-specific post-digestion spikes analyzed? | ☐ | ☐ | ☒ | |
| g) Were project-specific post-digestion spike recoveries within control limits? | ☐ | ☐ | ☒ | |

| **Duplicates** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were project-specific laboratory duplicates reported? | ☒ | ☐ | ☐ | SW5_030625 |
| b) Was laboratory duplicate RPD or absolute difference criteria acceptable? | ☒ | ☐ | ☐ | |
| c) Were field duplicates reported? | ☒ | ☐ | ☐ | FDSW_030625 |
| d) Was field duplicate RPD or absolute difference criteria acceptable? | ☒ | ☐ | ☐ | |

| **ICP Serial Dilution (SD)** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Was project-specific ICP SD data provided? | ☐ | ☐ | ☒ | |
| b) Were project-specific ICP SD within acceptable criteria? | ☐ | ☐ | ☒ | |

| **Overall Evaluation** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were there any other technical problems not previously addressed? | ☐ | ☒ | | |
| b) Were data acceptable and usable, except where noted? | ☒ | ☐ | | |

**Comments/Notes:**

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

1. The chain of custody and initial report listed sample names FDGW_030625 and TBGW_030625. These samples should have been named FDSW_030625 and TBSW_030625 to properly reflect the surface water matrix of the samples. A revised chain of custody was provided to the laboratory, and a revised laboratory report was received on March 10, 2025. There is no action other than to note.
2. The laboratory narrative noted that “The samples were logged in accordance with the chain of custody provided by the client at the time of pick up. The original chain of custody was misplaced during transit, and a copy from the initial pickup has been provided at the back of the report. The samples were in the continuous possession of Pace staff until delivered to the laboratory on 3/7/2025.” As documented in the data package,

a chain of custody was provided and signed by WSP and the laboratory courier at 16:15 on 3/6/2025 when custody of the samples was initially transferred from WSP to Pace. The scanned copy of this chain of custody was used to log in the samples.

Following project practice, WSP placed custody seals on the coolers prior to giving them to the laboratory courier. The Sample Receipt and Container Information form included in the data package documents that the custody seals on coolers A, B, C, and D were intact. While the chain of custody was not signed to document transfer of custody from the Pace courier to the Pace laboratory staff, the presence of the cooler custody seals provides corroborating evidence that the samples were not compromised during shipment. There is no action other than to note.

**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- | SM 4500C | SM 3500 | SM 3500C |
| L2512807 | SW5_030625 | WS | L2512807-01 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | SW4_030625 | WS | L2512807-02 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | SW3_030625 | WS | L2512807-03 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | SW2_030625 | WS | L2512807-04 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | SW1_030625 | WS | L2512807-05 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | FDSW_030625 | WS | L2512807-06 | FD (SW4_030625) | 3/6/2025 | X | X | X | X | X | X | X | X | X |
| L2512807 | TBSW_030125 | WQ | L2512807-07 | TB | 3/6/2025 | 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:**
FD: Field Duplicate
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* |
|---|---|---|---|---|---|---|---|
| L2512807 | No qualifications required | | | | | | |
| L2512807 | 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:**

**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, revised March 11, 2025

**Checked by:** Julie Lehrman

**Review Date:** March 11, 2025

**Laboratory:** Pace Analytical LLC

**Lab SDG #:** L2513323

**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? | ☒ | ☐ | | |
| b) COC documents release of custody (signed and dated)? | ☒ | ☐ | | See Note 1 |
| c) Field QC types provided (note types)? | ☐ | ☒ | ☐ | |
| d) Did the cooler contents match the COC? | ☒ | ☐ | | |
| e) Were samples received in good condition? | ☒ | ☐ | | |
| f) Were cooler temperatures within control limits? | ☒ | ☐ | | |

| Data Package Information | YES | NO | NA | COMMENT |
|---|---|---|---|---|
| a) Laboratory name and location documented? | ☒ | ☐ | | |
| b) All samples on COC reported in data package? | ☐ | ☒ | | See Note 2 |
| c) Requested analytical methods used? | ☒ | ☐ | | |
| d) Requested sample preparation methods used? | ☒ | ☐ | ☐ | |
| e) Requested analyte list reported? | ☒ | ☐ | | |
| f) Requested units reported? | ☒ | ☐ | ☐ | |
| g) Did the laboratory define the qualifiers used? | ☒ | ☐ | | |
| h) Data package contains all information necessary to complete the data quality review? | ☒ | ☐ | | |

| Analytical Assessment | YES | NO | NA | COMMENT |
|---|---|---|---|---|
| a) Solid samples reported on a dry-weight basis? | ☐ | ☐ | ☒ | |
| b) Were solid samples percent moisture criteria acceptable? | ☐ | ☐ | ☒ | |
| c) Were sample dilutions noted? | ☒ | ☐ | | |

| **Analytical Assessment** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| d) Were detected concentrations less than the QL qualified by the laboratory? | ☒ | ☐ | | |
| e) Were detected concentrations above the calibration range reported by the laboratory? | ☐ | ☒ | | |
| f) Did the laboratory satisfy the requested sensitivity requirements? | ☒ | ☐ | | |

| **Laboratory Case Narrative** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies? | ☒ | ☐ | ☐ | See Notes below |
| b) Were all deficiencies noted in the laboratory qualifiers or narrative? | ☒ | ☐ | ☐ | |

| **Sample Preservation and Holding Time** | **YES** | **NO** | **NA** | **COMMENT** |
|---|---|---|---|---|
| a) Were samples properly preserved? | ☒ | ☐ | | |
| b) Were holding times met for sample preparation? | ☒ | ☐ | ☐ | |
| c) Were holding times met for sample analysis? | ☒ | ☐ | | |

| **Blanks** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were blanks analyzed at the appropriate frequency? | ☒ | ☐ | | |
| b) Were any analytes detected in the associated preparation/method blank? | ☐ | ☒ | | |
| c) Were any analytes detected in the associated trip blanks? | ☐ | ☒ | ☐ | Reported in Laboratory Job L2512806 |
| d) Were any analytes detected in the associated field or equipment/rinsate blanks? | ☐ | ☐ | ☒ | |
| e) Were any analytes detected in the associated storage blanks? | ☐ | ☐ | ☒ | |

| **Surrogates or Deuterated Monitoring Compounds** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were the correct surrogate compounds added to each sample? | ☒ | ☐ | ☐ | |
| b) Were surrogate recoveries within control limits? | ☒ | ☐ | ☐ | |
| c) If not, were samples analyzed at dilution factors of 20x or greater? | ☐ | ☐ | ☒ | |

