SPS TECHNOLOGIES - ABINGTON PA
SURFACE WATER AND OUTFALL SAMPLING RESULTS REPORT FOR MAY 13, 2025

PREPARED FOR:
SPS TECHNOLOGIES

PREPARED BY:
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MAY 16, 2025

TABLE OF CONTENTS

Page No.

1.0 EXECUTIVE SUMMARY 2

2.0 INTRODUCTION 4

2.1 BACKGROUND 4

3.0 OFF-SITE SURFACE WATER INVESTIGATION 5

3.1 SURFACE WATER AND OUTFALL SAMPLING METHODOLOGY 5
3.2 SURFACE WATER AND OUTFALL SAMPLING 5
3.3 SURFACE WATER AND OUTFALL SAMPLING RESULTS 5

4.0 DATA QUALITY ASSURANCE/QUALITY CONTROL MANAGEMENT 7

4.1 FIELD QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS. 7
4.2 ANALYTICAL QA/QC SAMPLES 7
4.3 DATA EVALUATION 7
4.4 REFERENCES 7

Figures

Figure 1: On-Site Investigation Surface Water and Outfall Sampling Locations
Figure 2: Off-Site Investigation Surface Water Locations

Table

Table 1: Surface Water Analytical Results
Table 2: Outfall Analytical Results

Appendices

Appendix A: Surface Water and Outfall Field Information Form
Appendix B: Data Validation Report
Appendix C: Laboratory Analytical Report

1.0 EXECUTIVE SUMMARY

TRC Environmental Corporation, on behalf of SPS Technologies Abington PA (SPS), collected three surface water samples and two outfall samples in accordance with the TRC Surface Water and Outfall Sampling Plan revised on March 25, 2025 (Sampling Plan). The samples were collected on May 13, 2025 and 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. No sheet flow sample was collected due to lack of flow.

Surface Water		**Upstream Offsite SW Sample Location 2**	**SW Sample Location 3**	**SW Sample Location 3 (Duplicate)**	**High School Road Sample Location 4**
Parameter	**Units**	Result	Result	Result	Result
General Chemistry					
Chromium, Trivalent	mg/L	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	0.003 J	ND
Total Cyanide	mg/L	0.009	0.007	0.003 J	0.007
Free Cyanide	mg/L	ND	ND	ND	ND
Oil & Grease	mg/L	ND	ND	ND	ND
Total Metals					
Total Chromium	mg/L	0.00021 J	0.00023 J	0.00026 J	0.00029 J
Total Nickel	mg/L	0.00181 J	0.00115 J	0.00107 J	0.00133 J
Dissolved Metals					
Dissolved Chromium	mg/L	0.0003 J	ND	0.0002 J	ND
Dissolved Nickel	mg/L	0.0015 J	0.0009 J	0.0010 J	0.0012 J
Total Hardness					
Hardness	mg/L	297.7 J+	227.9 J+	212.6 J+	219 J+
Field Parameters					
pH	SU	7.11	7.62	7.62	7.41

Outfall		Outfall 002	Outfall 006	Outfall 006 (Duplicate)
Parameter	**Units**	Result	Result	Result
Volatile Organic Compounds				
Toluene	mg/L	ND	ND	ND
2-Butanone (MEK)	mg/L	0.0022 J	ND	ND
General Chemistry				
Chromium, Trivalent	mg/L	ND	ND	ND
Chromium, Hexavalent	mg/L	0.005 J	ND	ND
Total Cyanide	mg/L	0.007	0.006	0.007
Free Cyanide	mg/L	0.004 J	ND	0.004 J
Oil & Grease	mg/L	ND	ND	ND
Total Suspended Solids	mg/L	180	ND	ND
Nitrate/Nitrite as Nitrogen	mg/L	1.2	3.8	3.6
Chemical Oxygen Demand	mg/L	250	18 J	11 J
Total Metals				
Total Aluminum	mg/L	1.158 J	0.02432 J	0.01207 J
Total Chromium	mg/L	0.0024	0.00027 J	0.00025 J
Total Copper	mg/L	0.07866 J	0.00653 J	0.00324 J
Total Iron	mg/L	0.3165	0.1466	0.1004
Total Lead	mg/L	0.00342	0.00101	0.00037 J
Total Nickel	mg/L	0.01060	0.00125 J	0.00111 J
Total Zinc	mg/L	0.6839 J	0.02683 J	0.01589 J
Dissolved Metals				
Dissolved Chromium	mg/L	0.0009 J	0.0002 J	0.0002 J
Dissolved Nickel	mg/L	0.0054	0.0010 J	0.0013 J
Total Hardness				
Hardness	mg/L	48.85 J+	175.9 J+	194.6 J+
Field Parameters				
pH	SU	6.91	7.08	7.08

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

2.0 INTRODUCTION

This Surface Water and Outfall Sampling Results Report for May 13, 2025 (Sampling Report) was prepared by TRC Environmental Corporation, Inc., (TRC) on behalf of SPS Technologies Abington PA (SPS). The SPS facility is located at 301 Highland Avenue, Jenkintown, PA 19046 (Site). This Sampling Report was prepared to provide the off-Site surface water and outfall sampling results from May 13, 2025, which were collected in accordance with the TRC Surface Water and Outfall Sampling Plan revised on March 25, 2025 and approved by the PADEP on April 2, 2025.

2.1 Background

The Site is currently owned by SPS Technologies. On February 17, 2025, a fire broke out at the facility causing major damage and a cessation of operation. Prior to the fire, facility operations consisted of manufacturing of bolts, nuts, screws, rivets, washers, furniture, and fixtures.

3.0 OFF-SITE SURFACE WATER INVESTIGATION

TRC collected three surface water samples at the approved upstream and downstream sampling locations along the Tookany and Tacony Creeks on May 13, 2025. The locations are located northeast from the facility and downstream from the conjoined stream south from the facility. TRC collected two outfall samples during this event as a result of the precipitation on May 13, 2025.

3.1 Surface Water and Outfall Sampling Methodology

TRC collected the surface water samples in accordance with the Sampling Plan. Field data collected from each surface water during the sampling include:

- Water depth
- Weather conditions
- Physical characteristics (clarity, appearance, odor)
- Water Quality (DO, pH, OPR, turbidity, conductivity, and temperature)
- Water velocity (visibly moving)

The field data is documented in the daily field sampling form included as **Appendix A**, except for the in-field pH measurement, which is summarized in **Table 1** for the surface water samples and **Table 2** for the outfall samples.

3.2 Surface Water and Outfall Sampling

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.

3.3 Surface Water and Outfall Sampling Results

Surface water samples were collected from the three approved locations in accordance with Sampling Plan for the following parameters:

- Oil & Grease
- Free Cyanide
- Total Cyanide
- Total Nickel
- Dissolved Nickel
- Total Chromium
- Dissolved Chromium
- Hexavalent Chromium (calculated for Trivalent Chromium)
- Total Hardness

The validated analytical results are summarized in **Table 1**. The sampling locations are shown on **Figures 1** and **2**.

Outfall samples were collected from two approved locations in accordance with Sampling Plan for the following parameters:

- Chemical Oxygen Demand
- Total Suspended Solids
- Nitrate-Nitrite as N
- Hexavalent Chromium (calculated for Trivalent Chromium)
- Total Aluminum
- Total Copper
- Total Iron
- Total Lead
- Total Zinc
- Oil & Grease
- Free Cyanide
- Total Cyanide
- Total Nickel
- Dissolved Nickel
- Total Chromium
- Dissolved Chromium
- Methyl ethyl ketone (2-Butanone)
- Toluene
- Hardness

The validated analytical results from outfall sampling are summarized in **Table 2**. The sampling locations are shown on **Figure 1**.

4.0 DATA QUALITY ASSURANCE/QUALITY CONTROL MANAGEMENT

4.1 Field Quality Assurance/Quality Control Requirements.

Field personnel performed data quality control (QC) verification of field measurements. This process includes equipment calibration, reviewing calibration records, and duplicate readings to ensure data accuracy. Field measurements were documented in the field information form included as **Appendix A** and pH readings are summarized in **Table 1** and **Table 2**.

All hand equipment used during the sampling event was cleaned with Alconox and distilled water. Disposable equipment was used for sample collection and processing as appropriate. Field personnel wore disposable nitrile sampling gloves during sampling activities. Sampling gloves were discarded following collection at each sample location and replaced before handling decontaminated equipment or work surfaces.

4.2 Analytical QA/QC Samples

All quality assurance and quality control (QA/QC), field duplicates and matrix spikes/matrix spike duplicates (MS/MSD) were collected in accordance with the Sampling Plan at a rate of 1 per 20 samples per day. A trip blank was included daily for volatile organic compounds (VOCs). A field blank was not collected because single-use disposable ladles were used to collect samples.

