

Appendix Q

Laboratory Analytical Reports for Recovery Well and Monitoring Well Samples



ANALYTICAL REPORT

Lab Number:	L2547823
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	08/04/25

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2547823-01	RW-2	WATER	E-25060-RL-25300050	07/30/25 12:15	07/30/25
L2547823-02	RW-3	WATER	E-25060-RL-25300050	07/30/25 13:00	07/30/25
L2547823-03	RW-4	WATER	E-25060-RL-25300050	07/30/25 13:30	07/30/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

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.

Sample Receipt

The analyses performed were specified by the Project Manager.

L2547823-01: The sample was received above the appropriate pH for the Dissolved Metals analysis. The laboratory added additional HNO₃ to a pH <2.

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:  Tiffani Morrissey

Title: Technical Director/Representative

Date: 08/04/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-01
 Client ID: RW-2
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 12:15
 Date Received: 07/30/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/04/25 13:07
 Analyst: HNY

Extraction Method: EPA 8011
 Extraction Date: 08/04/25 11:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-01 D

Date Collected: 07/30/25 12:15

Client ID: RW-2

Date Received: 07/30/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/02/25 12:58

Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.0	0.33	2
Benzene	42		ug/l	1.0	0.32	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
Toluene	78		ug/l	1.5	0.41	2
Ethylbenzene	39		ug/l	1.0	0.33	2
p/m-Xylene	200		ug/l	2.0	0.66	2
o-Xylene	110		ug/l	2.0	0.78	2
Xylenes, Total	310		ug/l	2.0	0.66	2
Isopropylbenzene	8.6		ug/l	1.0	0.37	2
1,3,5-Trimethylbenzene	130		ug/l	5.0	0.43	2
1,2,4-Trimethylbenzene	390		ug/l	5.0	0.38	2
Naphthalene	200		ug/l	2.0	0.43	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	106		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-02
 Client ID: RW-3
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 13:00
 Date Received: 07/30/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/04/25 13:15
 Analyst: HNY

Extraction Method: EPA 8011
 Extraction Date: 08/04/25 11:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-02 D

Date Collected: 07/30/25 13:00

Client ID: RW-3

Date Received: 07/30/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/02/25 13:24

Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.42	2.5
Benzene	140		ug/l	1.2	0.40	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
Toluene	260		ug/l	1.9	0.51	2.5
Ethylbenzene	39		ug/l	1.2	0.42	2.5
p/m-Xylene	460		ug/l	2.5	0.83	2.5
o-Xylene	320		ug/l	2.5	0.98	2.5
Xylenes, Total	780		ug/l	2.5	0.83	2.5
Isopropylbenzene	7.8		ug/l	1.2	0.47	2.5
1,3,5-Trimethylbenzene	190		ug/l	6.2	0.54	2.5
1,2,4-Trimethylbenzene	400		ug/l	6.2	0.48	2.5
Naphthalene	150		ug/l	2.5	0.54	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	96		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-03
 Client ID: RW-4
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 13:30
 Date Received: 07/30/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/04/25 13:23
 Analyst: HNY

Extraction Method: EPA 8011
 Extraction Date: 08/04/25 11:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**SAMPLE RESULTS**

Lab ID: L2547823-03
 Client ID: RW-4
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 13:30
 Date Received: 07/30/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/02/25 12:31
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	4.6		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	0.50	J	ug/l	1.0	0.33	1
o-Xylene	5.4		ug/l	1.0	0.39	1
Xylenes, Total	5.9	J	ug/l	1.0	0.33	1
Isopropylbenzene	0.49	J	ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	1.5	J	ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	3.1		ug/l	2.5	0.19	1
Naphthalene	8.4		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	108		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/02/25 09:52
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2098551-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	109		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 08/04/25 12:35
Analyst: HNY

Extraction Method: EPA 8011
Extraction Date: 08/04/25 11:38

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01-03 Batch: WG2098729-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2098551-3 WG2098551-4								
Methyl tert butyl ether	82		77		63-130	6		20
Benzene	91		87		70-130	4		20
1,2-Dichloroethane	100		95		70-130	5		20
Toluene	86		83		70-130	4		20
Ethylbenzene	95		92		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		90		70-130	5		20
Isopropylbenzene	92		88		70-130	4		20
1,3,5-Trimethylbenzene	94		91		64-130	3		20
1,2,4-Trimethylbenzene	93		89		70-130	4		20
Naphthalene	80		77		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	115		109		70-130
Toluene-d8	92		93		70-130
4-Bromofluorobenzene	87		83		70-130
Dibromofluoromethane	105		100		70-130



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2547823

Project Number: PROJ-051861

Report Date: 08/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG2098729-2									
1,2-Dibromoethane	108		-		60-140	-		20	A

Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2547823

Project Number: PROJ-051861

Report Date: 08/04/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2098729-3 QC Sample: L2547823-01 Client ID: RW-2													
1,2-Dibromoethane	ND	0.201	0.229	114		-	-		60-140	-		20	A

METALS



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

SAMPLE RESULTS

Lab ID: L2547823-01
 Client ID: RW-2
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 12:15
 Date Received: 07/30/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/01/25 15:17	08/03/25 23:15	EPA 3005A	1,6020B	TAA



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

SAMPLE RESULTS

Lab ID: L2547823-02
 Client ID: RW-3
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 13:00
 Date Received: 07/30/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/01/25 15:17	08/03/25 23:41	EPA 3005A	1,6020B	TAA



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

SAMPLE RESULTS

Lab ID: L2547823-03
 Client ID: RW-4
 Sample Location: E-25060-RL-25300050

Date Collected: 07/30/25 13:30
 Date Received: 07/30/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/01/25 15:17	08/04/25 00:08	EPA 3005A	1,6020B	TAA



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2547823

Project Number: PROJ-051861

Report Date: 08/04/25

Method Blank Analysis Batch Quality Control

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: WG2097639-1										
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/01/25 15:17	08/03/25 22:53	1,6020B	TAA

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2547823

Project Number: PROJ-051861

Report Date: 08/04/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG2097639-2								
Lead, Dissolved	106		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2547823

Project Number: PROJ-051861

Report Date: 08/04/25

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>MSD Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>MSD Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>RPD Qual</u>	<u>RPD Limits</u>
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2097639-3 QC Sample: L2547823-01 Client ID: RW-2												
Lead, Dissolved	ND	0.53	0.5442	103		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2547823

Report Date: 08/04/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG2097639-4 QC Sample: L2547823-01 Client ID: RW-2						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2547823-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-01D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-01E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-01F	Plastic 500ml HNO3 preserved	NA	4	<2		N	Absent		PB-6020S(180)
L2547823-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-02D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-02E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-02F	Plastic 500ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2547823-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2547823-03D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-03E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2547823-03F	Plastic 500ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2547823**Project Number:** PROJ-051861**Report Date:** 08/04/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2547823
Report Date: 08/04/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, SM4500CI-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, SM4500CL-G, 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.

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, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1: Hg. **EPA 245.7:** Hg.

SM2340B

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 28

Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

CT PH-0826, IL 200077, IN C-MA-03, KY KY98045, 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

MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, 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, LA 245052, 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.



Sample Delivery Group Summary

Pace Job Number : L2547823

Received : 30-JUL-2025

Reviewer : Craig Sloma-Green

Account Name : Groundwater & Environmental Service

Project Number : PROJ-051861

Project Name : SUNOCO PIPELINE LP (SPLP)

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.7	
B	Absent/	Ice	2.1	

Condition Information

- | | | | |
|--|------------|--------------------|----------|
| 1) All samples on COC received? | YES | | |
| 2) Extra samples received? | NO | | |
| 3) Are there any sample container discrepancies? | NO | | |
| 4) Are there any discrepancies between COC & sample labels? | NO | | |
| 5) Are samples in appropriate containers for requested analysis? | YES | | |
| 6) Are samples properly preserved for requested analysis? | NO | | |
| Container | pH | Preservative Added | Final pH |
| L2547823-01F | 4 | HNO3 | <2 |
| 7) Are samples within holding time for requested analysis? | YES | | |
| 8) All sampling equipment returned? | NA | | |

Volatile Organics/VPH

- | | |
|--|-----------|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|-----------|



ANALYTICAL REPORT

Lab Number:	L2517147
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	E-25060-RL-25300050
Report Date:	03/28/25

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

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (9110), MN (025-999-495), NJ (MA015), NY (11627), NC (685), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708A1), USFWS (Permit #A24920).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2517147-01	RW-1	DW	WASHINGTON CROSSING, PA	03/24/25 13:00	03/24/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

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.