| **LCS/LCSD** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were LCS/LCSD reported at the appropriate frequency? | ☒ | ☐ | | |
| b) Were proper analytes included in the LCS/LCSD? | ☒ | ☐ | | |
| c) Were LCS/LCSD recoveries within control limits? | ☒ | ☐ | | |
| d) Were RPD values within control limits (if LCSD was analyzed)? | ☐ | ☐ | ☒ | |

| **MS/MSDs** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were project-specific MS (and MSD) reported? | ☐ | ☒ | | None from samples in this laboratory job |

| **MS/MSDs** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| b) Were proper analytes reported in the MS/MSD? | ☐ | ☐ | ☒ | |
| c) Were project-specific MS/MSD recoveries within control limits? | ☐ | ☐ | ☒ | |
| d) If not, were sample concentrations greater than 4x the spiking concentration? | ☐ | ☐ | ☒ | |
| e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)? | ☐ | ☐ | ☒ | |
| f) Were project-specific post-digestion spikes analyzed? | ☐ | ☐ | ☒ | |
| g) Were project-specific post-digestion spike recoveries within control limits? | ☐ | ☐ | ☒ | |

| **Duplicates** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were project-specific laboratory duplicates reported? | ☐ | ☒ | ☐ | None from samples in this laboratory job |
| b) Was laboratory duplicate RPD or absolute difference criteria acceptable? | ☐ | ☐ | ☒ | |
| c) Were field duplicates reported? | ☐ | ☐ | ☒ | |
| d) Was field duplicate RPD or absolute difference criteria acceptable? | ☐ | ☐ | ☒ | |

| **ICP Serial Dilution (SD)** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Was project-specific ICP SD data provided? | ☐ | ☐ | ☒ | |
| b) Were project-specific ICP SD within acceptable criteria? | ☐ | ☐ | ☒ | |

| **Overall Evaluation** | **YES** | **NO** | **NA** | **COMMENTS** |
|---|---|---|---|---|
| a) Were there any other technical problems not previously addressed? | ☐ | ☒ | | |
| b) Were data acceptable and usable, except where noted? | ☒ | ☐ | | |

**Comments/Notes:**

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

1. The laboratory narrative noted that “The samples were logged in accordance with the chain of custody provided by the client at the time of pick up. The original chain of custody was misplaced during transit, and a copy from the initial pickup has been provided at the back of the report. The samples were in the continuous possession of Pace staff until delivered to the laboratory on 3/7/2025.” As documented in the data package, a chain of custody was provided and signed by WSP and the laboratory courier at 16:15 on 3/6/2025 when custody of the samples was initially transferred from WSP to Pace. The scanned copy of this chain of custody was used to log in the samples.

Following project practice, WSP placed custody seals on the coolers prior to giving them to the laboratory courier. The Sample Receipt and Container Information form included in the data package documents that the custody seals on coolers A, B, and C were intact. While the chain of custody was not signed to document transfer of custody from the Pace courier to the Pace laboratory staff, the presence of the cooler custody seals provides corroborating evidence that the samples were not compromised during shipment. There is no action other than to note.

2. The chain of custody includes samples collected on March 5, 2025 and March 6, 2025. The preliminary report issued for Laboratory Job L2512806 included all 4 samples on the chain of custody. WSP requested that separate data packages be issued for each sampling date. The March 6, 2025 samples, OF002_030625 and OF006_030625, were reported in this Laboratory Job # L2513323. The remaining samples on the chain of custody, including the trip blank associated with these samples were reported in Laboratory Job L2512806.

**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** | **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 |
| L2513323 | OF002_030625 | WS | L2513323-01 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X | X | X | X |
| L2513323 | OF006_030625 | WS | L2513323-02 | -- | 3/6/2025 | X | X | X | X | X | X | X | X | X | X | X | 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) Dissovled 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
WS: Surface Water

**Table B-2**
**Qualifier Summary Table**

| *Laboratory Job* | *Sample Name* | *Analyte* | *New Result* | *New MDL* | *New RL* | *Qualifier* | *Reason* |
|---|---|---|---|---|---|---|---|
| L2513323 | No qualifications required | | | | | | |
| L2513323 | 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: | L2512807 |
| Client: | WSP USA Inc.<br>401 Route 73 North<br>Suite 205<br>Marlton, NJ 08053 |
| ATTN: | Stacy Mason |
| Phone: | (856) 793-2005 |
| Project Name: | SPS TECHNOLOGIES |
| Project Number: | US0043268.2150 |
| Report Date: | 03/11/25 |



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).

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| Lab Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2512807-01 | SW5_030625 | WATER | JENKINTOWN, PA | 03/06/25 10:00 | 03/06/25 |
| L2512807-02 | SW4_030625 | WATER | JENKINTOWN, PA | 03/06/25 10:55 | 03/06/25 |
| L2512807-03 | SW3_030625 | WATER | JENKINTOWN, PA | 03/06/25 12:55 | 03/06/25 |
| L2512807-04 | SW2_030625 | WATER | JENKINTOWN, PA | 03/06/25 13:10 | 03/06/25 |
| L2512807-05 | SW1_030625 | WATER | JENKINTOWN, PA | 03/06/25 13:45 | 03/06/25 |
| L2512807-06 | FDSW_030625 | WATER | JENKINTOWN, PA | 03/06/25 00:00 | 03/06/25 |
| L2512807-07 | TBSW_030625 | WATER | JENKINTOWN, PA | 03/06/25 00:00 | 03/06/25 |

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2512807 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

## 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 | **Lab Number:** | L2512807 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

**Case Narrative (continued)**

Report Revision

March 11, 2025: The Sample Receipt narrative has been updated.

March 10, 2025: At the client's request, the sample receipt narrative has been changed and the Client IDs have been changed on L2512807-06 and -07.

Report Submission

March 08, 2025: This final report includes the results of all requested analyses.

March 07, 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.

Sample Receipt

The samples were logged in accordance with the chain of custody provided by the client at the time of pick up. The original chain of custody was misplaced during transit, and a copy from the initial pickup has been provided at the back of the report. The samples were in continuous possession of Pace staff until delivered to the laboratory on 3/7/2025.