4.3 Data Evaluation

The reliability of the analytical data was evaluated to assess its suitability for use in off-Site surface water 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 was performed in accordance with the Sampling Plan. The data validation report is included as **Appendix B**. The laboratory analytical report is included as **Appendix C**.

4.4 References

- SPS Technologies Surface Water and Outfall Sampling Plan, revised on March 25, 2025

SOURCE
NEARMAP IMAGERY, JUNE 16, 2024.

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

0 300 600
SCALE IN FEET

PROJECT:
SPS TECHNOLOGIES
301 HIGHLAND AVENUE
JENKINTOWN, PA

TITLE:
ONSITE INVESTIGATION SURFACE WATER AND OUTFALL SAMPLING LOCATIONS

DRAWN BY:	M. GIAMBATTISTA	PROJ NO.:	658978.0000
CHECKED BY:	J. ACTON		
APPROVED BY:	D. CARLSON		**FIGURE 1**
DATE:	MARCH 2025		

TRC
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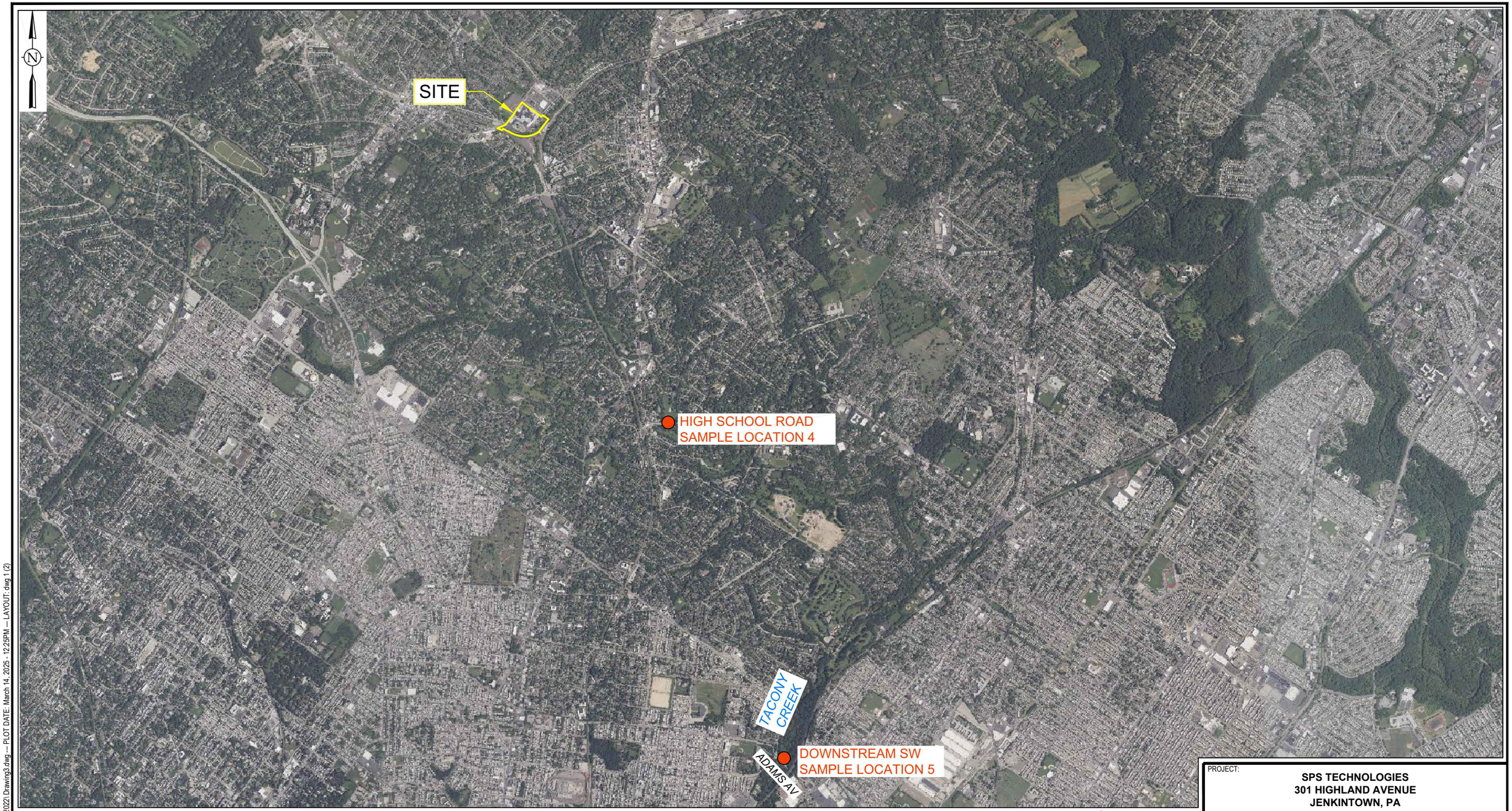
PHILADELPHIA, PA 19103

FILE NO.: Drawing3_1_16555_a55aae24.dwg

11:47 - USER: MGiambattista - - ATTACHED XREFS: - - ATTACHED IMAGES:
DRAWING NAME: C:\Users\mgiambattista\OneDrive - TRC\Desktop\Drawing3_1_16555_a55aae24.dwg -- PLOT DATE: March 19, 2025 - 2:29PM -- LAYOUT: dwg 1
Version: 2017-10-21



SOURCE
GEOMAP IMAGERY, 2025.

LEGEND
SW = SURFACE WATER
SURFACE WATER SAMPLE LOCATION

0 300 600
SCALE IN FEET

PROJECT:
SPS TECHNOLOGIES
301 HIGHLAND AVENUE
JENKINTOWN, PA

TITLE:
OFFSITE SURFACE WATER SAMPLING LOCATIONS

DRAWN BY:	M. GIAMBATTISTA	PROJ NO.:	658978.0000
CHECKED BY:	J. ACTON		
APPROVED BY:	D. CARLSON		**FIGURE 2**
DATE:	MARCH 2025		

TRC
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SUITE 510
PHILADELPHIA, PA 19103

FILE NO.: Drawing3.dwg

May 2025

Table 1

Surface Water Analytical Results
Surface Water Sampling Results Report SPS Technologies
Jenkintown, Pennsylvania

Project Number: 658978

Sample Location		Upstream Offsite SW Sample Location 2				SW Sample Location 3				SW Sample Location 3 (Duplicate)				High School Road Sample Location 4			
Field Sample ID		SW2-051325				SW3-051325				DUP-051325				SW4-051325			
Lab Sample ID		L2529777-01				L2529777-02				L2529777-04				L2529777-03			
Sampling Date		5/13/2025				5/13/2025				5/13/2025				5/13/2025			
Matrix		Water				Water				Water				Water			
Parameter	**Units**	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
General Chemistry																	
Chromium, Trivalent	mg/L	ND		0.010	0.003	ND		0.010	0.003	ND		0.010	0.003	ND		0.010	0.003
Chromium, Hexavalent	mg/L	ND		0.010	0.003	ND		0.010	0.003	0.003	J	0.010	0.003	ND		0.010	0.003
Total Cyanide	mg/L	0.009		0.005	0.001	0.007		0.005	0.001	0.003	J	0.005	0.001	0.007		0.005	0.001
Free Cyanide	mg/L	ND		0.010	0.003	ND		0.010	0.003	ND		0.010	0.003	ND		0.010	0.003
Oil & Grease	mg/L	ND		4.0	4.0	ND		4.0	4.0	ND		4.0	4.0	ND		4.0	4.0
Total Metals																	
Total Chromium	mg/L	0.00021	J	0.00100	0.00017	0.00023	J	0.00100	0.00017	0.00026	J	0.00100	0.00017	0.00029	J	0.00100	0.00017
Total Nickel	mg/L	0.00181	J	0.00200	0.00055	0.00115	J	0.00200	0.00055	0.00107	J	0.00200	0.00055	0.00133	J	0.00200	0.00055
Dissolved Metals																	
Dissolved Chromium	mg/L	0.0003	J	0.0010	0.0002	ND		0.0010	0.0002	0.0002	J	0.0010	0.0002	ND		0.0010	0.0002
Dissolved Nickel	mg/L	0.0015	J	0.0020	0.0006	0.0009	J	0.0020	0.0006	0.0010	J	0.0020	0.0006	0.0012	J	0.0020	0.0006
Total Hardness																	
Hardness	mg/L	297.7	J+	0.5400	---	227.9	J+	0.5400	---	212.6	J+	0.5400	---	219.0	J+	0.5400	---
Field Parameters																	
pH[1]	SU	7.11				7.62				7.62				7.41			