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

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 03/28/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2517147**Project Number:** E-25060-RL-25300050**Report Date:** 03/28/25**SAMPLE RESULTS**

Lab ID: L2517147-01
 Client ID: RW-1
 Sample Location: WASHINGTON CROSSING, PA

Date Collected: 03/24/25 13:00
 Date Received: 03/24/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Dw
 Analytical Method: 14,504.1
 Analytical Date: 03/26/25 13:20
 Analyst: JKH

Extraction Method: EPA 504.1
 Extraction Date: 03/26/25 09:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2517147**Project Number:** E-25060-RL-25300050**Report Date:** 03/28/25**SAMPLE RESULTS**

Lab ID: L2517147-01
 Client ID: RW-1
 Sample Location: WASHINGTON CROSSING, PA

Date Collected: 03/24/25 13:00
 Date Received: 03/24/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Dw
 Analytical Method: 16,524.2
 Analytical Date: 03/28/25 07:11
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	0.50	0.13	1
1,2-Dichloroethane	ND		ug/l	0.50	0.15	1
Benzene	2.0		ug/l	0.50	0.19	1
Toluene	0.35	J	ug/l	0.50	0.19	1
Ethylbenzene	0.70		ug/l	0.50	0.13	1
p/m-Xylene	7.8		ug/l	0.50	0.30	1
o-Xylene	5.9		ug/l	0.50	0.19	1
Isopropylbenzene	0.67		ug/l	0.50	0.13	1
1,3,5-Trimethylbenzene	13		ug/l	0.50	0.15	1
1,2,4-Trimethylbenzene	12		ug/l	0.50	0.13	1
Naphthalene	2.1		ug/l	0.50	0.14	1
Xylenes, Total ¹	14		ug/l	0.50	0.19	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	103		80-120
4-Bromofluorobenzene	110		80-120

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2517147**Project Number:** E-25060-RL-25300050**Report Date:** 03/28/25**Method Blank Analysis
Batch Quality Control**Analytical Method: 14,504.1
Analytical Date: 03/26/25 12:22
Analyst: JKHExtraction Method: EPA 504.1
Extraction Date: 03/26/25 09:50

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2045376-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/28/25 05:13
Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2046605-4					
Methyl tert butyl ether	ND		ug/l	0.50	0.13
1,2-Dichloroethane	ND		ug/l	0.50	0.15
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	0.50	0.19
Ethylbenzene	ND		ug/l	0.50	0.13
p/m-Xylene	ND		ug/l	0.50	0.30
o-Xylene	ND		ug/l	0.50	0.19
Isopropylbenzene	ND		ug/l	0.50	0.13
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.15
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.13
Naphthalene	ND		ug/l	0.50	0.14
Xylenes, Total ¹	ND		ug/l	0.50	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	112		80-120
4-Bromofluorobenzene	89		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2045376-2									
1,2-Dibromoethane	102		-		70-130	-			A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2046605-3								
Methyl tert butyl ether	102		-		70-130	-		20
1,2-Dichloroethane	128		-		70-130	-		20
Benzene	105		-		70-130	-		20
Toluene	102		-		70-130	-		20
Ethylbenzene	100		-		70-130	-		20
p/m-Xylene	110		-		70-130	-		20
o-Xylene	110		-		70-130	-		20
Isopropylbenzene	100		-		70-130	-		20
1,3,5-Trimethylbenzene	112		-		70-130	-		20
1,2,4-Trimethylbenzene	112		-		70-130	-		20
Naphthalene	100		-		70-130	-		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	99				80-120
4-Bromofluorobenzene	101				80-120



Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2045376-3 QC Sample: L2516326-01 Client ID: MS Sample													
1,2-Dibromoethane	ND	0.248	0.261	105		-	-		65-135	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.248	0.318	128		-	-		65-135	-		20	A
1,2,3-Trichloropropane	ND	0.248	0.233	94		-	-		65-135	-		20	A

Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

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 QC Batch ID: WG2046605-5 WG2046605-6 QC Sample: L2518409-01 Client ID: MS Sample												
Methyl tert butyl ether	ND	4	4.0	100		3.8	95		70-130	5		20
1,2-Dichloroethane	ND	4	4.6	115		4.8	120		70-130	4		20
Benzene	ND	4	4.2	105		4.2	105		70-130	0		20
Toluene	ND	4	3.9	98		4.0	100		70-130	3		20
Ethylbenzene	ND	4	4.0	100		4.0	100		70-130	0		20
p/m-Xylene	ND	8	8.7	109		8.8	110		70-130	1		20
o-Xylene	ND	4	4.0	100		4.2	105		70-130	5		20
Isopropylbenzene	ND	4	4.2	105		4.3	108		70-130	2		20
1,3,5-Trimethylbenzene	ND	4	4.2	105		4.5	113		70-130	7		20
1,2,4-Trimethylbenzene	ND	4	4.2	105		4.3	108		70-130	2		20
Naphthalene	ND	4	3.1	78		3.3	82		70-130	6		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		102		80-120
4-Bromofluorobenzene	110		105		80-120



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

SAMPLE RESULTS

Lab ID: L2517147-01

Date Collected: 03/24/25 13:00

Client ID: RW-1

Date Received: 03/24/25

Sample Location: WASHINGTON CROSSING, PA

Field Prep: Refer to COC

Sample Depth:

Matrix: Dw

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.0010	0.0003	1	03/26/25 09:37	03/26/25 10:16	NA	3,200.8	NTB



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2045252-1										
Lead, Dissolved	ND		mg/l	0.0010	0.0003	1	03/26/25 09:37	03/26/25 10:08	3,200.8	NTB

Prep Information

Digestion Method: NA



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2045252-2								
Lead, Dissolved	100		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2517147

Project Number: E-25060-RL-25300050

Report Date: 03/28/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MS Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2045252-3 QC Sample: L2517147-01 Client ID: RW-1												
Lead, Dissolved	ND	0.053	0.0569	107		-	-		70-130	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2045252-5 QC Sample: L2517520-01 Client ID: MS Sample												
Lead, Dissolved	ND	0.053	0.0544	103		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: E-25060-RL-25300050

Lab Number: L2517147

Report Date: 03/28/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2045252-4 QC Sample: L2517147-01 Client ID: RW-1						
Lead, Dissolved	ND	ND	mg/l	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2045252-6 QC Sample: L2517520-01 Client ID: DUP Sample						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2517147**Project Number:** E-25060-RL-25300050**Report Date:** 03/28/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2517147-01A	Vial HCl preserved	A	NA		2.1	Y	Absent		524.2(14)
L2517147-01B	Vial HCl preserved	A	NA		2.1	Y	Absent		524.2(14)
L2517147-01C	Vial HCl preserved	A	NA		2.1	Y	Absent		524.2(14)
L2517147-01D	Vial Na ₂ S ₂ O ₃ preserved	A	NA		2.1	Y	Absent		504(14)
L2517147-01E	Vial Na ₂ S ₂ O ₃ preserved	A	NA		2.1	Y	Absent		504(14)
L2517147-01F	Plastic 250ml HNO ₃ preserved	A	<2	<2	2.1	Y	Absent		PB-2008S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

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Data Qualifiers

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

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

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: E-25060-RL-25300050

Lab Number: L2517147
Report Date: 03/28/25

REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

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.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

Pace Analytical Services LLC

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Revision 27

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Title: **Certificate/Approval Program Summary**

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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.

Pace Pace® Location Requested (City/State): **CHAIN-OF-CUSTODY Analytical Request Document**
Westborough, MA Chain of Custody is a LEGAL DOCUMENT. Complete all relevant fields.

Company Name: **GES, Inc.** Contact/Request To: **Stephanie Grillo**
 Street Address: **410 Eagleview Blvd, Suite 110** Phone #: **(610) 458-1077 x3064 / (610) 458-2300**
Exton, PA 19341 E-Mail: **SGrillo@gesonline.com; gesinbox@gesonline.com; ges@gesonline.com**
 Customer Project #: **Washington Crossing, PA** Invoice to: **GES**
 Project Name: **Sunoco Pipeline LP (SPLP) Washington Crossing** Invoice Email: **ges-invoices@gesonline.com**
 Site Collection Info/Facility ID (as applicable): **Washington Crossing, PA** Purchase Order # (if applicable): **0225040-06-160**
 Time Zone Collected: LAB PT MT CT ET Country (State origin of sample): **PA**



L2517147
GES - PA - ER

Specify Container Size **

6	6	3							
---	---	---	--	--	--	--	--	--	--

Identify Container Preservation Type ***

4	8	2							
---	---	---	--	--	--	--	--	--	--

Analysis Requested

Data Deliverable: Level I Level II Level III Other

Regulatory Program (DW, RCRA, etc.) as applicable: **DW** Reportable Yes No

Rush (Pre-approval required): Same Day 1 Day 2 Day 3 Day Other: **ADAP 3-Day**

Date Results Requested: **ADAP 3-Day**

DW PWSID # or WW Permit # as applicable: **Field Filtered (if applicable): Yes No**

Analysis: **Lead**

Container Size: (1) 1L, (2) 250mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 50mL, (7) 25mL, (8) 10mL, (9) 5mL, (10) Other

Preservation Type: (1) None, (2) PWS, (3) H2O2, (4) HCl, (5) NaOH, (6) In Acetic, (7) Acetic, (8) Sealed, (9) As is, (10) Other

Analysis Requested: **VOCs (list below), EPA 524.2**
1,2-Dichloroethane, EPA 504.1
Lead (dissolved), EPA 200.8

Proj. Mgr: **Scott Enright**
 Account / Client ID:
 Table #:
 Profile / Template:
 Prelog / Bottle Ord. ID:

Sample Comment:

Customer Sample ID	Matrix*	Comp / Grab	Composite Start		Collected or Composite End		# Cont.	Regul. Chem.		VOCs (list below), EPA 524.2	1,2-Dichloroethane, EPA 504.1	Lead (dissolved), EPA 200.8	Lab Use Only
			Date	Time	Date	Time		Result	Units				
RW-1	DW	G	-	-	3/24/25	1:300	6			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Instructions from Pace®: **VOCs by EPA 524.2 list: BTEX, isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane**

Collected By: **Jason Crone**
 Signature: *Jason Crone*

Customer Remarks / Special Conditions / Possible Hazards:

Contain: Thermobaric Correction Factor (°C) Obs. Temp. (°C) Corrected Temp. (°C) On/Off

Requested by (Company Representative): <i>Anthony Green / GES</i>	Date/Time: 3/24/25 / 1540	Received by (Company Representative): <i>Anthony Green</i>	Date/Time: 3/24/25 / 1540	Tracing Number:
Requested by (Company Representative): <i>Anthony Green</i>	Date/Time: 3:24	Received by (Company Representative): <i>Anthony Green</i>	Date/Time: 3:24 / 140	Delivered by: <input type="checkbox"/> In. Field <input type="checkbox"/> Corner
Requested by (Company Representative): <i>Anthony Green</i>	Date/Time: 3:24	Received by (Company Representative): <i>Anthony Green</i>	Date/Time: MAR 24 2025 0203	<input type="checkbox"/> Field <input type="checkbox"/> UPS <input type="checkbox"/> Other
Requested by (Company Representative): <i>Anthony Green</i>	Date/Time: 3:24	Received by (Company Representative): <i>Anthony Green</i>	Date/Time: 3/24/25 0203	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at <http://www.pace.com> under the identified terms and conditions.