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 03/11/25

# ORGANICS

# VOLATILES

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-01
Client ID: SW5_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 10:00
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 10:14
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 100 | | 60-140 |
| Fluorobenzene | 86 | | 60-140 |
| 4-Bromofluorobenzene | 83 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-02
Client ID: SW4_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 10:55
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 10:48
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 97 | | 60-140 |
| Fluorobenzene | 87 | | 60-140 |
| 4-Bromofluorobenzene | 84 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-03
Client ID: SW3_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 12:55
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 11:23
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 90 | | 60-140 |
| Fluorobenzene | 77 | | 60-140 |
| 4-Bromofluorobenzene | 85 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-04
Client ID: SW2_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 13:10
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 11:57
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 97 | | 60-140 |
| Fluorobenzene | 85 | | 60-140 |
| 4-Bromofluorobenzene | 89 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-05
Client ID: SW1_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 13:45
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 12:32
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 97 | | 60-140 |
| Fluorobenzene | 80 | | 60-140 |
| 4-Bromofluorobenzene | 88 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-06
Client ID: FDSW_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 00:00
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 13:06
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 92 | | 60-140 |
| Fluorobenzene | 76 | | 60-140 |
| 4-Bromofluorobenzene | 86 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-07
Client ID: TBSW_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 00:00
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 13:40
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 95 | | 60-140 |
| Fluorobenzene | 77 | | 60-140 |
| 4-Bromofluorobenzene | 86 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 03/07/25 08:18
Analyst: GMT

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2037922-4 | | | | | |
| Toluene | ND | | mg/l | 0.0010 | 0.00031 |
| 2-Butanone | ND | | mg/l | 0.010 | 0.0010 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 101 | | 60-140 |
| Fluorobenzene | 89 | | 60-140 |
| 4-Bromofluorobenzene | 83 | | 60-140 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2037922-3 | | | | | | | | |
| Toluene | 90 | | - | | 70-130 | - | | 41 |
| 2-Butanone | 80 | | - | | 60-140 | - | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| Pentafluorobenzene | 105 | | | | 60-140 |
| Fluorobenzene | 90 | | | | 60-140 |
| 4-Bromofluorobenzene | 83 | | | | 60-140 |

# Matrix Spike Analysis
## *Batch Quality Control*

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG2037922-5 WG2037922-6 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Toluene | ND | 0.00002 | 0.020 | 100 | | 0.022 | 110 | | 47-150 | 10 | | 41 |
| 2-Butanone | ND | 0.00005 | 0.044 | 88 | | 0.051 | 102 | | 60-140 | 15 | | 30 |

| Surrogate | MS % Recovery | MS Qualifier | MSD % Recovery | MSD Qualifier | Acceptance Criteria |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 86 | | 81 | | 60-140 |
| Fluorobenzene | 83 | | 87 | | 60-140 |
| Pentafluorobenzene | 97 | | 102 | | 60-140 |

# METALS

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-01
Client ID: SW5_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 10:00
Date Received: 03/06/25
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 | 0.00115 | | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:31 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00162 | J | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:31 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 90.11 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:31 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 11:31 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0006 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 10:50 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0015 | J | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 10:50 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-02
Client ID: SW4_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 10:55
Date Received: 03/06/25
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 | 0.00071 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:59 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00256 | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:59 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 158.5 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:59 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 11:59 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0005 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:24 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0025 | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:24 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-03
Client ID: SW3_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 12:55
Date Received: 03/06/25
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 | 0.00049 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 12:04 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00162 | J | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 12:04 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 208.7 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 12:04 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 12:04 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0003 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:40 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0017 | J | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:40 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-04
Client ID: SW2_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 13:10
Date Received: 03/06/25
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 | 0.00047 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 12:27 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00106 | J | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 12:27 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 219.0 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 12:27 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 12:27 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0004 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:46 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0011 | J | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:46 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-05
Client ID: SW1_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 13:45
Date Received: 03/06/25
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 | 0.00042 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 12:31 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00815 | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 12:31 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 223.3 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 12:31 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 12:31 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0004 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:51 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0083 | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:51 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-06
Client ID: FDSW_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 00:00
Date Received: 03/06/25
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 | 0.00080 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 12:36 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00258 | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 12:36 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 161.8 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 12:36 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 12:36 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0005 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:55 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0026 | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:55 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES **Lab Number:** L2512807

**Project Number:** US0043268.2150 **Report Date:** 03/11/25

# 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): 01-06 Batch: WG2037631-1 | | | | | | | | | | |
| Chromium, Total | ND | | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Nickel, Total | ND | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |

**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): 01-06 Batch: WG2037631-1 | | | | | | | | | | |
| Hardness | ND | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |

**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): 01-06 Batch: WG2037915-1 | | | | | | | | | | |
| Chromium, Dissolved | ND | | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 10:41 | 3,200.8 | MRC |
| Nickel, Dissolved | ND | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 10:41 | 3,200.8 | MRC |

**Prep Information**

Digestion Method: EPA 3005A

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG2037631-2 | | | | | | | | |
| Chromium, Total | 96 | | - | | 85-115 | - | | |
| Nickel, Total | 93 | | - | | 85-115 | - | | |
| Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-06 Batch: WG2037631-2 | | | | | | | | |
| Hardness | 104 | | - | | 85-115 | - | | |
| Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG2037915-2 | | | | | | | | |
| Chromium, Dissolved | 91 | | - | | 85-115 | - | | |
| Nickel, Dissolved | 96 | | - | | 85-115 | - | | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| 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): 01-06 QC Batch ID: WG2037631-3 WG2037631-4 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Chromium, Total | 0.00115 | 0.2 | 0.1855 | 92 | | 0.2076 | 103 | | 70-130 | 11 | | 20 |
| Nickel, Total | 0.00162J | 0.5 | 0.4470 | 89 | | 0.4874 | 97 | | 70-130 | 9 | | 20 |
| Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2037631-3 WG2037631-4 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Hardness | 90.11 | 66.2 | 153.2 | 95 | | 164.7 | 113 | | 70-130 | 7 | | 20 |
| Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2037915-3 WG2037915-4 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Chromium, Dissolved | 0.0006J | 0.2 | 0.1846 | 92 | | 0.1851 | 92 | | 70-130 | 0 | | 20 |
| Nickel, Dissolved | 0.0015J | 0.5 | 0.4821 | 96 | | 0.4788 | 96 | | 70-130 | 1 | | 20 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-01
Client ID: SW5_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 10:00
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:40 | 121,4500CN-CE | JER |
| Cyanide, Free | 0.006 | J | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/07/25 07:19 | 03/07/25 08:57 | 140,1664B | TPR |
| Chromium, Hexavalent | 0.004 | J | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:43 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-02
Client ID: SW4_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 10:55
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:44 | 121,4500CN-CE | JER |
| Cyanide, Free | 0.005 | J | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.4 | 4.4 | 1.1 | 03/07/25 07:19 | 03/07/25 09:49 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:47 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-03
Client ID: SW3_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 12:55
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:45 | 121,4500CN-CE | JER |
| Cyanide, Free | 0.005 | J | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.4 | 4.4 | 1.1 | 03/07/25 07:19 | 03/07/25 10:49 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:48 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-04
Client ID: SW2_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 13:10
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:46 | 121,4500CN-CE | JER |
| Cyanide, Free | ND | | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/07/25 07:19 | 03/07/25 10:51 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:49 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-05
Client ID: SW1_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 13:45
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:47 | 121,4500CN-CE | JER |
| Cyanide, Free | ND | | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/07/25 07:19 | 03/07/25 10:54 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:50 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2512807-06
Client ID: FDSW_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 00:00
Date Received: 03/06/25
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 | 03/07/25 11:00 | 03/07/25 13:50 | 121,4500CN-CE | JER |
| Cyanide, Free | 0.004 | J | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.4 | 4.4 | 1.1 | 03/07/25 07:19 | 03/07/25 10:56 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:51 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2512807
**Report Date:** 03/11/25