Notes:
1.) Field measurements for pH were performed by TRC 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
MDL: Method Detection Limit

Qualifiers:
J: Estimated Result
J+: Estimated Result, Potential High Bias

Created By: JM 5/15/25 Checked By: MO 5/15/25

May 2025

Table 2

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

Project Number: 658978

Sample Location		Outfall 002				Outfall 006				Outfall 006 (Duplicate)			
Field Sample ID		OF002-051325				OF006-051325				DUP-051325-1			
Lab Sample ID		L2529778-01				L2529778-02				L2529778-03			
Sampling Date		5/13/2025				5/13/2025				5/13/2025			
Matrix		Water				Water				Water			
Parameter	**Units**	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Volatile Organic Compounds													
Toluene	mg/L	ND		0.0010	0.00031	ND		0.0010	0.00031	ND		0.0010	0.00031
2-Butanone (MEK)	mg/L	0.0022	J	0.010	0.0010	ND		0.010	0.0010	ND		0.010	0.0010
General Chemistry													
Chromium, Trivalent	mg/L	ND		0.0010	0.003	ND		0.0010	0.003	ND		0.0010	0.003
Chromium, Hexavalent	mg/L	0.005	J	0.010	0.003	ND		0.010	0.003	ND		0.010	0.003
Total Cyanide	mg/L	0.007		0.005	0.001	0.006		0.005	0.001	0.007		0.005	0.001
Free Cyanide	mg/L	0.004	J	0.010	0.003	ND		0.010	0.003	0.004	J	0.010	0.003
Oil & Grease	mg/L	ND		4.0	4.0	ND		4.0	4.0	ND		4.0	4.0
Total Suspended Solids	mg/L	180		5.0	NA	ND		5.0	NA	ND		5.0	NA
Nitrate/Nitrite as Nitrogen	mg/L	1.2		0.10	0.046	3.8		0.10	0.046	3.6		0.10	0.046
Chemical Oxygen Demand	mg/L	250		20	6.0	18	J	20	6.0	11	J	20	6.0
Total Metals													
Total Aluminum	mg/L	1.158	J	0.01000	0.00327	0.0243	J	0.01000	0.00327	0.01207	J	0.00100	0.00327
Total Chromium	mg/L	0.00240		0.00100	0.00017	0.00027	J	0.00100	0.00017	0.00025	J	0.00100	0.00017
Total Copper	mg/L	0.07866	J	0.00100	0.00038	0.00653	J	0.00100	0.00038	0.00324	J	0.00100	0.00038
Total Iron	mg/L	0.3165		0.05000	0.01910	0.1466		0.05000	0.01910	0.1004		0.05000	0.01910
Total Lead	mg/L	0.00342		0.00100	0.00034	0.00101		0.00100	0.00034	0.00037	J	0.00100	0.00034
Total Nickel	mg/L	0.01060		0.00200	0.00055	0.00125	J	0.00200	0.00055	0.00111	J	0.00200	0.00055
Total Zinc	mg/L	0.6839	J	0.00500	0.00341	0.02683	J	0.00500	0.00341	0.01589	J	0.00500	0.00341
Dissolved Metals													
Dissolved Chromium	mg/L	0.0009	J	0.0010	0.0002	0.0002	J	0.0010	0.0002	0.0002	J	0.0010	0.0002
Dissolved Nickel	mg/L	0.0054		0.0020	0.0006	0.0010	J	0.0020	0.0006	0.0013	J	0.0020	0.0006
Total Hardness													
Hardness	mg/L	48.85	J+	0.5400	---	175.9	J+	0.5400	---	194.6	J+	0.5400	---
Field Parameters													
pH[1]	SU	6.91				7.08				7.08			

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

Abbreviations:
MDL: Method Detection Limit
mg/L: milligrams per liter
ND: Non-Detect
NA: Not Applicable
Q: Qualifier
RL: Reporting Limit
SU: Standard Units

Qualifiers:
Qualifiers:
J: Estimated Result
J+: Estimated Result, Potential High Bias

Created By: JM 5/16/25 Checked By: MO 5/16/25

Date: 5/13/25

Project Number: 658978

SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: SPS
Location: Abington PA
Project Number: Horiba U-52
Water Quality Meter: SM23 S/N: U1296032X
Meter Calibrated @: 5/13/25 @ 0815
Flow Meter: OTT MF PRO S/N: 337466
Sampling Date/Time:
Sampler(s):
Sampling Device:
Sample Characteristics:
Analytical Parameters:

Weather Conditions: 66°F, 93% humidity, light rain, Wind: 3MPH, 118°

Additional Notes:
SW-3 - collect Dup-051325 @ 0000
SW-4 - collect MS/MSD
PID: 0.0 at all locations
- Used single use disposable sampling cups, so no FB required.

SAMPLE / STATION	STATION DESCRIPTION (stream, lake/river)	DATE MM/DD/YY	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
SW-3-051325	Creek	5/13/25	0920	19	9.5	19.01	0.37	7.62	0.759	250	0.0	4.23	0.497
	Sample Characteristics:												
SW-4-051325	Creek	5/13/25	1030	57	28.5	18.08	0.43	7.41	0.868	319	12.12 (D)	12.12	0.192
	Sample Characteristics:												
SW-2-051325	Creek	5/13/25	1100	28	14	17.60	0.52	7.11	1.05	301	4.44 (T)	4.44	0.335
	Sample Characteristics:	~~water brownish, fines~~											
	Sample Characteristics:												
	Sample Characteristics:												
	Characteristics												

TRC

Date: 5/13/25

Project Number: 658978

SURFACE WATER/OUTFALL SAMPLE FIELD INFORMATION FORM

Site: 575
Location: Abington PA
Project Number:
Water Quality Meter: Horiba U52 S/N: U1296037X
Meter Calibrated @: 5/13/25 @ 0815
Flow Meter: QTTMF Pro S/N: 337466
Sampling Date/Time:
Sampler(s):
Sampling Device:
Sample Characteristics:
Analytical Parameters:

Additional Notes: Collect MS/MSD & Dup from OF006

No sheet flow or Flow @ OF009

Weather Conditions: 66°F, 93% Humidity, light rain, Wind 3MPH, 118°

SAMPLE / STATION	STATION DESCRIPTION (stream, lake/river)	DATE MM/DD/YY	TIME hr:min	TOTAL DEPTH inches	SAMPLE DEPTH	WATER TEMP Celsius	SALINITY	pH SU	COND mS/cm	ORP mV	TURBIDITY NTU	DO mg/L	VELOCITY ft/sec
OF002-051325	outfall	5/13/25	1130	NM	—	17.20	0.07	6.91	0.155	295	5.7	6.07	NM
Sample Characteristics	yellow-brn color, foam on surface												
OF006-051325	outfall	5/13/25	1220	NM	—	19.26	0.31	7.08	0.650	274	0.1	6.99	NM
Sample Characteristics													
Sample Characteristics													
Sample Characteristics													
Sample Characteristics													
Sample Characteristics													

TRC

Data Validation Report

Site: SPS Technologies, Surface Water Sampling
Laboratory: Pace Analytical, Westborough and Mansfield, MA
SDG No.: L2529777
Parameters: Select Metals, Hardness, Total Cyanide, Free Cyanide, Oil & Grease, Hexavalent Chromium, Trivalent Chromium
Data Reviewer: Jessica Esser/TRC
Peer Reviewer: Nancy Bergstrom/TRC
Date: May 15, 2025

Samples Reviewed and Evaluation Summary

4 Surface Water Samples: SW2-051325, SW3-051325, SW4-051325, DUP-051325[1]

[1]Field duplicate of SW3-051325

The above-listed samples were collected on May 13, 2025 and were analyzed for the following parameters.

- Select total and dissolved metals (chromium, nickel) using EPA Method 200.8
- Total hardness (by calculation) using EPA Method 200.8
- Total cyanide using Standard Methods (SM) 4500 CN-CE
- Free cyanide using SM 4500 CN-E (M)
- Oil and grease using EPA Method 1664B
- Hexavalent chromium using SM 3500 CR-B
- Trivalent chromium by calculation

Limited data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
* • Data Completeness
* • Holding Times and Sample Preservation
* • Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
* • Laboratory Duplicate Results
* • Laboratory Control Sample (LCS) Results
* • Field Duplicate Results
- Sample Results and Reported Quantitation Limits (QLs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualification of the data as a result of sampling error was not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select metals, total cyanide, and hexavalent chromium results that were below the lowest calibration standard and QL. These results were qualified as

estimated (J) by the laboratory in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for hardness in all samples in this data set were qualified as estimated with a potential high bias (J+) due to a high MS percent recovery (%R). These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level 2 data package.

Holding Times and Sample Preservation

All holding time and preservation criteria were met for all parameters.