Chris Pace *Stephanie Grillo* **3/25/25 0410**



ANALYTICAL REPORT

Lab Number:	L2526894
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	05/03/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2526894-01	RW-1	DW	E-25060-RL-25300050	05/01/25 11:30	05/01/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

Case Narrative

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

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

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

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

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

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

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

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.

Volatile Organics by Method 524.2

The required Trip Blank for EPA Method 524.2 was not submitted with the sample upon return to the laboratory. It could not be determined if analytes detected were the result of exposure to contaminants during the trip from the laboratory to the field and back to the laboratory. Any analytes detected are to be considered qualified.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 05/03/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25**SAMPLE RESULTS**

Lab ID: L2526894-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 05/01/25 11:30
 Date Received: 05/01/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Dw
 Analytical Method: 14,504.1
 Analytical Date: 05/02/25 10:59
 Analyst: JKH

Extraction Method: EPA 504.1
 Extraction Date: 05/02/25 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25**SAMPLE RESULTS**

Lab ID: L2526894-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 05/01/25 11:30
 Date Received: 05/01/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Dw
 Analytical Method: 16,524.2
 Analytical Date: 05/02/25 23:46
 Analyst: JKH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	0.50	0.13	1
1,2-Dichloroethane	ND		ug/l	0.50	0.15	1
Benzene	0.52		ug/l	0.50	0.19	1
Toluene	ND		ug/l	0.50	0.19	1
Ethylbenzene	ND		ug/l	0.50	0.13	1
p/m-Xylene	0.78		ug/l	0.50	0.30	1
o-Xylene	0.96		ug/l	0.50	0.19	1
Isopropylbenzene	0.51		ug/l	0.50	0.13	1
1,3,5-Trimethylbenzene	2.3		ug/l	0.50	0.15	1
1,2,4-Trimethylbenzene	4.0		ug/l	0.50	0.13	1
Naphthalene	3.2		ug/l	0.50	0.14	1
Xylenes, Total ¹	1.7		ug/l	0.50	0.19	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	97		80-120

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25**Method Blank Analysis
Batch Quality Control**Analytical Method: 14,504.1
Analytical Date: 05/02/25 10:18
Analyst: JKHExtraction Method: EPA 504.1
Extraction Date: 05/02/25 07:08

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2061478-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/02/25 18:27
Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2061988-4					
Methyl tert butyl ether	ND		ug/l	0.50	0.13
1,2-Dichloroethane	ND		ug/l	0.50	0.15
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	0.50	0.19
Ethylbenzene	ND		ug/l	0.50	0.13
p/m-Xylene	ND		ug/l	0.50	0.30
o-Xylene	ND		ug/l	0.50	0.19
Isopropylbenzene	ND		ug/l	0.50	0.13
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.15
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.13
Naphthalene	ND		ug/l	0.50	0.14
Xylenes, Total ¹	ND		ug/l	0.50	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	104		80-120
4-Bromofluorobenzene	93		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2526894

Report Date: 05/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2061478-2									
1,2-Dibromoethane	108		-		70-130	-			A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2061988-3								
Methyl tert butyl ether	70		-		70-130	-		20
1,2-Dichloroethane	80		-		70-130	-		20
Benzene	75		-		70-130	-		20
Toluene	72		-		70-130	-		20
Ethylbenzene	75		-		70-130	-		20
p/m-Xylene	78		-		70-130	-		20
o-Xylene	75		-		70-130	-		20
Isopropylbenzene	80		-		70-130	-		20
1,3,5-Trimethylbenzene	78		-		70-130	-		20
1,2,4-Trimethylbenzene	80		-		70-130	-		20
Naphthalene	70		-		70-130	-		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	98				80-120
4-Bromofluorobenzene	101				80-120



Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2526894

Project Number: PROJ-051861

Report Date: 05/03/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2061478-3 QC Sample: L2526578-01 Client ID: MS Sample													
1,2-Dibromoethane	ND	0.249	0.221	89		-	-		65-135	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.249	0.227	91		-	-		65-135	-		20	A
1,2,3-Trichloropropane	ND	0.249	0.224	90		-	-		65-135	-		20	A

Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2526894

Project Number: PROJ-051861

Report Date: 05/03/25

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2061988-6 QC Sample: L2526868-02 Client ID: MS Sample												
Methyl tert butyl ether	ND	4	3.0	75		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	3.1	78		-	-		70-130	-		20
Benzene	ND	4	3.1	78		-	-		70-130	-		20
Toluene	ND	4	3.0	75		-	-		70-130	-		20
Ethylbenzene	ND	4	3.0	75		-	-		70-130	-		20
p/m-Xylene	ND	8	6.1	76		-	-		70-130	-		20
o-Xylene	ND	4	3.0	75		-	-		70-130	-		20
Isopropylbenzene	ND	4	3.0	75		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	3.1	78		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.1	78		-	-		70-130	-		20
Naphthalene	ND	4	2.7	68	Q	-	-		70-130	-		20

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1,2-Dichlorobenzene-d4	100				80-120
4-Bromofluorobenzene	102				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2526894

Report Date: 05/03/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2061988-5 QC Sample: L2526868-01 Client ID: DUP Sample						
Methyl tert butyl ether	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20
Ethylbenzene	ND	ND	ug/l	NC		20
p/m-Xylene	ND	ND	ug/l	NC		20
o-Xylene	ND	ND	ug/l	NC		20
Isopropylbenzene	ND	ND	ug/l	NC		20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC		20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC		20
Naphthalene	ND	ND	ug/l	NC		20
Xylene (Total) ¹	ND	ND	ug/l	NC		20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	104		103		80-120
4-Bromofluorobenzene	92		96		80-120



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

SAMPLE RESULTS

Lab ID: L2526894-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 05/01/25 11:30
 Date Received: 05/01/25
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Dw

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.0010	0.0003	1	05/02/25 08:37	05/02/25 10:11	NA	3,200.8	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2526894

Project Number: PROJ-051861

Report Date: 05/03/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2061481-1										
Lead, Dissolved	ND		mg/l	0.0010	0.0003	1	05/02/25 08:37	05/02/25 08:57	3,200.8	BLR

Prep Information

Digestion Method: NA



Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2526894

Project Number: PROJ-051861

Report Date: 05/03/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2061481-2								
Lead, Dissolved	96		-		85-115	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2526894

Project Number: PROJ-051861

Report Date: 05/03/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2061481-3 QC Sample: L2526868-01 Client ID: MS Sample												
Lead, Dissolved	ND	0.053	0.0520	98		-	-		70-130	-		20

Lab Duplicate Analysis*Batch Quality Control***Project Name:** SUNOCO PIPELINE LP (SPLP)**Project Number:** PROJ-051861**Lab Number:** L2526894**Report Date:** 05/03/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2061481-4 QC Sample: L2526868-01 Client ID: DUP Sample						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2526894-01A	Vial HCl preserved	B	NA		2.1	Y	Absent		524.2(14)
L2526894-01B	Vial HCl preserved	B	NA		2.1	Y	Absent		524.2(14)
L2526894-01C	Vial HCl preserved	B	NA		2.1	Y	Absent		524.2(14)
L2526894-01D	Vial Na ₂ S ₂ O ₃ preserved	B	NA		2.1	Y	Absent		504(14)
L2526894-01E	Vial Na ₂ S ₂ O ₃ preserved	B	NA		2.1	Y	Absent		504(14)
L2526894-01F	Plastic 250ml HNO ₃ preserved	B	<2	<2	2.1	Y	Absent		PB-2008S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2526894**Project Number:** PROJ-051861**Report Date:** 05/03/25**Footnotes**

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

Data Qualifiers

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

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

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2526894
Report Date: 05/03/25

REFERENCES

- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

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

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

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

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

EPA 522, EPA 537.1.

Non-Potable Water

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

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

EPA 245.1 Hg.

SM2340B

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048


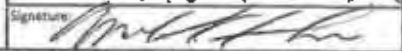

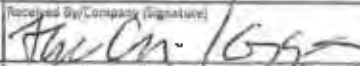
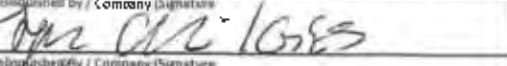




CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

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

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

L2526894
GES - PA - ER


 CHAIN-OF-CUSTODY Analytical Request Document Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/lit/bis/pas-standard-terms.pdf Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields																	
Company Name: GES, Inc.			Contact/Report To: Stephanie Grillo														
Street Address: 410 Eagleview Blvd, Suite 110 Exton, PA 19341			Phone #: (610) 458-1077x3064 / (610) 458-2300														
			E-mail: Sgrillo@gesonline.com; gesinbox@gesonline.com; ges@equisonline.com														
			CITEH_Deliverables@envstid.com; labresults@citeh.com; jwilson@citeh.com; ges@gesonline.com														
Customer Project #:			Invoice To: SUNOCO PIPELINE L.P., Project Manager Gary Hopkins														
Project Name: Sunoco Pipeline LP (SPLP) Washington Crossing			Invoice E-Mail: apinvoicesetp.mailbox@energytransfer.com														
Site Collection Info/Facility ID (if applicable): Washington Crossing, PA			Purchase Order # (if applicable):			Tasking Letter No.: 112209239			Specify Container Size **								
									**Container Size: (1) 1L, (2) 500 mL, (3) 250 mL, (4) 125 mL, (5) 100 mL, (6) 40 mL vial, (7) EnvCore, (8) TerraCore, (9) Other								
			Quote #:						Identify Container Preservative Type***								
									*** (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) 40 mL vial, (7) NaHSO4, (8) Seol, Thiourea, (9) Ascorbic Acid, (10) MeOH, (11) Other								
Time Zone Collected: [] AK [] MT [] MT [] CT [] ET			County/State origin of sample(s): PA			Analysis Requested											
Data Deliverables: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input checked="" type="checkbox"/> EQUIS <input type="checkbox"/> Other: 10% Level IV			Regulatory Program (DW, RCRA, etc.) as applicable: DW			Target VOCs (EPA 524.2) 1,2-Dibromoethane (EDB) (EPA 504.1) Lead (dissolved) (EPA 200.8)					(Pre) Mgr. Scott Enright Acct Num/ Client ID Title # Profile/Template						
			Rush (Pre-approval Required):								DW PWSID # or WW Permit # as applicable: <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> 3 day <input type="checkbox"/> 5 day <input type="checkbox"/> Other:					Lab Use Only Preservation non-conformance identified for sample	
			Date Results Requested: ASAP								Field Filtered (if applicable): <input type="checkbox"/> Yes <input type="checkbox"/> No Analysis: Lead						
*Matrix Codes (omit): N=Volatile, B=Inert, DW=Drinking Water, GW=Ground Water, WW=Wastewater, P=Product, S=Soil/Sediment, OH=Oil, W=Water, T=Trace, B=Cosmetics, V=Vapor, O=Other, SW=Surface Water, S=Sediment, S=Sludge, C=Cauk																	
Customer Sample ID	Matrix	Comp/Grab	Collected (Start)		Composite End		# cont.	Number & Type of Containers		Target VOCs (EPA 524.2) 1,2-Dibromoethane (EDB) (EPA 504.1) Lead (dissolved) (EPA 200.8)	Sample Comment	Preservation non-conformance identified for sample					
			Date	Time	Date	Time		Plastic	Glass								
RW-1	DW	G	5/1/25	12:00	-	-	6	1	5	X	X	X					
Additional Instructions from Pace: Target VOCs by EPA 524.2 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane			Collected By: Michael Horechran			Customer Remarks / Special Conditions / Possible Hazards:											
			Signature: 			Coolers: _____ Inertifier ID: _____ Correction Factor: _____ Temp (°C): _____ Corrected Temp (°C): _____ on ice											
Relinquished By / Company Signature: 			Date/Time: 5/1/25 / 12:00		Received By/Company Signature: 			Date/Time: 5-1-25 / 12:00		Tracking #							
Relinquished By / Company Signature: 			Date/Time: 5-1-25 / 13:00		Received By/Company Signature: 			Date/Time: 5-1-25 / 13:00		Delivered By: <input type="checkbox"/> In Person <input type="checkbox"/> Courier <input type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Other:							
Relinquished By / Company Signature: 			Date/Time: 5-1-25 / 16:00		Received By/Company Signature: 			Date/Time: 5-1-25 / 16:00									
Relinquished By / Company Signature: 			Date/Time: 5-1		Received By/Company Signature: Anthony Green			Date/Time: MAY 01 2025 2500		Page 1 of 1							

Anthony Green
Ch... 5/1/25 03:00
Ch... 5/1/25 03:00



ANALYTICAL REPORT

Lab Number:	L2537988
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	06/20/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2537988-01	RW-1	WATER	E-25060-RL-25300050	06/17/25 12:00	06/17/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

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.

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

Authorized Signature:  Kelly O'Neill

Title: Technical Director/Representative

Date: 06/20/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25**SAMPLE RESULTS**

Lab ID: L2537988-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 06/17/25 12:00
 Date Received: 06/17/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 06/19/25 17:14
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 06/19/25 12:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25**SAMPLE RESULTS**

Lab ID: L2537988-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 06/17/25 12:00
 Date Received: 06/17/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/19/25 11:51
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	1.6		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	0.30	J	ug/l	0.50	0.17	1
p/m-Xylene	2.2		ug/l	1.0	0.33	1
o-Xylene	0.91	J	ug/l	1.0	0.39	1
Xylenes, Total	3.1	J	ug/l	1.0	0.33	1
Isopropylbenzene	1.1		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	8.2		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	21		ug/l	2.5	0.19	1
Naphthalene	14		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	115		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8011
Analytical Date: 06/19/25 13:42
Analyst: MHGExtraction Method: EPA 8011
Extraction Date: 06/19/25 12:24

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2081000-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/19/25 11:26
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2081533-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2537988

Project Number: PROJ-051861

Report Date: 06/20/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2081000-2									
1,2-Dibromoethane	108		-		60-140	-		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2081533-3 WG2081533-4								
Methyl tert butyl ether	93		85		63-130	9		20
Benzene	100		90		70-130	11		20
1,2-Dichloroethane	100		90		70-130	11		20
Toluene	110		93		70-130	17		20
Ethylbenzene	110		90		70-130	20		20
p/m-Xylene	105		90		70-130	15		20
o-Xylene	100		85		70-130	16		20
Isopropylbenzene	97		82		70-130	17		20
1,3,5-Trimethylbenzene	100		83		64-130	19		20
1,2,4-Trimethylbenzene	100		87		70-130	14		20
Naphthalene	94		82		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		105		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	89		89		70-130
Dibromofluoromethane	103		105		70-130



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

SAMPLE RESULTS

Lab ID: L2537988-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 06/17/25 12:00
 Date Received: 06/17/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/19/25 15:50	06/20/25 08:24	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2537988

Project Number: PROJ-051861

Report Date: 06/20/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2081100-1									
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	06/19/25 15:50	06/20/25 07:53	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2537988

Project Number: PROJ-051861

Report Date: 06/20/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2081100-2								
Lead, Dissolved	101		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2537988

Project Number: PROJ-051861

Report Date: 06/20/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2081100-3 QC Sample: L2536072-05 Client ID: MS Sample												
Lead, Dissolved	0.03117	0.53	0.5597	100		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2537988

Report Date: 06/20/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2081100-4 QC Sample: L2536072-05 Client ID: DUP Sample						
Lead, Dissolved	0.03117	0.03199	mg/l	3		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2537988-01A	Vial HCl preserved	A	NA		4.2	Y	Absent		PA-8260(14)
L2537988-01B	Vial HCl preserved	A	NA		4.2	Y	Absent		PA-8260(14)
L2537988-01C	Vial HCl preserved	A	NA		4.2	Y	Absent		PA-8260(14)
L2537988-01D	Vial Na2S2O3 preserved	A	NA		4.2	Y	Absent		8011(14)
L2537988-01E	Vial Na2S2O3 preserved	A	NA		4.2	Y	Absent		8011(14)
L2537988-01F	Plastic 250ml HNO3 preserved	A	<2	<2	4.2	Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25

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: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2537988**Project Number:** PROJ-051861**Report Date:** 06/20/25**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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2537988
Report Date: 06/20/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

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

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

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

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

EPA 522, EPA 537.1.

Non-Potable Water

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

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

EPA 245.1 Hg.

SM2340B

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

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

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

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

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

CHAIN-OF-CUSTODY Analytical Request Document

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pac-standard-terms.pdf>
Chain of Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: GES, Inc.

Street Address: 410 Eagleview Blvd, Suite 110 Exton, PA 19341

Customer Project #:

Project Name: Sunoco Pipeline LP (SPLP) Washington Crossing

Site Collection Info/Facility ID (if applicable): Washington Crossing, PA

Time Zone Collected: | AM | PM | MT | CT | ET

Data Deliverables:
 Level II | Level III | Level IV
 EQUIS
 Other: _____

Regulatory Program (DW, RCRA, etc.) as applicable: DW

Rush (Pre-approval Required):
 2 day | 3 day | 5 day | Other: _____

Date Results Requested:

Contact/Report To: Stephanie Grillo

Phone #: (610) 458-1077x3064

E-mail: Sgrillo@gesonline.com; gesinbox@gesonline.com

CTEH Deliverables@envsbd.com; labresults@cteh.com; jmlison@cteh.com; gesinbox@gesonline.com

Invoice To: Energy Transfer

Invoice E-Mail: apinvoicetp.mailbox@energytransfer.com

Purchase Order # (if applicable): 112203239

Quote #:


County/State origin of sample(s): PA

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): Yes | No

Analyst: Lead

L2537988
GES - PA - ER



Specify Container Size **

6	6	3			
---	---	---	--	--	--

Identify Container Preservative Type***

4	8	2			
---	---	---	--	--	--

Analysis Requested

Target VOCs (EPA 8260) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDB, EDC	Lead (dissolved) (EPA 7420)	EQUIS (EPA 811)			
--	-----------------------------	-----------------	--	--	--

Proj. Mgr.	Acct/Num / Client ID	Table #	Profile/Template		
------------	----------------------	---------	------------------	--	--

Customer Sample ID	Matrix	Camp/ Grab	Collected (Start)		Composite End		# cont.	Number & Type of Containers		Target VOCs (EPA 8260) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDB, EDC	Lead (dissolved) (EPA 7420)	EQUIS (EPA 811)	Sample Comment	Preservation non-conformance identified for sample
			Date	Time	Date	Time		Plastic	Glass					
RW-1	GW	G	6/17/25	1200	-	-	6	1	5	X	X	X		
RW-2	GW	G	-	-	-	-	6	1	5	X	X	X		
RW-3	GW	G	-	-	-	-	6	1	5	X	X	X		
RW-4	GW	G	-	-	-	-	6	1	5	X	X	X		

Additional instructions from Pace: Target VOCs by EPA 8260 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane

Collected by: KEVIN TROUTMAN

Signature: *[Signature]*

Customer Remarks / Special Conditions / Possible Hazards:

# coolers	Thermometer ID	Correction Factor	Temp (°C)	Corrected Temp (°C)	Ice on Ice
-----------	----------------	-------------------	-----------	---------------------	------------

Released by / Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17/25 1215	Received by/Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17/25 1215
Released by / Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17/25 1345	Received by/Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17 1345
Released by / Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17 @ 1500	Received by/Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17/25 15:03
Released by / Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17/25- 1835	Received by/Company Signature: <i>[Signature]</i> / GES	Date/Time: 6/17 1835

Delivered By: In Person | Cooler | Tank | UPS | Other: _____

Page of

Anthony Green

Anthony Green
6/17
Collected 6/18/25 0435

Anthony Green
6/17
6/18/25 0435

JUN 17 2025 2320
Collected 6/18/25 0435

06/18/25-0435



ANALYTICAL REPORT

Lab Number:	L2539687
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	06/26/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2539687-01	RW-2-48-63FT	WATER	E-25060-RL-25300050	06/24/25 11:20	06/24/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

Case Narrative (continued)

Report Submission


June 26, 2025: This final report includes the results of all requested analyses.