# 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): 01-06 Batch: WG2037664-1 | | | | | | | | | | |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/07/25 07:19 | 03/07/25 08:55 | 140,1664B | TPR |
| General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG2037680-1 | | | | | | | | | | |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:38 | 121,3500CR-B | DMO |
| General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG2037685-1 | | | | | | | | | | |
| Cyanide, Free | ND | | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG2037775-1 | | | | | | | | | | |
| Cyanide, Total | ND | | mg/l | 0.005 | 0.001 | 1 | 03/07/25 11:00 | 03/07/25 13:25 | 121,4500CN-CE | JER |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG2037664-2 | | | | | | | | |
| Oil & Grease, Hem-Grav | 92 | | - | | 78-114 | - | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG2037680-2 | | | | | | | | |
| Chromium, Hexavalent | 99 | | - | | 85-115 | - | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG2037685-2 | | | | | | | | |
| Cyanide, Free | 94 | | - | | 90-110 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG2037775-2 | | | | | | | | |
| Cyanide, Total | 98 | | - | | 90-110 | - | | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

| 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): 01-06 QC Batch ID: WG2037664-4 WG2037664-5 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Oil & Grease, Hem-Grav | ND | 42.1 | 40 | 94 | | 39 | 93 | | 78-114 | 2 | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037680-4 WG2037680-5 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Chromium, Hexavalent | 0.004J | 0.1 | 0.092 | 92 | | 0.090 | 90 | | 85-115 | 2 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037685-4 WG2037685-5 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Cyanide, Free | 0.006J | 0.25 | 0.256 | 102 | | 0.260 | 104 | | 80-120 | 2 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037775-3 WG2037775-4 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | | | | | | | |
| Cyanide, Total | 0.002J | 0.2 | 0.212 | 106 | | 0.210 | 105 | | 90-110 | 1 | | 30 |

# Lab Duplicate Analysis

***Batch Quality Control***

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

***Lab Number:*** L2512807
***Report Date:*** 03/11/25

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037664-3 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | |
| Oil & Grease, Hem-Grav | ND | ND | mg/l | NC | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037680-3 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | |
| Chromium, Hexavalent | 0.004J | 0.004J | mg/l | NC | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037685-3 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | |
| Cyanide, Free | 0.006J | 0.005J | mg/l | NC | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2037775-5 QC Sample: L2512807-01 Client ID: SW5_030625 | | | | | | |
| Cyanide, Total | 0.002J | ND | mg/l | NC | | 30 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

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

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2512807-01A | Plastic 120ml HNO3 preserved Filtrates | A | NA | NA | 2.0 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-01A1 | Plastic 120ml HNO3 preserved Filtrates | A | NA | NA | 2.0 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-01A2 | Plastic 120ml HNO3 preserved Filtrates | A | NA | NA | 2.0 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-01C | Plastic 250ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | - |
| L2512807-01C1 | Plastic 250ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | - |
| L2512807-01C2 | Plastic 250ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | - |
| L2512807-01D | Plastic 250ml HNO3 preserved | A | <2 | <2 | 2.0 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-01D1 | Plastic 250ml HNO3 preserved | A | <2 | <2 | 2.0 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-01D2 | Plastic 250ml HNO3 preserved | A | <2 | <2 | 2.0 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-01T | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01T1 | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01T2 | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01U | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01U1 | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01U2 | Amber 1L HCl preserved | A | NA | | 2.0 | Y | Present/Intact | | OG-1664(28) |
| L2512807-01V | Plastic 500ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-01V1 | Plastic 500ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-01V2 | Plastic 500ml unpreserved | A | 7 | 7 | 2.0 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |



*Values in parentheses indicate holding time in days

***Container Information***

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2512807-01W | Plastic 250ml NaOH preserved | A | >12 | >12 | 2.0 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-01W1 | Plastic 250ml NaOH preserved | A | >12 | >12 | 2.0 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-01W2 | Plastic 250ml NaOH preserved | A | >12 | >12 | 2.0 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-01X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01X1 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01X2 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Y1 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Y2 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Z1 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-01Z2 | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-02A | Plastic 120ml HNO3 preserved Filtrates | C | NA | NA | 4.4 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-02C | Plastic 250ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | - |
| L2512807-02D | Plastic 250ml HNO3 preserved | C | <2 | <2 | 4.4 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-02T | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |
| L2512807-02U | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |
| L2512807-02V | Plastic 500ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-02W | Plastic 250ml NaOH preserved | C | >12 | >12 | 4.4 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-02X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-02Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-02Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-03A | Plastic 120ml HNO3 preserved Filtrates | C | NA | NA | 4.4 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-03C | Plastic 250ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | - |
| L2512807-03D | Plastic 250ml HNO3 preserved | C | <2 | <2 | 4.4 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-03T | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |
| L2512807-03U | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |



*Values in parentheses indicate holding time in days

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2512807-03V | Plastic 500ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-03W | Plastic 250ml NaOH preserved | C | >12 | >12 | 4.4 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-03X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-03Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-03Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-04A | Plastic 120ml HNO3 preserved Filtrates | B | NA | NA | 2.8 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-04C | Plastic 250ml unpreserved | B | 7 | 7 | 2.8 | Y | Present/Intact | | - |
| L2512807-04D | Plastic 250ml HNO3 preserved | B | <2 | <2 | 2.8 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-04T | Amber 1L HCl preserved | B | NA | | 2.8 | Y | Present/Intact | | OG-1664(28) |
| L2512807-04U | Amber 1L HCl preserved | B | NA | | 2.8 | Y | Present/Intact | | OG-1664(28) |
| L2512807-04V | Plastic 500ml unpreserved | B | 7 | 7 | 2.8 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-04W | Plastic 250ml NaOH preserved | B | >12 | >12 | 2.8 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-04X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-04Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-04Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-05A | Plastic 120ml HNO3 preserved Filtrates | B | NA | NA | 2.8 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-05C | Plastic 250ml unpreserved | B | 7 | 7 | 2.8 | Y | Present/Intact | | - |
| L2512807-05D | Plastic 250ml HNO3 preserved | B | <2 | <2 | 2.8 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-05T | Amber 1L HCl preserved | B | NA | | 2.8 | Y | Present/Intact | | OG-1664(28) |
| L2512807-05U | Amber 1L HCl preserved | B | NA | | 2.8 | Y | Present/Intact | | OG-1664(28) |
| L2512807-05V | Plastic 500ml unpreserved | B | 7 | 7 | 2.8 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-05W | Plastic 250ml NaOH preserved | B | >12 | >12 | 2.8 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-05X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-05Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-05Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-06A | Plastic 120ml HNO3 preserved Filtrates | C | NA | NA | 4.4 | Y | Present/Intact | | CR-2008S(180),NI-2008S(180) |
| L2512807-06C | Plastic 250ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | - |



*Values in parentheses indicate holding time in days

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2512807
**Report Date:** 03/11/25

***Container Information***

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2512807-06D | Plastic 250ml HNO3 preserved | C | <2 | <2 | 4.4 | Y | Present/Intact | | NI-2008T(180),HARDT-2008(180),CR-2008T(180) |
| L2512807-06T | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |
| L2512807-06U | Amber 1L HCl preserved | C | NA | | 4.4 | Y | Present/Intact | | OG-1664(28) |
| L2512807-06V | Plastic 500ml unpreserved | C | 7 | 7 | 4.4 | Y | Present/Intact | | HEXCR-3500(1),FCN(1) |
| L2512807-06W | Plastic 250ml NaOH preserved | C | >12 | >12 | 4.4 | Y | Present/Intact | | TCN-4500(14) |
| L2512807-06X | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-06Y | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-06Z | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-07A | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |
| L2512807-07B | Vial Na2S2O3 preserved | A | NA | | 2.0 | Y | Present/Intact | | 624.1-PPM(7) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2512807 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

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

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2512807 |
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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

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2512807 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

***Data Qualifiers***

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

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** SPS TECHNOLOGIES **Lab Number:** L2512807

**Project Number:** US0043268.2150 **Report Date:** 03/11/25

## REFERENCES


3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

107 Calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

140 Method 1664,Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.


## LIMITATION OF LIABILITIES

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

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

# Certification Information

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

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**
**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene
**EPA 625.1:** alpha-Terpineol
**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**
**SM 2540D:** TSS.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**MADEP-APH.**
**Nonpotable Water: EPA RSK-175 Dissolved Gases**
**Biological Tissue Matrix:** EPA 3050B

**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048**
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Nonpotable Water: EPA RSK-175 Dissolved Gases**

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

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

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

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables).
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522, EPA 537.1.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

**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.

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

L2512807
GOLDER – NJ

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/7/25

ALPHA
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: tovah.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

## Report Information - Data Deliverables

☐ FAX ☐ EMAIL ☐ Same as Client info PO #:
☐ ADEx ☐ Add'l Deliverables

## Regulatory Requirements/Report Limits

State /Fed Program: PA
Criteria:

Other Project Specific Requirements/Comments/Detection Limits:
* Attorney-Client Priviledged + Confidential
All VOAs in one cooler
Dissolved metals will be lab filtered

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Oil and Grease E1664B | Free Cyanide SM4500-CN-I | Reactive Hex Chrom SM3500-Cr B | Total Cyanide SM4500-CN | Total Nickel E200.8 | Total Chromium E200.8 | Dissolved Nickel E200.8 | Dissolved Chromium E200.8 | MEK E624.1 | Toluene E624.1 | Total Hardness E200.7 | Total Zinc E200.7 | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12804-01 | SW5-030625 | 3/6/25 | 10:00 | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | pH 5.94 MS/MSD collected | 27 |
| -02 | SW4-030625 | 3/6/25 | 10:55 | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | pH 7.24 | 9 |
| -03 | SW3-030625 | 3/6/25 | 12:55 | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | pH 7.62 | 9 |
| -04 | SW2-030625 | 3/6/25 | 13:10 | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | pH 8.14 | 9 |
| -05 | SW1-030625 | 3/6/25 | 13:45 | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | pH 7.75 | 9 |
| -06 | FDGW-030625 | 3/6/25 | — | SW | JET | X | X | X | X | X | X | X | X | X | X | X | X | | 9 |
| -07 | TBGW-030625 | 3/6/25 | — | W | — | | | | | | | | | X | X | | | | 2 |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

Container Type: A P P P P P P P V V P
Preservative: B X A E C C 4 A H H C

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do:
(Please specify below)

Relinquished By: Date/Time: 3/6/25 1615
Received By: Date/Time: 3/6/25 16:15

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.

FORM NO: 01-01 (rev. 14 OCT 07)

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

A

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

B

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

CUSTODY SEAL

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

CUSTODY SEAL

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

CUSTODY SEAL

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

D

ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L2513323 |
| Client: | WSP USA Inc.<br>401 Route 73 North<br>Suite 205<br>Marlton, NJ 08053 |
| ATTN: | Stacy Mason |
| Phone: | (856) 793-2005 |
| Project Name: | SPS TECHNOLOGIES |
| Project Number: | US0043268.2150 |
| Report Date: | 03/11/25 |



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).

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

| Lab Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2513323-01 | OF002_030625 | WATER | JENKINTOWN, PA | 03/06/25 10:45 | 03/06/25 |
| L2513323-02 | OF006_030625 | WATER | JENKINTOWN, PA | 03/06/25 11:30 | 03/06/25 |

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2513323 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

## 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 | **Lab Number:** | L2513323 |
| **Project Number:** | US0043268.2150 | **Report Date:** | 03/11/25 |

**Case Narrative (continued)**

Report Revision

March 11, 2025: The Sample Receipt narrative has been updated.

Report Submission

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

Sample Receipt

The samples were logged in accordance with the chain of custody provided by the client at the time of pick up. The original chain of custody was misplaced during transit, and a copy from the initial pickup has been provided at the back of the report. The samples were in continuous possession of Pace staff until delivered to the laboratory on 3/7/2025.

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 03/11/25

# ORGANICS

# VOLATILES

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-01
Client ID: OF002_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 10:45
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 10:02
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 81 | | 60-140 |
| Fluorobenzene | 73 | | 60-140 |
| 4-Bromofluorobenzene | 111 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-02
Client ID: OF006_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 11:30
Date Received: 03/06/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/07/25 10:36
Analyst: GMT

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

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 82 | | 60-140 |
| Fluorobenzene | 73 | | 60-140 |
| 4-Bromofluorobenzene | 109 | | 60-140 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 03/07/25 08:17
Analyst: GMT

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG2037807-4 | | | | | |
| Toluene | ND | | mg/l | 0.0010 | 0.00031 |
| 2-Butanone | ND | | mg/l | 0.010 | 0.0010 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Pentafluorobenzene | 88 | | 60-140 |
| Fluorobenzene | 73 | | 60-140 |
| 4-Bromofluorobenzene | 116 | | 60-140 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

| 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: WG2037807-3 | | | | | | | | |
| Toluene | 100 | | - | | 70-130 | - | | 41 |
| 2-Butanone | 72 | | - | | 60-140 | - | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| Pentafluorobenzene | 91 | | | | 60-140 |
| Fluorobenzene | 86 | | | | 60-140 |
| 4-Bromofluorobenzene | 112 | | | | 60-140 |