Blanks

Target analytes were not detected in the associated method blanks. A field blank was not submitted with the data set.

MS/MSD Results

MS/MSD analyses were performed on sample SW4-051325 for total and dissolved metals, hardness, total cyanide, free cyanide, oil and grease, and hexavalent chromium. With the exception of hardness, all criteria were met. The %R for hardness in the MS (145%) performed on sample SW4-051325 was above the laboratory acceptance criteria (70-130%). Therefore, the positive results for hardness in all samples in this data set were qualified as estimated with a potential high bias (J+).

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on sample SW4-051325 for free cyanide, hexavalent chromium, and oil and grease. All criteria were met.

LCS Results

All criteria were met for all parameters.

Field Duplicate Results

Samples SW3-051325 and DUP-051325 were submitted as the field duplicate pair with this sample set. The following table summarizes the relative percent differences (RPDs) and/or absolute differences (AbsDs), where applicable, of the detected analytes. The QL was used in the calculation of the AbsD for ND results. All criteria were met.

Analyte	QL(s) (mg/L)	SW3-051325 (mg/L)	DUP-051325 (mg/L)	RPD (%) or AbsD (mg/L)	Validation Action
Total Chromium	0.001	0.00023 J	0.00026 J	AbsD = 0.00003	None; all criteria were met.
Total Nickel	0.002	0.00115 J	0.00107 J	AbsD = 0.00008	
Hardness	0.54	227.9	212.6	RPD = 6.9	
Dissolved Chromium	0.001	ND	0.0002 J	AbsD = 0.0008	
Dissolved Nickel	0.002	0.0009 J	0.0010 J	AbsD = 0.0001	

Analyte	QL(s) (mg/L)	SW3-051325 (mg/L)	DUP-051325 (mg/L)	RPD (%) or AbsD (mg/L)	Validation Action
Total Cyanide	0.005	0.007	0.003 J	AbsD = 0.004	None; all criteria were met.
Hexavalent Chromium	0.010	ND	0.003 J	AbsD = 0.007	

Field duplicate criteria are as follows:

- RPD ≤ 30 when positive results for both samples are ≥ 5x QL
- AbsD ≤ QL when one or both results are < 5x QL

Sample Results and Reported Quantitation Limits

Select metals, total cyanide, and hexavalent chromium results were reported that were below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

There were no dilutions performed on the samples in this data set.

The total and dissolved metal results were evaluated during data validation to identify any dissolved concentrations that were significantly higher than the associated total concentration. The evaluation was based on the following criteria to determine significance: percent difference (%D) should be ≤ 20% when dissolved results are greater than total results and both results are ≥ 5x the QL. If the dissolved result was > the total and one or both results were < 5x the QL, then the AbsD should be ≤ 2x the QL. These criteria were met for all samples.

QUALIFIED FORM 1s

METALS

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-01
Client ID: SW2-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 11:00
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00021	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00181	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	297.7	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:03	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:47	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0015	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:47	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-02
Client ID: SW3-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 09:20
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00023	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00115	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	227.9	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:08	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:52	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0009	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:52	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-03
Client ID: SW4-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 10:30
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00029	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00133	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	219.0	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 19:12	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:18	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0012	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:18	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-04
Client ID: DUP-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.00026	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00107	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	212.6	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:21	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:07	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0010	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:07	EPA 3005A	3,200.8	BLR

INORGANICS
&
MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-01
Client ID: SW2-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 11:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.009		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:27	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:42	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:32	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-02
Client ID: SW3-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 09:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:28	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:38	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:33	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-03
Client ID: SW4-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 10:30
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:29	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 09:58	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:34	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-04
Client ID: DUP-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.003	J	mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:32	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:46	140,1664B	TPR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:36	121,3500CR-B	DMO

Data Validation Report

Site: SPS Technologies, Outfall Sampling
Laboratory: Pace Analytical, Westborough and Mansfield, MA
SDG No.: L2529778
Parameters: Select Volatile Organic Compounds (VOCs), Select Metals, Hardness, Total Suspended Solids (TSS), Total Cyanide, Free Cyanide, Nitrate/Nitrite, Chemical Oxygen Demand (COD), Oil & Grease, Hexavalent Chromium, Trivalent Chromium
Data Reviewer: Jessica Esser/TRC
Peer Reviewer: Nancy Bergstrom/TRC
Date: May 15, 2025

Samples Reviewed and Evaluation Summary

4 Outfall Samples: OF002-051325, OF006-051325, DUP-051325-1[1]

1 Trip Blank: TRIP BLANK-051325

[1]Field duplicate of OF006-051325

The above-listed samples were collected on May 13, 2025 and were analyzed for one or more of the following parameters.

- Select VOCs (toluene, 2-butanone) using EPA Method 624.1
- Select total metals (aluminum, chromium, copper, iron, lead, nickel, zinc) using EPA Method 200.8
- Select dissolved metals (chromium, nickel) using EPA Method 200.8
- Total hardness (by calculation) using EPA Method 200.8
- TSS using Standard Methods (SM) 2540D
- Total cyanide using SM 4500 CN-CE
- Free cyanide using SM 4500 CN-E (M)
- Nitrate/nitrite using EPA Method 353.2
- COD using EPA Method 410.4
- Oil and grease using EPA Method 1664B
- Hexavalent chromium using SM 3500 CR-B
- Trivalent chromium by calculation

Limited data validation was performed in accordance with *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005),* November 2020 and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* - Holding Times and Sample Preservation
* - Blanks
* - Surrogate Recoveries (VOCs only)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results

* • Laboratory Duplicate Results
* • Laboratory Control Sample (LCS) Results
• Field Duplicate Results
• Sample Results and Reported Quantitation Limits (QLs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error are discussed below.

- The positive results for total aluminum, total copper, and total zinc in all samples in this data set were qualified as estimated (J) due to field duplicate variability. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select 2-butanone, metals, free cyanide, COD, and hexavalent chromium results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) by the laboratory in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for hardness in all samples in this data set were qualified as estimated with a potential high bias (J+) due to a high MS percent recovery (%R). These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level 2 data package with the following exceptions/notes.

- The laboratory performed MS/laboratory duplicate analyses on sample OF006-051325 for nitrate/nitrite and COD rather than MS/MSD analyses as requested on the COC.
- MS/MSD analyses were not performed on sample OF006-051325 for TSS as requested on the COC; a laboratory duplicate analysis was performed instead due to the nature of the analysis.

There is no impact on the data usability due to these issues and no validation actions were taken on this basis.

Holding Times and Sample Preservation

All holding time and preservation criteria were met for all parameters.

Blanks

Target analytes were not detected in the associated laboratory method blanks. Target VOCs were not detected in the trip blank. A field blank was not submitted with the data set.

Surrogate Recoveries (VOCs only)

All criteria were met.

MS/MSD Results

MS/MSD analyses were performed on sample OF006-051325 for VOCs, total and dissolved metals, hardness, total cyanide, free cyanide, oil and grease, and hexavalent chromium. MS analyses were performed on sample OF006-051325 for nitrate/nitrite and COD. With the exception of hardness, all criteria were met. The %R for hardness in the MS (144%) performed on sample OF006-051325 was above the laboratory acceptance criteria (70-130%). Therefore, the positive results for hardness in the outfall samples in this data set were qualified as estimated with a potential high bias (J+).

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on sample OF006-051325 for TSS, total cyanide, free cyanide, nitrate/nitrite, COD, and hexavalent chromium. All criteria were met.

LCS Results

All criteria were met for all parameters.

Field Duplicate Results

Samples OF006-051325 and DUP-051325-1 were submitted as the field duplicate pair with this sample set. The following table summarizes the relative percent differences (RPDs) and/or absolute differences (AbsDs), where applicable, of the detected analytes. The QL was used in the calculation of the AbsD for ND results. With the exceptions listed in the table below, all criteria were met.