June 25, 2025: This is a preliminary report.

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

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/26/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2539687**Project Number:** PROJ-051861**Report Date:** 06/26/25**SAMPLE RESULTS**

Lab ID: L2539687-01
 Client ID: RW-2-48-63FT
 Sample Location: E-25060-RL-25300050

Date Collected: 06/24/25 11:20
 Date Received: 06/24/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 06/25/25 16:06
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 06/25/25 14:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2539687**Project Number:** PROJ-051861**Report Date:** 06/26/25**SAMPLE RESULTS**

Lab ID: L2539687-01 D

Date Collected: 06/24/25 11:20

Client ID: RW-2-48-63FT

Date Received: 06/24/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 06/25/25 12:55

Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	10	1.7	10
Benzene	290		ug/l	5.0	1.6	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Toluene	500		ug/l	7.5	2.0	10
Ethylbenzene	220		ug/l	5.0	1.7	10
p/m-Xylene	880		ug/l	10	3.3	10
o-Xylene	500		ug/l	10	3.9	10
Xylenes, Total	1400		ug/l	10	3.3	10
Isopropylbenzene	42		ug/l	5.0	1.9	10
1,3,5-Trimethylbenzene	350		ug/l	25	2.2	10
1,2,4-Trimethylbenzene	1100		ug/l	25	1.9	10
Naphthalene	460		ug/l	10	2.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2539687**Project Number:** PROJ-051861**Report Date:** 06/26/25**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8011
Analytical Date: 06/25/25 15:32
Analyst: MHGExtraction Method: EPA 8011
Extraction Date: 06/25/25 14:43

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2083393-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/25/25 11:41
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2083956-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2083393-2									
1,2-Dibromoethane	102		-		60-140	-		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2083956-3 WG2083956-4								
Methyl tert butyl ether	100		80		63-130	22	Q	20
Benzene	110		80		70-130	32	Q	20
1,2-Dichloroethane	110		87		70-130	23	Q	20
Toluene	110		84		70-130	27	Q	20
Ethylbenzene	100		82		70-130	20		20
p/m-Xylene	100		80		70-130	22	Q	20
o-Xylene	100		80		70-130	22	Q	20
Isopropylbenzene	98		75		70-130	27	Q	20
1,3,5-Trimethylbenzene	100		78		64-130	25	Q	20
1,2,4-Trimethylbenzene	100		80		70-130	22	Q	20
Naphthalene	97		74		70-130	27	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		109		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	99		101		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2083393-3 QC Sample: L2539687-01 Client ID: RW-2-48-63FT													
1,2-Dibromoethane	ND	0.25	0.234	94		-	-		60-140	-		20	A



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

SAMPLE RESULTS

Lab ID: L2539687-01

Date Collected: 06/24/25 11:20

Client ID: RW-2-48-63FT

Date Received: 06/24/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/25/25 10:39	06/25/25 14:48	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2083270-1										
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/25/25 10:39	06/25/25 14:21	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2083270-2								
Lead, Dissolved	99		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2539687

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083270-3 QC Sample: L2539687-01 Client ID: RW-2-48-63FT												
Lead, Dissolved	ND	0.53	0.5388	102		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2539687

Report Date: 06/26/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083270-4 QC Sample: L2539687-01 Client ID: RW-2-48-63FT						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2539687**Project Number:** PROJ-051861**Report Date:** 06/26/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2539687-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2539687-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2539687-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2539687-01D	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2539687-01E	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2539687-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2539687**Project Number:** PROJ-051861**Report Date:** 06/26/25**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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2539687
Report Date: 06/26/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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.



Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

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Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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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.

06/25/25

Pace Pace® Location Requested (City/State): **Westborough, MA** **CHAIN-OF-CUSTODY Analytical Request Document**
Chain-of-Custody is a EPA DOCUMENT - Complete all relevant fields

Company Name: **GES, Inc.** Contact Person: **Stephanie Grillo**
 Street Address: **410 Eagleview Blvd, Suite 110** Phone #: **(610) 458-1077x3064 / (610) 458-2300**
Exton, PA 19341 E-Mail: **SGrillo@gesonline.com; gesinbox@gesonline.com**
 Customer Project #: _____ C. E-Mail: **CTEH.Deliverables@envsrd.com; ges@gesonline.com**
 Project Name: **Sunoco Pipeline LP (SPLP) Washington Crossing** Invoice #: **ges-invoices@gesonline.com**
 Site Collection Info/Facility ID (as applicable): **Washington Crossing, PA** Invoice E-mail: **ges-invoices@gesonline.com**
 Purchase Order # If applicable: **0225040-06-242** Date Results Requested: **ASAP**

Time Zone Collected: AT ET MT CF ET County/State origin of sample(s): **PA**

Data Deliverables: Level I Level II Level III QAC Other: _____

Regulatory Program (DW, RCRA, etc.) as applicable: **DW** Reportable: Yes No
 Rush (Pre-approval required): Same Day 1 Day 2 Day 3 Day Other: **24 hour** DW PWSB # or WW Permit # as applicable: _____
 Date Results Requested: **ASAP** Field Filtered (if applicable): Yes No
 Analysis: **Lead**

* Matrix Codes (found in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Packed (P), Soil/Sediment (SS), Other (O), Vapor (VP), Tissue (TS), Sludge (S), Gas (G), Other (OT), Surface Water (SW), Sediment (SED), Sludge (S), Gas (G), Leachate (L), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start		Collected or Composite End		# Cont.	Result Classen		VOCs (see below), EPA 8260C	1,2-Dichloroethane, EPA 8011	Lead (dissolved), EPA 821-C	Proj. Mgr	Account / Client ID	Table #	Profile / Template	Prng / Bottle Ord. ID	Sample Comment
			Date	Time	Date	Time		Result	Units									
-01 RW-2 - 48-63 ft	GW	G	6/24/2025	1120			6			X	X	X						

Additional Instructions from Pace®: **VOCs by EPA 524.2 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane**

Collected By: **CHRIS MCKAY** Signature: *[Signature]*

Customer Remarks / Special Conditions / Possible Hazards: _____

# Contain.	Thermometer ID	Correction Factor (°C)	Obs. Temp. (°C)	Corrected Temp. (°C)	() On Ice

Received by Customer (Signature): *[Signature]* Date/Time: **6/24/25 1145** Tracking Number: _____
 Received by Company (Signature): **IGES** Date/Time: **6/24/25 1450** Delivered by: R-Permit Courier
 Received by Customer (Signature): **ANTHONY GREEN** Date/Time: **6/24/25 1340** Delivered by: FedEx UPS Other
 Received by Company (Signature): **Anthony Green** Date/Time: **6/24/25 2300** Page: _____ of _____

06/25/25-0315



ANALYTICAL REPORT

Lab Number:	L2540008
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	06/26/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2540008-01	RW-3-47-65FT	WATER	E-25060-RL-25300050	06/24/25 16:00	06/25/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

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.

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: 06/26/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540008**Project Number:** PROJ-051861**Report Date:** 06/26/25**SAMPLE RESULTS**

Lab ID: L2540008-01
 Client ID: RW-3-47-65FT
 Sample Location: E-25060-RL-25300050

Date Collected: 06/24/25 16:00
 Date Received: 06/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 06/26/25 14:59
 Analyst: HNY

Extraction Method: EPA 8011
 Extraction Date: 06/26/25 13:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540008**Project Number:** PROJ-051861**Report Date:** 06/26/25**SAMPLE RESULTS**

Lab ID: L2540008-01 D

Date Collected: 06/24/25 16:00

Client ID: RW-3-47-65FT

Date Received: 06/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 06/26/25 13:51

Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	4.0	0.66	4
Benzene	100		ug/l	2.0	0.64	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
Toluene	200		ug/l	3.0	0.81	4
Ethylbenzene	56		ug/l	2.0	0.67	4
p/m-Xylene	500		ug/l	4.0	1.3	4
o-Xylene	330		ug/l	4.0	1.6	4
Xylenes, Total	830		ug/l	4.0	1.3	4
Isopropylbenzene	15		ug/l	2.0	0.75	4
1,3,5-Trimethylbenzene	230		ug/l	10	0.87	4
1,2,4-Trimethylbenzene	530		ug/l	10	0.76	4
Naphthalene	130		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 06/26/25 14:26
Analyst: HNY

Extraction Method: EPA 8011
Extraction Date: 06/26/25 13:05

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2083902-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/26/25 12:07
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2083980-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2083902-2									
1,2-Dibromoethane	99		-		60-140	-		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2083980-3 WG2083980-4								
Methyl tert butyl ether	81		83		63-130	2		20
Benzene	100		98		70-130	2		20
1,2-Dichloroethane	98		99		70-130	1		20
Toluene	99		96		70-130	3		20
Ethylbenzene	99		96		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		90		70-130	5		20
Isopropylbenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		97		64-130	3		20
1,2,4-Trimethylbenzene	100		97		70-130	3		20
Naphthalene	75		83		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		102		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	102		102		70-130
Dibromofluoromethane	101		98		70-130



Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2083902-3 QC Sample: L2540008-01 Client ID: RW-3-47-65FT													
1,2-Dibromoethane	ND	0.25	0.246	98		-	-		60-140	-		20	A



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

SAMPLE RESULTS

Lab ID: L2540008-01

Date Collected: 06/24/25 16:00

Client ID: RW-3-47-65FT

Date Received: 06/25/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/26/25 08:15	06/26/25 14:14	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2083677-1										
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/26/25 08:15	06/26/25 13:46	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2083677-2								
Lead, Dissolved	106		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540008

Project Number: PROJ-051861

Report Date: 06/26/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083677-3 QC Sample: L2540008-01 Client ID: RW-3-47-65FT												
Lead, Dissolved	ND	0.53	0.5651	107		-	-		75-125	-		20

Lab Duplicate Analysis*Batch Quality Control***Project Name:** SUNOCO PIPELINE LP (SPLP)**Project Number:** PROJ-051861**Lab Number:** L2540008**Report Date:** 06/26/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083677-4 QC Sample: L2540008-01 Client ID: RW-3-47-65FT						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540008**Project Number:** PROJ-051861**Report Date:** 06/26/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2540008-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540008-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540008-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540008-01D	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2540008-01E	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2540008-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540008**Project Number:** PROJ-051861**Report Date:** 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

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Report Date: 06/26/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540008
Report Date: 06/26/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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.