# METALS

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-01
Client ID: OF002_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 10:45
Date Received: 03/06/25
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 | 0.06665 | | mg/l | 0.01000 | 0.00327 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Chromium, Total | 0.02075 | | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Copper, Total | 0.00980 | | mg/l | 0.00100 | 0.00038 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Iron, Total | 0.6708 | | mg/l | 0.05000 | 0.01910 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Lead, Total | 0.00121 | | mg/l | 0.00100 | 0.00034 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.01997 | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| Zinc, Total | 0.1556 | | mg/l | 0.00500 | 0.00341 | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 582.2 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:50 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | 0.006 | J | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 11:50 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0210 | | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:15 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0206 | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:15 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-02
Client ID: OF006_030625
Sample Location: JENKINTOWN, PA
Date Collected: 03/06/25 11:30
Date Received: 03/06/25
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 | 0.1286 | | mg/l | 0.01000 | 0.00327 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Chromium, Total | 0.00054 | J | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Copper, Total | 0.00390 | | mg/l | 0.00100 | 0.00038 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Iron, Total | 0.4369 | | mg/l | 0.05000 | 0.01910 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Lead, Total | 0.00067 | J | mg/l | 0.00100 | 0.00034 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Nickel, Total | 0.00145 | J | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| Zinc, Total | 0.04159 | | mg/l | 0.00500 | 0.00341 | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| **Total Hardness (by calculation) - Mansfield Lab** | | | | | | | | | | | |
| Hardness | 222.7 | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:54 | EPA 3005A | 3,200.8 | BLR |
| **General Chemistry - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Trivalent | ND | | mg/l | 0.010 | 0.003 | 1 | | 03/07/25 11:54 | NA | 107,- | |
| **Dissolved Metals - Mansfield Lab** | | | | | | | | | | | |
| Chromium, Dissolved | 0.0003 | J | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 11:20 | EPA 3005A | 3,200.8 | MRC |
| Nickel, Dissolved | 0.0017 | J | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 11:20 | EPA 3005A | 3,200.8 | MRC |

**Project Name:** SPS TECHNOLOGIES **Lab Number:** L2513323

**Project Number:** US0043268.2150 **Report Date:** 03/11/25

# 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): 01-02 Batch: WG2037631-1 | | | | | | | | | | |
| Aluminum, Total | ND | | mg/l | 0.01000 | 0.00327 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Chromium, Total | ND | | mg/l | 0.00100 | 0.00017 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Copper, Total | ND | | mg/l | 0.00100 | 0.00038 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Iron, Total | ND | | mg/l | 0.05000 | 0.01910 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Lead, Total | ND | | mg/l | 0.00100 | 0.00034 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Nickel, Total | ND | | mg/l | 0.00200 | 0.00055 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |
| Zinc, Total | ND | | mg/l | 0.00500 | 0.00341 | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |

**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): 01-02 Batch: WG2037631-1 | | | | | | | | | | |
| Hardness | ND | | mg/l | 0.5400 | NA | 1 | 03/07/25 08:06 | 03/07/25 11:22 | 3,200.8 | BLR |

**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): 01-02 Batch: WG2037915-1 | | | | | | | | | | |
| Chromium, Dissolved | ND | | mg/l | 0.0010 | 0.0002 | 1 | 03/08/25 07:15 | 03/08/25 10:41 | 3,200.8 | MRC |
| Nickel, Dissolved | ND | | mg/l | 0.0020 | 0.0006 | 1 | 03/08/25 07:15 | 03/08/25 10:41 | 3,200.8 | MRC |

**Prep Information**

Digestion Method: EPA 3005A

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG2037631-2 | | | | | | | | |
| Aluminum, Total | 100 | | - | | 85-115 | - | | |
| Chromium, Total | 96 | | - | | 85-115 | - | | |
| Copper, Total | 92 | | - | | 85-115 | - | | |
| Iron, Total | 101 | | - | | 85-115 | - | | |
| Lead, Total | 97 | | - | | 85-115 | - | | |
| Nickel, Total | 93 | | - | | 85-115 | - | | |
| Zinc, Total | 100 | | - | | 85-115 | - | | |
| Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-02 Batch: WG2037631-2 | | | | | | | | |
| Hardness | 104 | | - | | 85-115 | - | | |
| Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG2037915-2 | | | | | | | | |
| Chromium, Dissolved | 91 | | - | | 85-115 | - | | |
| Nickel, Dissolved | 96 | | - | | 85-115 | - | | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

| 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): 01-02 QC Batch ID: WG2037631-3 WG2037631-4 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Aluminum, Total | 0.5082 | 2 | 2.529 | 101 | | 2.607 | 105 | | 70-130 | 3 | | 20 |
| Chromium, Total | 0.00115 | 0.2 | 0.1855 | 92 | | 0.2076 | 103 | | 70-130 | 11 | | 20 |
| Copper, Total | 0.005 | 0.25 | 0.2256 | 88 | | 0.2572 | 101 | | 70-130 | 13 | | 20 |
| Iron, Total | 0.5426 | 1 | 1.387 | 84 | | 1.538 | 100 | | 70-130 | 10 | | 20 |
| Lead, Total | 0.0022 | 0.53 | 0.5018 | 94 | | 0.5402 | 102 | | 70-130 | 7 | | 20 |
| Nickel, Total | 0.00162J | 0.5 | 0.4470 | 89 | | 0.4874 | 97 | | 70-130 | 9 | | 20 |
| Zinc, Total | 0.0150 | 0.5 | 0.5007 | 97 | | 0.5436 | 106 | | 70-130 | 8 | | 20 |
| Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2037631-3 WG2037631-4 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Hardness | 90.11 | 66.2 | 153.2 | 95 | | 164.7 | 113 | | 70-130 | 7 | | 20 |
| Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2037915-3 WG2037915-4 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Chromium, Dissolved | 0.0006J | 0.2 | 0.1846 | 92 | | 0.1851 | 92 | | 70-130 | 0 | | 20 |
| Nickel, Dissolved | 0.0015J | 0.5 | 0.4821 | 96 | | 0.4788 | 96 | | 70-130 | 1 | | 20 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-01
Client ID: OF002_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 10:45
Date Received: 03/06/25
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 | - | 03/10/25 17:17 | 121,2540D | CVN |
| Cyanide, Total | 0.029 | | mg/l | 0.005 | 0.001 | 1 | 03/07/25 11:00 | 03/07/25 13:38 | 121,4500CN-CE | JER |
| Cyanide, Free | 0.007 | J | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Nitrogen, Nitrate/Nitrite | 2.2 | | mg/l | 0.10 | 0.046 | 1 | - | 03/07/25 07:54 | 44,353.2 | KAF |
| Chemical Oxygen Demand | 57. | | mg/l | 20 | 6.0 | 1 | 03/07/25 09:30 | 03/07/25 13:02 | 44,410.4 | CVN |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/10/25 16:08 | 03/10/25 16:10 | 140,1664B | TPR |
| Chromium, Hexavalent | 0.014 | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:41 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