Analyte	QLs (mg/L)	OF006-051325 (mg/L)	DUP-051325-1 (mg/L)	RPD (%) or AbsD (mg/L)	Validation Action
Total Aluminum	0.010	0.02432	0.01207	AbsD = 0.01225 (>QL)	The positive results for total aluminum, total copper, and total zinc in the outfall samples in this data set were qualified as estimated (J).
Total Copper	0.001	0.00653	0.00324	AbsD = 0.00329 (>QL)	
Total Zinc	0.005	0.02683	0.01589	AbsD = 0.01094 (>QL)	
Total Chromium	0.001	0.00027 J	0.00025 J	AbsD = 0.00002	None; all criteria were met.
Total Iron	0.050	0.1466	0.1004	AbsD = 0.0462	
Total Lead	0.001	0.00101	0.00037 J	AbsD = 0.00064	
Total Nickel	0.002	0.00125 J	0.00111 J	AbsD = 0.00014	
Hardness	0.54	175.9	194.6	RPD = 10.1	
Dissolved Chromium	0.001	0.0002 J	0.0002 J	AbsD = 0	
Dissolved Nickel	0.002	0.0010 J	0.0013 J	AbsD = 0.0003	
Total Cyanide	0.005	0.006	0.007	AbsD = 0.001	
Free Cyanide	0.01	ND	0.004 J	AbsD = 0.006	
Nitrate/Nitrite	0.10	3.8	3.6	RPD = 5.4	
COD	20	18 J	11 J	AbsD = 7.0	

Field duplicate criteria are as follows:

- RPD ≤ 30 when positive results for both samples are ≥ 5x QL
- AbsD ≤ QL when one or both results are < 5x QL

Sample Results and Reported Quantitation Limits

Select 2-butanone, metals, free cyanide, COD, and hexavalent chromium results were reported that were below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

There were no dilutions performed on the samples in this data set.

The total and dissolved metal results were evaluated during data validation to identify any dissolved concentrations that were significantly higher than the associated total concentration. The evaluation was based on the following criteria to determine significance: percent difference (%D) should be ≤ 20% when dissolved results are greater than total results and both results are ≥ 5x the QL. If the dissolved result was > the total and one or both results were < 5x the QL, then the AbsD should be ≤ 2x the QL. These criteria were met for all samples.

QUALIFIED FORM 1s

VOLATILES

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 11:07
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	0.0022	J	mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	101		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	94		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 11:41
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	103		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	96		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 12:15
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	102		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	95		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-04
Client ID: TRIP BLANK-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 12:49
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	101		60-140
Fluorobenzene	89		60-140
4-Bromofluorobenzene	97		60-140

METALS

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.158	J	mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00240		mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Copper, Total	0.07866	J	mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Iron, Total	0.3165		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Lead, Total	0.00342		mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Nickel, Total	0.01060		mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Zinc, Total	0.6839	J	mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	48.85	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:26	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0009	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:31	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0054		mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:31	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.02432	J	mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00027	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Copper, Total	0.00653	J	mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Iron, Total	0.1466		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Lead, Total	0.00101		mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00125	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Zinc, Total	0.02683	J	mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	175.9	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 19:26	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:32	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0010	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:32	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.01207	J	mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00025	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Copper, Total	0.00324	J	mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Iron, Total	0.1004		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Lead, Total	0.00037	J	mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00111	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Zinc, Total	0.01589	J	mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	194.6	J+	mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:31	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:16	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0013	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:16	EPA 3005A	3,200.8	BLR

INORGANICS
&
MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

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	180		mg/l	5.0	NA	1	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:35	121,4500CN-CE	JER
Cyanide, Free	0.004	J	mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	1.2		mg/l	0.10	0.046	1	-	05/14/25 09:22	44,353.2	KAF
Chemical Oxygen Demand	250		mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:43	140,1664B	TPR
Chromium, Hexavalent	0.005	J	mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:42	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.006		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:36	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.8		mg/l	0.10	0.046	1	-	05/14/25 09:23	44,353.2	KAF
Chemical Oxygen Demand	18.	J	mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 13:25	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:42	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:40	121,4500CN-CE	JER
Cyanide, Free	0.004	J	mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.6		mg/l	0.10	0.046	1	-	05/14/25 09:26	44,353.2	KAF
Chemical Oxygen Demand	11.	J	mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 13:30	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:45	121,3500CR-B	DMO

ANALYTICAL REPORT

Lab Number:	L2529777
Client:	TRC Environmental 1617 JFK Blvd. Suite 510 Philadelphia, PA 19103
ATTN:	Julie Acton
Phone:	(215) 563-2122
Project Name:	SPS TECHNOLOGIES
Project Number:	658978
Report Date:	05/15/25

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).

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

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2529777-01	SW2-051325	WATER	JENKINTOWN, PA	05/13/25 11:00	05/13/25
L2529777-02	SW3-051325	WATER	JENKINTOWN, PA	05/13/25 09:20	05/13/25
L2529777-03	SW4-051325	WATER	JENKINTOWN, PA	05/13/25 10:30	05/13/25
L2529777-04	DUP-051325	WATER	JENKINTOWN, PA	05/13/25 00:00	05/13/25

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529777
Project Number:	658978	**Report Date:**	05/15/25

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:** L2529777
Project Number: 658978 **Report Date:** 05/15/25

Case Narrative (continued)

Report Submission

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

Total Metals

The WG2066532-3 MS recovery performed on L2529777-03 recovered outside the 70-130% acceptance criteria for hardness (145%). The result for this analyte is considered suspect due to either the heterogeneous nature of the sample or matrix interference.

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 05/15/25

METALS

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-01
Client ID: SW2-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 11:00
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00021	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00181	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	297.7		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:03	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:03	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:47	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0015	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:47	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-02
Client ID: SW3-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 09:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.00023	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00115	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	227.9		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:08	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:08	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:52	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0009	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:52	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-03
Client ID: SW4-051325
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 10:30
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.00029	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00133	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	219.0		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:12	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 19:12	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:18	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0012	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:18	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-04
Client ID: DUP-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.00026	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00107	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	212.6		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:21	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:21	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:07	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0010	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:07	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES **Lab Number:** L2529777

Project Number: 658978 **Report Date:** 05/15/25

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): 01-04 Batch: WG2066532-1										
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA

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): 01-04 Batch: WG2066532-1										
Hardness	ND		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA

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): 01-04 Batch: WG2066533-1										
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:08	3,200.8	BLR
Nickel, Dissolved	ND		mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:08	3,200.8	BLR

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG2066532-2								
Chromium, Total	107		-		85-115	-		
Nickel, Total	108		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-04 Batch: WG2066532-2								
Hardness	108		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG2066533-2								
Chromium, Dissolved	97		-		85-115	-		
Nickel, Dissolved	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

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): 01-04 QC Batch ID: WG2066532-3 WG2066532-4 QC Sample: L2529777-03 Client ID: SW4-051325												
Chromium, Total	0.00029J	0.2	0.2291	114		0.2112	106		70-130	8		20
Nickel, Total	0.00133J	0.5	0.5768	115		0.5386	108		70-130	7		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG2066532-3 WG2066532-4 QC Sample: L2529777-03 Client ID: SW4-051325												
Hardness	219.0	66.2	315.1	**145**	Q	286.6	102		70-130	9		20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG2066532-5 WG2066532-6 QC Sample: L2529778-02 Client ID: MS Sample												
Chromium, Total	0.00027J	0.2	0.2275	114		0.2239	112		70-130	2		20
Nickel, Total	0.00125J	0.5	0.5704	114		0.5605	112		70-130	2		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG2066532-5 WG2066532-6 QC Sample: L2529778-02 Client ID: MS Sample												
Hardness	175.9	66.2	271.1	**144**	Q	261.0	129		70-130	4		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG2066533-3 WG2066533-4 QC Sample: L2529777-03 Client ID: SW4-051325												
Chromium, Dissolved	ND	0.2	0.1922	96		0.1840	92		70-130	4		20
Nickel, Dissolved	0.0012J	0.5	0.4977	100		0.4804	96		70-130	4		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG2066533-5 WG2066533-6 QC Sample: L2529778-02 Client ID: MS Sample												
Chromium, Dissolved	0.0002J	0.2	0.1855	93		0.1847	92		70-130	0		20
Nickel, Dissolved	0.0010J	0.5	0.4757	95		0.4784	96		70-130	1		20

INORGANICS
&
MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-01
Client ID: SW2-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 11:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.009		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:27	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:42	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:32	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-02
Client ID: SW3-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 09:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:28	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:38	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:33	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-03
Client ID: SW4-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 10:30
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:29	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 09:58	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:34	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529777-04
Client ID: DUP-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.003	J	mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:32	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:46	140,1664B	TPR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:36	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529777
Report Date: 05/15/25

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): 01-04 Batch: WG2066354-1										
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG2066358-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:05	05/14/25 08:30	121,3500CR-B	DMO
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG2066386-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 09:59	140,1664B	TPR
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG2066456-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:06	121,4500CN-CE	JER

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG2066354-2								
Cyanide, Free	107		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG2066358-2								
Chromium, Hexavalent	101		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG2066386-2								
Oil & Grease, Hem-Grav	103		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG2066456-2								
Cyanide, Total	104		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