Pace Analytical Services LLCID No.: **17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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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.

06/26/25

Pace Pace® Location Requested (City/State): **CHAIN-OF-CUSTODY Analytical Request Document**
 Westborough, MA Chain of Custody is a LEGAL DOCUMENT - Complete at Present State

Company Name: **GES, Inc.** Contact/Request To: **Stephanie Grillo**
 Street Address: **410 Eagleview Blvd, Suite 110** Phone #: **(610) 458-1077 x3064 / (610) 458-2300**
 Exton, PA 19341 E-Mail: **SGrillo@gesonline.com; gesinbox@gesonline.com**
 Customer Project #: CTEH_Deliverables@unvald.com; ges@equisonline.com
 Project Name: **Sunoco Pipeline LP (SPLP) Washington Crossing** Invoice E-mail: **ges-invoices@gesonline.com**
 Site Collection Method/Depth #: (as applicable) Purchase Order # (if applicable): **0225040-06-242** Quote #: **ges-invoices@gesonline.com**

LAB USE ONLY: Affix Workorder/Inch Label Here:
 **62540008**
 Scan QR Code for instructions

Specify Container Size **
 6 6 3
 Specify Container Preservation Type***
 4 8 2

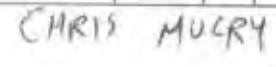
Matrix Codes (insert as Matrix Code below): LAK PT MP CT FT
 County/State origin of sample(s): **PA**

Date Deliverable: **DW** Reportable: Yes No
 Regulatory Program (DW, RCRA, etc.) as applicable:
 Level: Level I Level II Level III
 ASAP Rush (Pre-approval required): Same Day 1 Day 2 Day 3 Day Other: **24 hour**
 Date Results Requested: **ASAP** DW Permit # (if applicable):
 Field Filtered (if applicable): Yes No
 Analysis: **LEAD**

* Matrix Codes (insert as Matrix Code below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (S), Oil (O), Wipe (WF), Tissue (TS), Biosay (BL), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Creek (CK), Leachate (LL), Residue (RS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start		Collected or Composite End		# Cont.	Method Code(s)		VOCs (Ref below: EPA 524.2)	1,2-Dichloroethane, EPA 8011	Lab Use Only Label (attach) EPA 8011	Proj Mgr	AcctName / Client ID	Table #	Profile / Template	Presig / Bottle Ord. ID	Sample Comment	Preservation non-confirmance identified for sample	
			Date	Time	Date	Time		Result	Units											
-01 RW-3 - 47-65 ft	GW	G	6/25/25	1600			6			X	X	X								

Additional Instructions from Pace®:
 VOCs by EPA 524.2 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane

Collected By: Printed Name: **CHRIS MURRY**
 Signature: 

Customer Remarks / Special Conditions / Potential Hazards:
 # Containers: Thermometer ID: Correction Factor (°C): Obs. Temp (°C): Custodial Temp (°C): On Ice

Received by/Company Signature: **GES** Date/Time: **6/25/25 1411** Received by/Company Signature: **PACE** Date/Time: **6/25/25 1412** Tracking Number:
 Received by/Company Signature: **Anthony Green** Date/Time: **6/25/25 1840** Received by/Company Signature: **Anthony Green** Date/Time: **JUN 25 2025 2315**
 Received by/Company Signature: **Anthony Green** Date/Time: **6/25/25** Received by/Company Signature: **Anthony Green** Date/Time: **6/26/25**

6/26/25 0430



ANALYTICAL REPORT

Lab Number:	L2540009
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	06/27/25

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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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2540009-01	RW-3-30-48FT	WATER	E-25060-RL-25300050	06/25/25 10:25	06/25/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

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.

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

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 06/27/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540009**Project Number:** PROJ-051861**Report Date:** 06/27/25**SAMPLE RESULTS**

Lab ID: L2540009-01
 Client ID: RW-3-30-48FT
 Sample Location: E-25060-RL-25300050

Date Collected: 06/25/25 10:25
 Date Received: 06/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 06/26/25 15:07
 Analyst: HNY

Extraction Method: EPA 8011
 Extraction Date: 06/26/25 13:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540009**Project Number:** PROJ-051861**Report Date:** 06/27/25**SAMPLE RESULTS**

Lab ID: L2540009-01 D
 Client ID: RW-3-30-48FT
 Sample Location: E-25060-RL-25300050

Date Collected: 06/25/25 10:25
 Date Received: 06/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/27/25 10:12
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	4.0	0.66	4
Benzene	100		ug/l	2.0	0.64	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
Toluene	200		ug/l	3.0	0.81	4
Ethylbenzene	43		ug/l	2.0	0.67	4
p/m-Xylene	440		ug/l	4.0	1.3	4
o-Xylene	280		ug/l	4.0	1.6	4
Xylenes, Total	720		ug/l	4.0	1.3	4
Isopropylbenzene	16		ug/l	2.0	0.75	4
1,3,5-Trimethylbenzene	210		ug/l	10	0.87	4
1,2,4-Trimethylbenzene	540		ug/l	10	0.76	4
Naphthalene	120		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540009**Project Number:** PROJ-051861**Report Date:** 06/27/25**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8011
Analytical Date: 06/26/25 14:26
Analyst: HNYExtraction Method: EPA 8011
Extraction Date: 06/26/25 13:05

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG2083902-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/27/25 09:46
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2084402-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540009

Project Number: PROJ-051861

Report Date: 06/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG2083902-2									
1,2-Dibromoethane	99		-		60-140	-		20	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2084402-3 WG2084402-4								
Methyl tert butyl ether	90		79		63-130	13		20
Benzene	99		90		70-130	10		20
1,2-Dichloroethane	96		86		70-130	11		20
Toluene	96		89		70-130	8		20
Ethylbenzene	94		87		70-130	8		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		85		70-130	11		20
Isopropylbenzene	95		85		70-130	11		20
1,3,5-Trimethylbenzene	97		86		64-130	12		20
1,2,4-Trimethylbenzene	95		87		70-130	9		20
Naphthalene	82		76		70-130	8		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	106		105		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	101		104		70-130



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540009

Project Number: PROJ-051861

Report Date: 06/27/25

SAMPLE RESULTS

Lab ID: L2540009-01

Date Collected: 06/25/25 10:25

Client ID: RW-3-30-48FT

Date Received: 06/25/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/26/25 08:15	06/26/25 15:12	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540009

Project Number: PROJ-051861

Report Date: 06/27/25

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2083677-1										
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/26/25 08:15	06/26/25 13:46	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2083677-2								
Lead, Dissolved	106		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2540009

Project Number: PROJ-051861

Report Date: 06/27/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083677-3 QC Sample: L2540008-01 Client ID: MS Sample												
Lead, Dissolved	ND	0.53	0.5651	107		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2540009

Report Date: 06/27/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2083677-4 QC Sample: L2540008-01 Client ID: DUP Sample						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540009**Project Number:** PROJ-051861**Report Date:** 06/27/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2540009-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540009-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540009-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		PA-8260(14)
L2540009-01D	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2540009-01E	Vial Na2S2O3 preserved	A	NA		3.5	Y	Absent		8011(14)
L2540009-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2540009**Project Number:** PROJ-051861**Report Date:** 06/27/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2540009
Report Date: 06/27/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, SM4500CI-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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

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

EPA 522, EPA 537.1.

Non-Potable Water

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

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

EPA 245.1 Hg.

SM2340B

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

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

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

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

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



ANALYTICAL REPORT

Lab Number:	L2535243
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	06/10/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2535243-01	RW-4	WATER	E-25060-RL-25300050	06/05/25 10:30	06/05/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

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.