## SAMPLE RESULTS

Lab ID: L2513323-02
Client ID: OF006_030625
Sample Location: JENKINTOWN, PA

Date Collected: 03/06/25 11:30
Date Received: 03/06/25
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 | - | 03/10/25 17:17 | 121,2540D | CVN |
| Cyanide, Total | ND | | mg/l | 0.005 | 0.001 | 1 | 03/07/25 11:00 | 03/07/25 13:39 | 121,4500CN-CE | JER |
| Cyanide, Free | ND | | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| Nitrogen, Nitrate/Nitrite | 4.2 | | mg/l | 0.10 | 0.046 | 1 | - | 03/07/25 07:59 | 44,353.2 | KAF |
| Chemical Oxygen Demand | 28. | | mg/l | 20 | 6.0 | 1 | 03/07/25 09:30 | 03/07/25 13:02 | 44,410.4 | CVN |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/10/25 16:08 | 03/10/25 16:10 | 140,1664B | TPR |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:42 | 121,3500CR-B | DMO |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150
**Lab Number:** L2513323
**Report Date:** 03/11/25

# 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): 01-02 Batch: WG2037594-1 | | | | | | | | | | |
| Nitrogen, Nitrate/Nitrite | ND | | mg/l | 0.10 | 0.046 | 1 | - | 03/07/25 03:21 | 44,353.2 | KAF |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037664-1 | | | | | | | | | | |
| Oil & Grease, Hem-Grav | ND | | mg/l | 4.0 | 4.0 | 1 | 03/07/25 07:19 | 03/07/25 08:55 | 140,1664B | TPR |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037680-1 | | | | | | | | | | |
| Chromium, Hexavalent | ND | | mg/l | 0.010 | 0.003 | 1 | 03/07/25 09:11 | 03/07/25 09:38 | 121,3500CR-B | DMO |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037684-1 | | | | | | | | | | |
| Solids, Total Suspended | ND | | mg/l | 5.0 | NA | 1 | - | 03/07/25 08:12 | 121,2540D | CVN |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037685-1 | | | | | | | | | | |
| Cyanide, Free | ND | | mg/l | 0.010 | 0.003 | 1 | - | 03/07/25 08:07 | 121,4500CN-E(M) | KAF |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037727-1 | | | | | | | | | | |
| Chemical Oxygen Demand | ND | | mg/l | 20 | 6.0 | 1 | 03/07/25 09:30 | 03/07/25 13:00 | 44,410.4 | CVN |
| General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2037775-1 | | | | | | | | | | |
| Cyanide, Total | ND | | mg/l | 0.005 | 0.001 | 1 | 03/07/25 11:00 | 03/07/25 13:25 | 121,4500CN-CE | JER |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

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**Report Date:** 03/11/25

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037594-2 | | | | | | | | |
| Nitrogen, Nitrate/Nitrite | 100 | | - | | 90-110 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037664-2 | | | | | | | | |
| Oil & Grease, Hem-Grav | 92 | | - | | 78-114 | - | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037680-2 | | | | | | | | |
| Chromium, Hexavalent | 99 | | - | | 85-115 | - | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037684-2 | | | | | | | | |
| Solids, Total Suspended | 102 | | - | | 80-120 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037685-2 | | | | | | | | |
| Cyanide, Free | 94 | | - | | 90-110 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037727-2 | | | | | | | | |
| Chemical Oxygen Demand | 99 | | - | | 90-110 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2037775-2 | | | | | | | | |
| Cyanide, Total | 98 | | - | | 90-110 | - | | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

| 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): 01-02 QC Batch ID: WG2037594-4 QC Sample: L2512492-01 Client ID: MS Sample | | | | | | | | | | | | |
| Nitrogen, Nitrate/Nitrite | 0.28 | 4 | 4.3 | 100 | | - | - | | 80-120 | - | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037664-4 WG2037664-5 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Oil & Grease, Hem-Grav | ND | 42.1 | 40 | 94 | | 39 | 93 | | 78-114 | 2 | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037680-4 WG2037680-5 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Chromium, Hexavalent | 0.004J | 0.1 | 0.092 | 92 | | 0.090 | 90 | | 85-115 | 2 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037685-4 WG2037685-5 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Cyanide, Free | 0.006J | 0.25 | 0.256 | 102 | | 0.260 | 104 | | 80-120 | 2 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037775-3 WG2037775-4 QC Sample: L2512807-01 Client ID: MS Sample | | | | | | | | | | | | |
| Cyanide, Total | 0.002J | 0.2 | 0.212 | 106 | | 0.210 | 105 | | 90-110 | 1 | | 30 |

# Lab Duplicate Analysis

***Batch Quality Control***

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

***Lab Number:*** L2513323
***Report Date:*** 03/11/25

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037594-3 QC Sample: L2512492-01 Client ID: DUP Sample | | | | | | |
| Nitrogen, Nitrate/Nitrite | 0.28 | 0.28 | mg/l | 0 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037664-3 QC Sample: L2512807-01 Client ID: DUP Sample | | | | | | |
| Oil & Grease, Hem-Grav | ND | ND | mg/l | NC | | 18 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037680-3 QC Sample: L2512807-01 Client ID: DUP Sample | | | | | | |
| Chromium, Hexavalent | 0.004J | 0.004J | mg/l | NC | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037684-3 QC Sample: L2512806-01 Client ID: DUP Sample | | | | | | |
| Solids, Total Suspended | 69. | 66 | mg/l | 4 | | 32 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037685-3 QC Sample: L2512807-01 Client ID: DUP Sample | | | | | | |
| Cyanide, Free | 0.006J | 0.005J | mg/l | NC | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2037775-5 QC Sample: L2512807-01 Client ID: DUP Sample | | | | | | |
| Cyanide, Total | 0.002J | ND | mg/l | NC | | 30 |