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): 01-04 QC Batch ID: WG2066354-4 WG2066354-5 QC Sample: L2529777-03 Client ID: SW4-051325												
Cyanide, Free	ND	0.25	0.274	110		0.276	110		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066358-4 WG2066358-5 QC Sample: L2529777-03 Client ID: SW4-051325												
Chromium, Hexavalent	ND	0.1	0.102	102		0.100	100		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066386-4 WG2066386-5 QC Sample: L2529777-03 Client ID: SW4-051325												
Oil & Grease, Hem-Grav	ND	39.2	37	94		35	90		78-114	4		18
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066386-6 WG2066386-7 QC Sample: L2529778-02 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	38.8	37	95		36	91		78-114	3		18
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066456-3 WG2066456-4 QC Sample: L2529778-02 Client ID: MS Sample												
Cyanide, Total	0.006	0.2	0.211	102		0.213	103		90-110	1		30
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066456-6 WG2066456-7 QC Sample: L2529777-03 Client ID: SW4-051325												
Cyanide, Total	0.007	0.2	0.214	103		0.218	105		90-110	3		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066354-3 QC Sample: L2529777-03 Client ID: SW4-051325						
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066358-3 QC Sample: L2529777-03 Client ID: SW4-051325						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066386-3 QC Sample: L2529777-03 Client ID: SW4-051325						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066456-5 QC Sample: L2529778-02 Client ID: DUP Sample						
Cyanide, Total	0.006	0.006	mg/l	1		30

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent
D	Absent
E	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2529777-01A	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-01B	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2529777-01C	Plastic 250ml NaOH preserved	B	>12	>12	4.2	Y	Absent		TCN-4500(14)
L2529777-01D	Plastic 500ml unpreserved	B	7	7	4.2	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-01E	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)
L2529777-01F	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)
L2529777-02A	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-02B	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2529777-02C	Plastic 250ml NaOH preserved	B	>12	>12	4.2	Y	Absent		TCN-4500(14)
L2529777-02D	Plastic 500ml unpreserved	B	7	7	4.2	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-02E	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)
L2529777-02F	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)
L2529777-03A	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-03A1	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-03A2	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-03B	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2529777-03B1	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)

*Values in parentheses indicate holding time in days

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529777
Report Date: 05/15/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2529777-03B2	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2529777-03C	Plastic 250ml NaOH preserved	D	>12	>12	3.1	Y	Absent		TCN-4500(14)
L2529777-03C1	Plastic 250ml NaOH preserved	D	>12	>12	3.1	Y	Absent		TCN-4500(14)
L2529777-03C2	Plastic 250ml NaOH preserved	D	>12	>12	3.1	Y	Absent		TCN-4500(14)
L2529777-03D	Plastic 500ml unpreserved	D	7	7	3.1	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-03D1	Plastic 500ml unpreserved	D	7	7	3.1	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-03D2	Plastic 500ml unpreserved	D	7	7	3.1	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-03E	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-03E1	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-03E2	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-03F	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-03F1	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-03F2	Amber 1L HCl preserved	D	NA		3.1	Y	Absent		OG-1664(28)
L2529777-04A	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529777-04B	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		NI-2008T(180),HARDT-2008(180),CR-2008T(180)
L2529777-04C	Plastic 250ml NaOH preserved	B	>12	>12	4.2	Y	Absent		TCN-4500(14)
L2529777-04D	Plastic 500ml unpreserved	B	7	7	4.2	Y	Absent		HEXCR-3500(1),FCN(1)
L2529777-04E	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)
L2529777-04F	Amber 1L HCl preserved	B	NA		4.2	Y	Absent		OG-1664(28)

*Values in parentheses indicate holding time in days

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529777
Project Number:	658978	**Report Date:**	05/15/25

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529777
Project Number:	658978	**Report Date:**	05/15/25

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529777
Project Number:	658978	**Report Date:**	05/15/25

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:** L2529777

Project Number: 658978 **Report Date:** 05/15/25

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.

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.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

L2529777
TRC

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/14/25 | ALPHA Job #:

Client Information

Client: TRC Environmental Corporation
Address: 1617 John F. Kennedy Blvd.
Suite 510, Philadelphia, PA 19103
Phone: 267-679-6728
Fax: 215-563-2339
Email: JActon@trccompanies.com
☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: SPS Technologies
Project Location: Jenkintown, PA
Project #: 658978
Project Manager: Julie Acton
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)
Due Date: Time: 1-Day

Report Information Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 228588

Regulatory Requirements/Report Limits

State/Fed Program: PA
Criteria:

Other Project Specific Requirements/Comments/Detection Limits:
Attorney-Client Privileged & Confidential
All VOAs in 1 Cooler

Dissolved Metals Field Filtered

ANALYSIS

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Oil and Grease E1664B	Free Cyanide SM4500CN-E(M)	Total Cyanide SM4500CN-CE	Speciated Hex Chrome SM3500-CrB	ToTal Chromium E200.8	Dissolved Chromium E200.8	Total Nickel E200.8	Dissolved Nickel E200.8	Total Hardness E200.8				Sample Specific Comments	TOTAL # BOTTLES
29777-01	SW2-051325	5/13/25	1100	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐		6
02	SW3-051325	5/13/25	0920	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐		6
03	SW4-051325	5/13/25	1030	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	perform MS/MSD	18
04	DUP-051325	5/13/25	0000	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐		6
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Container Type	A	P	P	P	P	P	P	P	V	V	-	-
Preservative	B	A	E	A	C	A	C	C	H	H	-	-

Relinquished By:	Date/Time	Received By:	Date/Time
MSTK	5/13/25 1350	Hoel Race	5/13/25 1550
Hoel Race	5/13/25		5/13 1905
	5/13	Anthony Green MAY 13 2025	

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 Payment Terms.

Anthony Green 5/14/25 0435
5/14/25 0435
5/14 0435

ANALYTICAL REPORT

Lab Number:	L2529778
Client:	TRC Environmental 1617 JFK Blvd. Suite 510 Philadelphia, PA 19103
ATTN:	Julie Acton
Phone:	(215) 563-2122
Project Name:	SPS TECHNOLOGIES
Project Number:	658978
Report Date:	05/15/25

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).

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

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2529778-01	OF002-051325	WATER	JENKINTOWN, PA	05/13/25 11:30	05/13/25
L2529778-02	OF006-051325	WATER	JENKINTOWN, PA	05/13/25 12:20	05/13/25
L2529778-03	DUP-051325-1	WATER	JENKINTOWN, PA	05/13/25 00:00	05/13/25
L2529778-04	TRIP BLANK-051325	WATER	JENKINTOWN, PA	05/13/25 00:00	05/13/25

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529778
Project Number:	658978	**Report Date:**	05/15/25

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:** L2529778
Project Number: 658978 **Report Date:** 05/15/25

Case Narrative (continued)

Report Submission

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

Total Metals

The WG2066532-5 MS recovery performed on L2529778-02 recovered outside the 70-130% acceptance criteria for hardness (144%). The result for this analyte is considered suspect due to either the heterogeneous nature of the sample or matrix interference.

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 05/15/25

ORGANICS

VOLATILES

Project Name: SPS TECHNOLOGIES
Lab Number: L2529778
Project Number: 658978
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 11:07
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	0.0022	J	mg/l	0.010	0.0010	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	101		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	94		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 11:41
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	103		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	96		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 12:15
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	102		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	95		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-04
Client ID: TRIP BLANK-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/14/25 12:49
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	101		60-140
Fluorobenzene	89		60-140
4-Bromofluorobenzene	97		60-140

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 05/14/25 09:58
Analyst: GMT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG2066641-4					
Toluene	ND		mg/l	0.0010	0.00031
2-Butanone	ND		mg/l	0.010	0.0010

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	97		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG2066641-3								
Toluene	105		-		70-130	-		41
2-Butanone	108		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	103				60-140
Fluorobenzene	92				60-140
4-Bromofluorobenzene	96				60-140

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG2066641-5 WG2066641-6 QC Sample: L2529778-02 Client ID: OF006-051325												
Toluene	ND	0.02	0.022	110		0.022	110		47-150	0		41
2-Butanone	ND	0.05	0.047	94		0.050	100		60-140	6		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	96		96		60-140
Fluorobenzene	91		92		60-140
Pentafluorobenzene	103		103		60-140

METALS

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

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	1.158		mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00240		mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Copper, Total	0.07866		mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Iron, Total	0.3165		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Lead, Total	0.00342		mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Nickel, Total	0.01060		mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Zinc, Total	0.6839		mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	48.85		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:26	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:26	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0009	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:31	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0054		mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:31	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA
Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	0.02432		mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00027	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Copper, Total	0.00653		mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Iron, Total	0.1466		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Lead, Total	0.00101		mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00125	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Zinc, Total	0.02683		mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	175.9		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:26	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 19:26	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:32	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0010	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:32	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES
Project Number: 658978
Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA
Sample Depth:
Matrix: Water