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

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 06/10/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2535243**Project Number:** PROJ-051861**Report Date:** 06/10/25**SAMPLE RESULTS**

Lab ID: L2535243-01
 Client ID: RW-4
 Sample Location: E-25060-RL-25300050

Date Collected: 06/05/25 10:30
 Date Received: 06/05/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/07/25 12:39
 Analyst: KAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	0.73		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	0.20	J	ug/l	0.75	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
Ethylbenzene	0.99		ug/l	0.50	0.17	1
p/m-Xylene	6.1		ug/l	1.0	0.33	1
o-Xylene	7.4		ug/l	1.0	0.39	1
Xylenes, Total	14		ug/l	1.0	0.33	1
Isopropylbenzene	0.60		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	13		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	16		ug/l	2.5	0.19	1
Naphthalene	2.3		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	111		70-130



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/25 11:46
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG2076722-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
1,2-Dibromoethane	ND		ug/l	2.0	0.19
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG2076722-3 WG2076722-4								
Methyl tert butyl ether	110		110		63-130	0		20
Benzene	120		120		70-130	0		20
1,2-Dichloroethane	140	Q	140	Q	70-130	0		20
Toluene	110		110		70-130	0		20
1,2-Dibromoethane	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	115		110		70-130	4		20
o-Xylene	110		110		70-130	0		20
Isopropylbenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
Naphthalene	92		75		70-130	20		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	125		121		70-130
Toluene-d8	97		95		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	103		102		70-130



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2535243**Project Number:** PROJ-051861**Report Date:** 06/10/25**SAMPLE RESULTS**

Lab ID: L2535243-01

Date Collected: 06/05/25 10:30

Client ID: RW-4

Date Received: 06/05/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/07/25 15:10	06/10/25 08:46	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2535243

Project Number: PROJ-051861

Report Date: 06/10/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG2076038-1									
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	06/07/25 15:10	06/09/25 10:00	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2076038-2								
Lead, Dissolved	101		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2535243

Project Number: PROJ-051861

Report Date: 06/10/25

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>Qual</u>	<u>RPD Limits</u>
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2076038-3 QC Sample: L2535207-01 Client ID: MS Sample												
Lead, Dissolved	0.00081J	0.53	0.5381	102		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2535243

Report Date: 06/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2076038-4 QC Sample: L2535207-01 Client ID: DUP Sample						
Lead, Dissolved	0.00081J	0.00076J	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2535243**Project Number:** PROJ-051861**Report Date:** 06/10/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2535243-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2535243-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2535243-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2535243-01D	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2535243-01E	Vial HCl preserved	A	NA		2.9	Y	Absent		PA-8260(14)
L2535243-01F	Plastic 250ml HNO3 preserved	A	<2	<2	2.9	Y	Absent		PB-6020S(180)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2535243**Project Number:** PROJ-051861**Report Date:** 06/10/25

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: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2535243**Project Number:** PROJ-051861**Report Date:** 06/10/25**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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2535243
Report Date: 06/10/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

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

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

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

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

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

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

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

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

L2535243

CHAIN-OF-CUSTODY Analytical Request Document

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <http://info.pacelabs.com/files/pace-standard-terms.pdf>
Chain of Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: GFS, Inc.		Contact/Report To: Stephanie Grillo	
Street Address: 410 Eagleview Blvd, Suite 110 Exton, PA 19341		Phone #: (610) 458-1077x3064	
		E-mail: Sgrillo@gesonline.com; gesinbox@gesonline.com	
		C/TEH_Deliverables@envytd.com, labresults@caeh.com; ywilson@ciab.com; gesinbox@gesonline.com	
Customer Project #:		Invoice To: Energy Transfer	
Project Name: Sunoco Pipeline LP (SPLP) Washington Crossing		Invoice E-Mail: spmweiser@pa.mailbox@energytransfer.com	
Site Collection Info/Facility ID (if applicable): Washington Crossing, PA		Purchase Order # (if applicable): 112203239	
		Quote #:	
Time Zone Collected: [] AK [] PT [] MT [] CT [] ET		County/State origin of sample(s): PA	
Data Deliverables: [] Level II [] Level III [] Level IV [X] EQUIS [] Other: _____		Regulatory Program (DW, RCRA, etc.) as applicable: DW	
		Rush (Pre-approval Required): [] 2 day [X] 3 day [] 5 day [] Other: _____	
		Date Results Requested:	
		Field Filtered (if applicable): [X] Yes [] No	
		Analytic Lead	
*Matrix Codes: Insert in Matrix Description: (M) Aqueous (AW), (G) Ground Water (GW), (W) Waste Water (WW), (P) Product (PL), (S) Solids (S), (O) Oil, (V) Vapor (V), (F) Other (OT), (S) Surface Water (SW), (B) Bottom (B), (D) Dredge (D), (C) Cook (C)			

Customer Sample ID	Matrix	Comp/Grab	Collected (Start)		Composite End		# cont.	Number & Type of Containers		Target VOCs (EPA 8260) BTEX, MTBE, cumene, naphthalene, 1,2,4-TMB, 1,3,5-TMB, EDB, EDC	Lead (dissolved) (EPA 7420)	Analysis Requested	Pres. Mgr.	Acct/Hunt/Client ID	Table #	Profile/Template	Sample Comment	Preservation non-confirmed (identified for sample)	
			Date	Time	Date	Time		Plastic	Glass										
RW-1	GW	G	-	-	-	-	6	1	5	X	X								
RW-2	GW	G	-	-	-	-	6	1	5	X	X								
RW-3	GW	G	-	-	-	-	6	1	5	X	X								
RW-4	GW	G	6/5/25	1030	-	-	6	1	5	X	X								

Additional instructions from Pace: Target VOCs by EPA 8260 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane		Collected By: <u>Jason Crone</u>		Customer Remarks / Special Conditions / Possible Hazards:					
		Signature: <u>Jason Crone</u>		# coolers:	Thermometer ID:	Correction Factor:	Temp (°C):	Corrected Temp (°C):	[] on ice

Relinquished By / Company Signature: <u>Jason Crone</u>	Date/Time: <u>6/5/25 / 1611</u>	Received By / Company Signature: <u>Lucretia Pace</u>	Date/Time: <u>6/5/25 / 1611</u>	Tracking #:
Relinquished By / Company Signature: <u>Lucretia Pace</u>	Date/Time: <u>6/5/25 / 1830</u>	Received By / Company Signature: _____	Date/Time: <u>6/5/25 / 2310</u>	Delivered By: _____
Relinquished By / Company Signature: _____	Date/Time: <u>6/5</u>	Received By / Company Signature: <u>Anthony Green</u>	Date/Time: <u>JUN 05 2025 2310</u>	Delivered By: _____
Relinquished By / Company Signature: <u>Anthony Green</u>	Date/Time: _____	Received By / Company Signature: _____	Date/Time: <u>6/6/25 0350</u>	Page: _____ of _____



ANALYTICAL REPORT

Lab Number:	L2550245
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	08/13/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2550245-01	RW-1	WATER	E-25060-RL-25300050	08/11/25 14:18	08/11/25
L2550245-02	MW-4S	WATER	E-25060-RL-25300050	08/11/25 11:50	08/11/25
L2550245-03	MW-4D	WATER	E-25060-RL-25300050	08/11/25 11:20	08/11/25
L2550245-04	MW-5S	WATER	E-25060-RL-25300050	08/11/25 13:26	08/11/25
L2550245-05	MW-5D	WATER	E-25060-RL-25300050	08/11/25 12:42	08/11/25
L2550245-06	TRIP BLANK	WATER	E-25060-RL-25300050	08/11/25 14:25	08/11/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

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.

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

Authorized Signature:  Kelly O'Neill

Title: Technical Director/Representative

Date: 08/13/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-01

Date Collected: 08/11/25 14:18

Client ID: RW-1

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/12/25 19:10

Analytical Date: 08/12/25 23:12

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-01
 Client ID: RW-1
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 14:18
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 21:35
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	3.0		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	0.42	J	ug/l	0.50	0.17	1
p/m-Xylene	1.6		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	1.6		ug/l	1.0	0.33	1
Isopropylbenzene	1.3		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	6.6		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	22		ug/l	2.5	0.19	1
Naphthalene	15		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	117		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-02
 Client ID: MW-4S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 11:50
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/12/25 23:20
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-02
 Client ID: MW-4S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 11:50
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 21:59
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	117		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-03
 Client ID: MW-4D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 11:20
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/12/25 23:28
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-03
 Client ID: MW-4D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 11:20
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 22:24
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	117		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-04
 Client ID: MW-5S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 13:26
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/12/25 23:37
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-04
 Client ID: MW-5S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 13:26
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 22:48
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	118		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-05
 Client ID: MW-5D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 12:42
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/12/25 23:45
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-05
 Client ID: MW-5D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 12:42
 Date Received: 08/11/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 23:12
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	120		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-06
 Client ID: TRIP BLANK
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 14:25
 Date Received: 08/11/25
 Field Prep: None

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 08/12/25 23:53
 Analyst: MHG

Extraction Method: EPA 8011
 Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**SAMPLE RESULTS**

Lab ID: L2550245-06
 Client ID: TRIP BLANK
 Sample Location: E-25060-RL-25300050

Date Collected: 08/11/25 14:25
 Date Received: 08/11/25
 Field Prep: None

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/12/25 21:11
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	118		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 08/12/25 21:17
Analyst: MHG

Extraction Method: EPA 8011
Extraction Date: 08/12/25 19:10

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01-06 Batch: WG2102052-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D
Analytical Date: 08/12/25 20:46
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG2102328-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	117		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG2102052-2									
1,2-Dibromoethane	136		-		60-140	-		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG2102328-3 WG2102328-4								
Methyl tert butyl ether	96		96		63-130	0		20
Benzene	99		95		70-130	4		20
1,2-Dichloroethane	110		110		70-130	0		20
Toluene	95		92		70-130	3		20
Ethylbenzene	96		94		70-130	2		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		90		70-130	0		20
Isopropylbenzene	94		90		70-130	4		20
1,3,5-Trimethylbenzene	95		91		64-130	4		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
Naphthalene	88		89		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		111		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	90		89		70-130
Dibromofluoromethane	114		111		70-130



Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2102052-3 QC Sample: L2550245-01 Client ID: RW-1													
1,2-Dibromoethane	ND	0.199	0.261	131		-	-		60-140	-		20	A

METALS



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-01

Date Collected: 08/11/25 14:18

Client ID: RW-1

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 07:55	EPA 3005A	1,6020B	SMV



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-02

Date Collected: 08/11/25 11:50

Client ID: MW-4S

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 08:00	EPA 3005A	1,6020B	SMV



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-03

Date Collected: 08/11/25 11:20

Client ID: MW-4D

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 08:06	EPA 3005A	1,6020B	SMV



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-04

Date Collected: 08/11/25 13:26

Client ID: MW-5S

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 08:22	EPA 3005A	1,6020B	SMV



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

SAMPLE RESULTS

Lab ID: L2550245-05

Date Collected: 08/11/25 12:42

Client ID: MW-5D

Date Received: 08/11/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 08:27	EPA 3005A	1,6020B	SMV



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG2101999-1									
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	08/12/25 12:36	08/13/25 07:21	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG2101999-2								
Lead, Dissolved	100		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2550245

Project Number: PROJ-051861

Report Date: 08/13/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG2101999-7 WG2101999-8 QC Sample: L2549720-04 Client ID: MS Sample												
Lead, Dissolved	0.00052J	0.53	0.5431	102		0.5982	113		75-125	10		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2550245-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-01D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-01E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-01F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2550245-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-02D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-02E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-02F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2550245-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-03D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-03E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-03F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2550245-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-04D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-04E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2550245-04F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2550245-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-05D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-05E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-05F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2550245-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2550245-06D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2550245-06E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25

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: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2550245**Project Number:** PROJ-051861**Report Date:** 08/13/25**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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2550245
Report Date: 08/13/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 28

Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-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, SM4500CL-G, 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.**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, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1:** Hg. **EPA 245.7:** Hg.**SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 28

Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

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

CT PH-0826, IL 200077, IN C-MA-03, KY KY98045, 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

MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, 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, LA 245052, 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.