**Project Name:** SPS TECHNOLOGIES
**Project Number:** US0043268.2150

**Lab Number:** L2513323
**Report Date:** 03/11/25

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| A | Present/Intact |
| B | Present/Intact |
| C | Present/Intact |
| D | Absent |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2513323-01A | Plastic 250ml H2SO4 preserved | D | <2 | <2 | 2.7 | Y | Absent | | NO3/NO2-353(28),COD-410(28) |
| L2513323-01B | Plastic 250ml NaOH preserved | D | >12 | >12 | 2.7 | Y | Absent | | TCN-4500(14) |
| L2513323-01C | Plastic 250ml unpreserved | D | 7 | 7 | 2.7 | Y | Absent | | - |
| L2513323-01D | Plastic 250ml HNO3 preserved | D | <2 | <2 | 2.7 | Y | Absent | | AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),PB-2008T(180),CR-2008T(180) |
| L2513323-01E | Plastic 500ml unpreserved | D | 7 | 7 | 2.7 | Y | Absent | | HEXCR-3500(1),FCN(1) |
| L2513323-01H | Amber 1L HCl preserved | D | NA | | 2.7 | Y | Absent | | OG-1664(28) |
| L2513323-01R | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |
| L2513323-01S | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |
| L2513323-01T | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |
| L2513323-01X | Plastic 120ml HNO3 preserved Filtrates | D | NA | | 2.7 | Y | Absent | | CR-2008S(180),NI-2008S(180) |
| L2513323-02A | Plastic 250ml H2SO4 preserved | D | <2 | <2 | 2.7 | Y | Absent | | NO3/NO2-353(28),COD-410(28) |
| L2513323-02B | Plastic 250ml NaOH preserved | D | >12 | >12 | 2.7 | Y | Absent | | TCN-4500(14) |
| L2513323-02C | Plastic 250ml unpreserved | D | 7 | 7 | 2.7 | Y | Absent | | - |
| L2513323-02D | Plastic 250ml HNO3 preserved | D | <2 | <2 | 2.7 | Y | Absent | | AL-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),HARDT-2008(180),FE-2008T(180),CR-2008T(180),PB-2008T(180) |
| L2513323-02E | Plastic 500ml unpreserved | D | 7 | 7 | 2.7 | Y | Absent | | HEXCR-3500(1),FCN(1) |
| L2513323-02H | Amber 1L HCl preserved | D | NA | | 2.7 | Y | Absent | | OG-1664(28) |
| L2513323-02R | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |



*Values in parentheses indicate holding time in days

**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(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2513323-02S | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |
| L2513323-02T | Vial Na2S2O3 preserved | D | NA | | 2.7 | Y | Absent | | 624.1-PPM(7) |
| L2513323-02X | Plastic 120ml HNO3 preserved Filtrates | D | NA | | 2.7 | Y | Absent | | CR-2008S(180),NI-2008S(180) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | SPS TECHNOLOGIES | **Lab Number:** | L2513323 |
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## 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.)<br><br>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

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
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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 **Lab Number:** L2513323

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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 it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

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

# Certification Information

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

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**
**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene
**EPA 625.1:** alpha-Terpineol
**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**
**SM 2540D:** TSS.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**MADEP-APH.**
**Nonpotable Water: EPA RSK-175 Dissolved Gases**
**Biological Tissue Matrix:** EPA 3050B

**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048**
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Nonpotable Water: EPA RSK-175 Dissolved Gases**

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

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

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

**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables).
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522, EPA 537.1.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

**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.

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

L2513323 EMO 3/10/25

# CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 3/7/25

ALPHA ~~L2512806~~ GOLDER – NJ

ALPHA TEST
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: tovah.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

## Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

## Billing Information

☐ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State /Fed Program: PA
Criteria:

Other Project Specific Requirements/Comments/Detection Limits:
* Attorney-Client Priviledged + Confidential
All VOAs in one cooler
Dissolved metals will be lab filtered

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Chemical oxygen demand E410.4 | Total suspended Solids SM2540D | Oil and Grease E1664B | Nitrate - Nitrite as N E353.2 | Total Aluminum E200.8 | Total Copper E200.8 | Total Iron E200.8 | Total Lead E200.8 | Total Zinc E200.8 | Free Cyanide SM4500-CN-I | Total Cyanide SM4500-CN-Mod | Total Nickel E200.8 | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~12800-01~~ | OF009_030525 | 3/5/25 | 1615 | SW | RTM | X | X | X | X | X | X | X | X | X | X | X | X | pH 8.15 | 11 |
| -02 | TBOF_030525 | 3/5/25 | — | W | — | | | | | | | | | | | | | | 2 |
| 13323-01 -03 | OF002_030625 | 3/6/25 | 1045 | SW | RTM | X | X | X | X | X | X | X | X | X | X | X | X | pH 6.65 | 11 |
| -02 -04 | OF006_030625 | 3/6/25 | 1130 | SW | RTM | X | X | X | X | X | X | X | X | X | X | X | X | pH 7.24 | 11 |
| | | | | | | | | | | | | | | | | | | | |
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SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

| Container Type | P | P | A | P | P | P | P | P | P | P | P | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservative | D | A | B | D | C | C | C | C | C | A | E | C |

| Relinquished By: | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 3/6/25 | | 3/6/25 16:15 |

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.

ORM NO: 01-01 (rev. 14-OCT-07)

L2513323 EMO 3/10/25

# CHAIN OF CUSTODY PAGE 2 OF 2

ALPHA ~~L2512806~~ GOLDER – NJ

Date Rec'd in Lab: 3/7/25

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: tovah.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

## Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

## Billing Information

☐ Same as Client info PO #

## Regulatory Requirements/Report Limits

State /Fed Program: PA
Criteria:

Other Project Specific Requirements/Comments/Detection Limits:
* Attorney-Client Privileged + Confidential
All VOAs in one cooler
Dissolved metals will be lab filtered

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Total Chromium E200.8 | Dissolved Nickle E200.8 | Dissolved Chromium E200.8 | MEK E624.1 | Toluene E624.1 | Total Hardness E200.7 | Speciate Hex. Chrom. SM3500Cr-B | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~12806-01~~ | OF009_030525 | 3/5/25 | 1615 | SW | RTM | X | X | X | X | X | X | X | PH 8.15 | 11 |
| ~~-02~~ | TBOF_030525 | 3/5/25 | — | W | — | | | | X | X | | | | 2 |
| 13323-01 ~~-03~~ | OF002_030625 | 3/6/25 | 1045 | SW | RTM | X | X | X | X | X | X | X | PH 6.65 | 11 |
| -02 ~~-04~~ | OF006_030625 | 3/6/25 | 1130 | SW | RTM | X | X | X | X | X | X | X | PH 7.24 | 11 |

| Container Type | P | P | P | V | V | | P | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservative | C | A | A | H | H | | A | | | | | | |

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 3/6/25 1615 | | 3/6/25 16:15 |

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.

FORM NO: 01-01 (rev. 14-OCT-07)

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

A

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

B

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

90009

**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

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**CUSTODY SEAL**

Date 3/6/25

Signature

Thermo SCIENTIFIC

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