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.01207		mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Chromium, Total	0.00025	J	mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Copper, Total	0.00324		mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Iron, Total	0.1004		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Lead, Total	0.00037	J	mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Nickel, Total	0.00111	J	mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Zinc, Total	0.01589		mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
Total Hardness (by calculation) - Mansfield Lab											
Hardness	194.6		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 20:31	EPA 3005A	3,200.8	TAA
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.003	1		05/14/25 20:31	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 20:16	EPA 3005A	3,200.8	BLR
Nickel, Dissolved	0.0013	J	mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 20:16	EPA 3005A	3,200.8	BLR

Project Name: SPS TECHNOLOGIES **Lab Number:** L2529778

Project Number: 658978 **Report Date:** 05/15/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG2066532-1										
Aluminum, Total	ND		mg/l	0.01000	0.00327	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Iron, Total	ND		mg/l	0.05000	0.01910	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA
Zinc, Total	ND		mg/l	0.00500	0.00341	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness (by calculation) - Mansfield Lab for sample(s): 01-03 Batch: WG2066532-1										
Hardness	ND		mg/l	0.5400	NA	1	05/14/25 11:48	05/14/25 19:49	3,200.8	TAA

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG2066533-1										
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	05/14/25 12:12	05/14/25 19:08	3,200.8	BLR
Nickel, Dissolved	ND		mg/l	0.0020	0.0006	1	05/14/25 12:12	05/14/25 19:08	3,200.8	BLR

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG2066532-2								
Aluminum, Total	107		-		85-115	-		
Chromium, Total	107		-		85-115	-		
Copper, Total	103		-		85-115	-		
Iron, Total	106		-		85-115	-		
Lead, Total	103		-		85-115	-		
Nickel, Total	108		-		85-115	-		
Zinc, Total	109		-		85-115	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-03 Batch: WG2066532-2								
Hardness	108		-		85-115	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG2066533-2								
Chromium, Dissolved	97		-		85-115	-		
Nickel, Dissolved	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066532-3 WG2066532-4 QC Sample: L2529777-03 Client ID: MS Sample												
Aluminum, Total	0.0183	2	2.135	106		1.965	97		70-130	8		20
Chromium, Total	0.00029J	0.2	0.2291	114		0.2112	106		70-130	8		20
Copper, Total	0.0022	0.25	0.2556	101		0.2561	102		70-130	0		20
Iron, Total	0.1651	1	1.399	123		1.337	117		70-130	5		20
Lead, Total	0.0005J	0.53	0.5565	105		0.5497	104		70-130	1		20
Nickel, Total	0.00133J	0.5	0.5768	115		0.5386	108		70-130	7		20
Zinc, Total	0.0064	0.5	0.5806	115		0.5423	107		70-130	7		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066532-3 WG2066532-4 QC Sample: L2529777-03 Client ID: MS Sample												
Hardness	219.0	66.2	315.1	**145**	Q	286.6	102		70-130	9		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066532-5 WG2066532-6 QC Sample: L2529778-02 Client ID: OF006-051325												
Aluminum, Total	0.02432	2	2.209	109		2.078	103		70-130	6		20
Chromium, Total	0.00027J	0.2	0.2275	114		0.2239	112		70-130	2		20
Copper, Total	0.00653	0.25	0.2641	103		0.2544	99		70-130	4		20
Iron, Total	0.1466	1	1.337	119		1.291	114		70-130	4		20
Lead, Total	0.00101	0.53	0.5303	100		0.5471	103		70-130	3		20
Nickel, Total	0.00125J	0.5	0.5704	114		0.5605	112		70-130	2		20
Zinc, Total	0.02683	0.5	0.5867	112		0.5844	112		70-130	0		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066532-5 WG2066532-6 QC Sample: L2529778-02 Client ID: OF006-051325												
Hardness	175.9	66.2	271.1	**144**	Q	261.0	129		70-130	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066533-3 WG2066533-4 QC Sample: L2529777-03 Client ID: MS Sample									
Chromium, Dissolved	ND	0.2	0.1922	96	0.1840	92	70-130	4	20
Nickel, Dissolved	0.0012J	0.5	0.4977	100	0.4804	96	70-130	4	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2066533-5 WG2066533-6 QC Sample: L2529778-02 Client ID: OF006-051325									
Chromium, Dissolved	0.0002J	0.2	0.1855	93	0.1847	92	70-130	0	20
Nickel, Dissolved	0.0010J	0.5	0.4757	95	0.4784	96	70-130	1	20

INORGANICS
&
MISCELLANEOUS

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-01
Client ID: OF002-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 11:30
Date Received: 05/13/25
Field Prep: Refer to COC

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	180		mg/l	5.0	NA	1	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:35	121,4500CN-CE	JER
Cyanide, Free	0.004	J	mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	1.2		mg/l	0.10	0.046	1	-	05/14/25 09:22	44,353.2	KAF
Chemical Oxygen Demand	250		mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 12:43	140,1664B	TPR
Chromium, Hexavalent	0.005	J	mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:42	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-02
Client ID: OF006-051325
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 12:20
Date Received: 05/13/25
Field Prep: Refer to COC

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	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.006		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:36	121,4500CN-CE	JER
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.8		mg/l	0.10	0.046	1	-	05/14/25 09:23	44,353.2	KAF
Chemical Oxygen Demand	18.	J	mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 13:25	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:42	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

SAMPLE RESULTS

Lab ID: L2529778-03
Client ID: DUP-051325-1
Sample Location: JENKINTOWN, PA

Date Collected: 05/13/25 00:00
Date Received: 05/13/25
Field Prep: Refer to COC

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	-	05/14/25 07:54	121,2540D	BAY
Cyanide, Total	0.007		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:40	121,4500CN-CE	JER
Cyanide, Free	0.004	J	mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
Nitrogen, Nitrate/Nitrite	3.6		mg/l	0.10	0.046	1	-	05/14/25 09:26	44,353.2	KAF
Chemical Oxygen Demand	11.	J	mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 13:30	140,1664B	TPR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:45	121,3500CR-B	DMO

Project Name: SPS TECHNOLOGIES **Lab Number:** L2529778

Project Number: 658978 **Report Date:** 05/15/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066355-1										
Cyanide, Free	ND		mg/l	0.010	0.003	1	-	05/14/25 07:19	121,4500CN-E(M)	KAF
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066360-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	05/14/25 08:15	05/14/25 08:40	121,3500CR-B	DMO
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066381-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.046	1	-	05/14/25 09:06	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066384-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	05/14/25 07:54	121,2540D	BAY
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066386-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	4.0	1	05/14/25 08:02	05/14/25 09:59	140,1664B	TPR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066456-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	05/14/25 10:50	05/14/25 14:06	121,4500CN-CE	JER
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2066470-1										
Chemical Oxygen Demand	ND		mg/l	20	6.0	1	05/14/25 10:28	05/14/25 15:23	44,410.4	CVN

Lab Control Sample Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066355-2								
Cyanide, Free	107		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066360-2								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066381-2								
Nitrogen, Nitrate/Nitrite	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066384-2								
Solids, Total Suspended	91		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066386-2								
Oil & Grease, Hem-Grav	103		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066456-2								
Cyanide, Total	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2066470-2								
Chemical Oxygen Demand	102		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

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): 01-03 QC Batch ID: WG2066355-4 WG2066355-5 QC Sample: L2529778-02 Client ID: OF006-051325												
Cyanide, Free	ND	0.25	0.273	109		0.274	110		80-120	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066360-4 WG2066360-5 QC Sample: L2529778-02 Client ID: OF006-051325												
Chromium, Hexavalent	ND	0.1	0.101	101		0.101	101		85-115	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066381-4 QC Sample: L2529778-02 Client ID: OF006-051325												
Nitrogen, Nitrate/Nitrite	3.8	4	7.4	90		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066381-6 QC Sample: L2527873-01 Client ID: MS Sample												
Nitrogen, Nitrate/Nitrite	ND	4	4.0	100		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066386-4 WG2066386-5 QC Sample: L2529777-03 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	39.2	37	94		35	90		78-114	4		18
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066386-6 WG2066386-7 QC Sample: L2529778-02 Client ID: OF006-051325												
Oil & Grease, Hem-Grav	ND	38.8	37	95		36	91		78-114	3		18
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066456-3 WG2066456-4 QC Sample: L2529778-02 Client ID: OF006-051325												
Cyanide, Total	0.006	0.2	0.211	102		0.213	103		90-110	1		30
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066456-6 WG2066456-7 QC Sample: L2529777-03 Client ID: MS Sample												
Cyanide, Total	0.007	0.2	0.214	103		0.218	105		90-110	3		30

Matrix Spike Analysis
Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066470-3 QC Sample: L2529778-02 Client ID: OF006-051325									
Chemical Oxygen Demand	18.J	238	260	110	-	-	90-110	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066355-3 QC Sample: L2529778-02 Client ID: OF006-051325						
Cyanide, Free	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066360-3 QC Sample: L2529778-02 Client ID: OF006-051325						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066381-3 QC Sample: L2529778-02 Client ID: OF006-051325						
Nitrogen, Nitrate/Nitrite	3.8	3.8	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066381-5 QC Sample: L2527873-01 Client ID: DUP Sample						
Nitrogen, Nitrate/Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066384-3 QC Sample: L2529778-02 Client ID: OF006-051325						
Solids, Total Suspended	ND	ND	mg/l	NC		32
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066386-3 QC Sample: L2529777-03 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066456-5 QC Sample: L2529778-02 Client ID: OF006-051325						
Cyanide, Total	0.006	0.006	mg/l	1		30
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2066470-4 QC Sample: L2529778-02 Client ID: OF006-051325						
Chemical Oxygen Demand	18.J	18.J	mg/l	NC		20

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent
D	Absent
E	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2529778-01A	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-01B	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-01C	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529778-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		AL-2008T(180),NI-2008T(180),ZN-2008T(180),HARDT-2008(180),CU-2008T(180),FE-2008T(180),PB-2008T(180),CR-2008T(180)
L2529778-01F	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Absent		NO3/NO2-353(28),COD-410(28)
L2529778-01G	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Absent		TCN-4500(14)
L2529778-01H	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		HEXCR-3500(1),FCN(1)
L2529778-01J	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		TSS-2540(7)
L2529778-01K	Amber 1L HCl preserved	A	NA		2.5	Y	Absent		OG-1664(28)
L2529778-01L	Amber 1L HCl preserved	A	NA		2.5	Y	Absent		OG-1664(28)
L2529778-02A	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02A1	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02A2	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02B	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02B1	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02B2	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)

*Values in parentheses indicate holding time in days

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2529778-02C	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02C1	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02C2	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529778-02D1	Plastic 250ml HNO3 preserved	C	<2	<2	2.2	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529778-02D2	Plastic 250ml HNO3 preserved	C	<2	<2	2.2	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529778-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	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)
L2529778-02E1	Plastic 250ml HNO3 preserved	C	<2	<2	2.2	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)
L2529778-02E2	Plastic 250ml HNO3 preserved	C	<2	<2	2.2	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)
L2529778-02F	Plastic 250ml H2SO4 preserved	A	<2	<2	2.5	Y	Absent		NO3/NO2-353(28),COD-410(28)
L2529778-02F1	Plastic 250ml H2SO4 preserved	C	<2	<2	2.2	Y	Absent		NO3/NO2-353(28),COD-410(28)
L2529778-02F2	Plastic 250ml H2SO4 preserved	C	<2	<2	2.2	Y	Absent		NO3/NO2-353(28),COD-410(28)
L2529778-02G	Plastic 250ml NaOH preserved	A	>12	>12	2.5	Y	Absent		TCN-4500(14)
L2529778-02G1	Plastic 250ml NaOH preserved	C	>12	>12	2.2	Y	Absent		TCN-4500(14)
L2529778-02G2	Plastic 250ml NaOH preserved	C	>12	>12	2.2	Y	Absent		TCN-4500(14)
L2529778-02H	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		HEXCR-3500(1),FCN(1)
L2529778-02H1	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		HEXCR-3500(1),FCN(1)
L2529778-02H2	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		HEXCR-3500(1),FCN(1)
L2529778-02J	Plastic 950ml unpreserved	A	7	7	2.5	Y	Absent		TSS-2540(7)
L2529778-02J1	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		TSS-2540(7)
L2529778-02J2	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		TSS-2540(7)
L2529778-02K	Amber 1L HCl preserved	A	NA		2.5	Y	Absent		OG-1664(28)
L2529778-02K1	Amber 1L HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)
L2529778-02K2	Amber 1L HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)

*Values in parentheses indicate holding time in days

Project Name: SPS TECHNOLOGIES
Project Number: 658978

Lab Number: L2529778
Report Date: 05/15/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2529778-02L	Amber 1L HCl preserved	A	NA		2.5	Y	Absent		OG-1664(28)
L2529778-02L1	Amber 1L HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)
L2529778-02L2	Amber 1L HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)
L2529778-03A	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-03B	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-03C	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-03D	Plastic 250ml HNO3 preserved	E	<2	<2	2.0	Y	Absent		CR-2008S(180),NI-2008S(180)
L2529778-03E	Plastic 250ml HNO3 preserved	E	<2	<2	2.0	Y	Absent		AL-2008T(180),NI-2008T(180),ZN-2008T(180),HARDT-2008(180),CU-2008T(180),FE-2008T(180),CR-2008T(180),PB-2008T(180)
L2529778-03F	Plastic 250ml H2SO4 preserved	E	<2	<2	2.0	Y	Absent		NO3/NO2-353(28),COD-410(28)
L2529778-03G	Plastic 250ml NaOH preserved	E	>12	>12	2.0	Y	Absent		TCN-4500(14)
L2529778-03H	Plastic 950ml unpreserved	E	7	7	2.0	Y	Absent		HEXCR-3500(1),FCN(1)
L2529778-03J	Plastic 950ml unpreserved	E	7	7	2.0	Y	Absent		TSS-2540(7)
L2529778-03K	Amber 1L HCl preserved	E	NA		2.0	Y	Absent		OG-1664(28)
L2529778-03L	Amber 1L HCl preserved	E	NA		2.0	Y	Absent		OG-1664(28)
L2529778-04A	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)
L2529778-04B	Vial Na2S2O3 preserved	E	NA		2.0	Y	Absent		624.1-PPM(7)

*Values in parentheses indicate holding time in days

Project Name: SPS TECHNOLOGIES **Lab Number:** L2529778

Project Number: 658978 **Report Date:** 05/15/25

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529778
Project Number:	658978	**Report Date:**	05/15/25

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	SPS TECHNOLOGIES	**Lab Number:**	L2529778
Project Number:	658978	**Report Date:**	05/15/25

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:** L2529778

Project Number: 658978 **Report Date:** 05/15/25

REFERENCES

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

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

107 Calculation method.

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

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

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

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at 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.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

L2529778
TRC

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/14/25

ALPHA Job #:

Project Information

Project Name: SPS Technologies
Project Location: Jenkintown, PA
Project #: 658978
Project Manager: Julie Acton
ALPHA Quote #:

Report Information — Data Deliverables
☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information
☐ Same as Client info PO #: 228588

Regulatory Requirements/Report Limits
State/Fed Program: PA
Criteria:

Client Information
Client: TRC Environmental Corporation
Address: 1617 John F. Kennedy Blvd.
Suite 510, Philadelphia, PA 19103
Phone: 267-679-6728
Fax: 215-563-2339
Email: JActon@trccompanies.com
☐ These samples have been Previously analyzed by Alpha

Turn-Around Time
☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)
Due Date: Time: 1-Day

Other Project Specific Requirements/Comments/Detection Limits:
Attorney-Client Privileged & Confidential
All VOAs in 1 Cooler

Dissolved Metals - Field Filtered

ANALYSIS

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Oil and Grease E1664B	Free Cyanide SM4500CN-E(M)	Total Cyanide SM4500CN-CE	Speciated Hex Chrome SM3500-CrB	Total Chromium, Nickel E200.8	Dissolved Chromium, Nickel E200.8	Total Al, Fe, Pb, Zn, Cu E200.8	Chemical Oxygn Demand E410.4	MEK, Toluene E624.1	Nitrate-Nitrite as N E353.2	Total Hardness E200.8	Total Suspendned Solids SM 2540 D	Sample Specific Comments	TOTAL # BOTTLES
29778-01	OF002 - 051325	5/13/25	1130	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		11
	~~OF004~~			~~SW~~		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	TT	
02	OF006 - 051325	5/13/25	1220	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	Perform MS/MSD	33
	~~OF009~~			~~SW~~		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	TT	
03	DUP- 051325-1	5/13/25	0000	SW	TT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		11
04	TRIP BLANK- 051325	5/13/25	—	W	TT	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐		2
	~~SF-~~			~~SW~~		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	TT	
	~~SF-~~			~~SW~~		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	TT	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Container Type	A	P	P	P	P	P	P	P	V	P	P	P	
Preservative	B	A	E	A	C	A	C	-	H	-	-	-	

Relinquished By:	Date/Time	Received By:	Date/Time
Kristi Reed	5/13/25 1350	[illegible]	5/13/25 1350
[illegible]	5/13/25	[illegible]	5.13 1505
Anthony Green	5/13	Anthony Green MAY 13 2025	

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 Payment Terms.

FORM NO. 01-01(RA) (rev. 1-JAN-12)

Anthony Green 5/14/25 0435

5/14 0435