8/12/25

CHAIN-OF-CUSTODY Analytical Request Document										L2550245 GES - PA - ER																																																																																																																																																										
<p>Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pace-standard-terms.pdf Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields.</p>					Company Name: GES, Inc. Contact/Report To: Stephanie Grillo Street Address: 410 Eagleview Blvd, Suite 110 Exton, PA 19341 Phone #: (610) 458-1077x3064 E-mail: Sgrillo@gesonline.com; gesinbox@gesonline.com CTEH_Deliverables@envstl.com; labresults@cteh.com; jwfson@cteh.com; gesinbox@gesonline.com					Customer Project #: Invoice To: Energy Transfer					Project Name: Sunoco Pipeline LP (SPLP) Washington Crossing Invoice E-Mail: apinvoices@energytransfer.com					Specify Container Size ** 6 3 6					**Container Size: (1) 1L, (2) 500 mL, (3) 250 mL, (4) 125 mL, (5) 100 mL, (6) 40 mL vial, (7) EnvCare, (8) TerraCura, (9) Other																																																																																																																																											
Site Collection Info/Facility ID (if applicable): Washington Crossing, PA					Purchase Order # (if applicable): 112203239					Identify Container Preservative Type*** 4 2 8					*** (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) H2O2, (6) 40 mL vial, (7) NaOH, (8) Solid Phosphate, (9) Ascorbic Acid, (10) NaOH, (11) Other																																																																																																																																																					
Time Zone Collected: [] AK [] BT [] MT [] CT [] ET					County/State origin of sample(s): PA					Analysis Requested Target VOCs (EPA 8260D) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDC Lead (dissolved) (EPA 6020B) EDB (EPA 8011)					Prop. Mgr. Acct/Mgr/ Client ID Table # Profile/Template																																																																																																																																																					
Data Deliverables: [] Level II [] Level III [] Level IV [X] EQUIS [] Other: _____					Regulatory Program (DW, RCRA, etc.) if applicable: DW Rush (Pre-approval Required): [] 2 day [X] 3 day [] 5 day [] Other: _____ Date Results Requested: _____ DW PWSID # or WW Permit # is applicable: _____ Field Filtered (if applicable): [X] Yes [] No Analysis: Lead					Lab Use Only Preservation non-conformance identified for sample					Sample Comment All dissolved lead samples were field filtered																																																																																																																																																					
*Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product Oil, Fuel/Oil (FO), Oil (OL), Wastewater (WW), Tissue (TS), Residue (RL), Vapor (V), Other (OT), Surface Water (SW), Sediment (SD), Sludge (SL), Cook (C)										<table border="1"> <thead> <tr> <th rowspan="2">Customer Sample ID</th> <th rowspan="2">Matrix</th> <th rowspan="2">Comp/Grab</th> <th colspan="2">Collected (Start)</th> <th colspan="2">Composite End</th> <th rowspan="2"># cont.</th> <th colspan="2">Number & Type of Containers</th> <th rowspan="2">Target VOCs (EPA 8260D) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDC</th> <th rowspan="2">Lead (dissolved) (EPA 6020B)</th> <th rowspan="2">EDB (EPA 8011)</th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> </tr> <tr> <th>Date</th> <th>Time</th> <th>Date</th> <th>Time</th> <th>Plastic</th> <th>Glass</th> </tr> </thead> <tbody> <tr> <td>RW-1</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>14:18</td> <td>-</td> <td>-</td> <td>6</td> <td>1</td> <td>5</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MW-4S</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>11:50</td> <td>-</td> <td>-</td> <td>6</td> <td>1</td> <td>5</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MW-4D</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>11:20</td> <td>-</td> <td>-</td> <td>6</td> <td>1</td> <td>5</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MW-5S</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>13:26</td> <td>-</td> <td>-</td> <td>6</td> <td>1</td> <td>5</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MW-5D</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>12:43</td> <td>-</td> <td>-</td> <td>6</td> <td>1</td> <td>5</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Trip Blank</td> <td>GW</td> <td>G</td> <td>8/11/25</td> <td>14:25</td> <td>-</td> <td>-</td> <td>4</td> <td></td> <td>4</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Customer Sample ID	Matrix	Comp/Grab	Collected (Start)		Composite End		# cont.	Number & Type of Containers		Target VOCs (EPA 8260D) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDC	Lead (dissolved) (EPA 6020B)	EDB (EPA 8011)							Date	Time	Date	Time	Plastic	Glass	RW-1	GW	G	8/11/25	14:18	-	-	6	1	5	X	X	X								MW-4S	GW	G	8/11/25	11:50	-	-	6	1	5	X	X	X								MW-4D	GW	G	8/11/25	11:20	-	-	6	1	5	X	X	X								MW-5S	GW	G	8/11/25	13:26	-	-	6	1	5	X	X	X								MW-5D	GW	G	8/11/25	12:43	-	-	6	1	5	X	X	X								Trip Blank	GW	G	8/11/25	14:25	-	-	4		4	X		X							
Customer Sample ID	Matrix	Comp/Grab	Collected (Start)		Composite End		# cont.	Number & Type of Containers		Target VOCs (EPA 8260D) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDC	Lead (dissolved) (EPA 6020B)	EDB (EPA 8011)																																																																																																																																																								
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Trip Blank	GW	G	8/11/25	14:25	-	-	4		4	X		X																																																																																																																																																								
Additional instructions from Pace: Target VOCs by EPA 8260 list: BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane, EDB; Also dissolved lead										Customer Remarks / Special Conditions / Possible Hazards: Collected By: _____ Signature: _____																																																																																																																																																										
Requisitioned By / Company (Signature): <i>Thomas Veary</i> Date/Time: 8/11/25 15:10					Received By/Company (Signature): <i>Steph Grillo</i> Date/Time: 8/11/25 17:10					Tracking # Delivered By: In Person [] Courier [] FedEx [] UPS [] Other: _____																																																																																																																																																										
Requisitioned By / Company (Signature): _____ Date/Time: 8/11/25 17:10					Received By/Company (Signature): _____ Date/Time: 8/11/25 17:40					Delivered By: In Person [] Courier [] FedEx [] UPS [] Other: _____																																																																																																																																																										
Requisitioned By / Company (Signature): _____ Date/Time: 8/11/25 17:40					Received By/Company (Signature): <i>Anthony Green</i> Date/Time: AUG 11 2025 0300					Delivered By: In Person [] Courier [] FedEx [] UPS [] Other: _____																																																																																																																																																										
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5c 245
-02
-03
-04
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-06

Alberto Liz 3:30 8/12/25

Alberto Liz 1:40 8/12/25

Sherry 08112125-0330



Sample Delivery Group Summary

Pace Job Number : L2550245

Received : 11-AUG-2025

Reviewer : Owen Jefferson

Account Name : Groundwater & Environmental Service

Project Number : PROJ-051861

Project Name : SUNOCO PIPELINE LP (SPLP)

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.2	

Condition Information

- | | |
|--|------------|
| 1) All samples on COC received? | YES |
| 2) Extra samples received? | NO |
| 3) Are there any sample container discrepancies? | NO |
| 4) Are there any discrepancies between COC & sample labels? | NO |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis? | YES |
| 7) Are samples within holding time for requested analysis? | YES |
| 8) All sampling equipment returned? | NA |

Volatile Organics/VPH

- | | |
|--|-----------|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|-----------|



ANALYTICAL REPORT

Lab Number:	L2551957
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	08/19/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2551957-01	MW-1D	WATER	E-25060-RL-25300050	08/18/25 10:32	08/18/25
L2551957-02	MW-1S	WATER	E-25060-RL-25300050	08/18/25 10:50	08/18/25
L2551957-03	MW-2D	WATER	E-25060-RL-25300050	08/18/25 12:20	08/18/25
L2551957-04	MW-2S	WATER	E-25060-RL-25300050	08/18/25 12:35	08/18/25
L2551957-05	MW-3D	WATER	E-25060-RL-25300050	08/18/25 09:42	08/18/25
L2551957-06	MW-3S	WATER	E-25060-RL-25300050	08/18/25 09:55	08/18/25
L2551957-07	TRIP BLANK	WATER	E-25060-RL-25300050	08/18/25 00:00	08/18/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

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.

Sample Receipt

L2551957-07: The analysis of EDB & DBCP by Method 8011 was requested on the Chain of Custody; however, sample containers were not received. This was verified by the client.

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:

Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 08/19/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-01

Date Collected: 08/18/25 10:32

Client ID: MW-1D

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 10:50

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-01

Date Collected: 08/18/25 10:32

Client ID: MW-1D

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/19/25 10:47

Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	0.44	J	ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	0.75	J	ug/l	2.5	0.19	1
Naphthalene	0.27	J	ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	114		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-02

Date Collected: 08/18/25 10:50

Client ID: MW-1S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 10:58

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-02
 Client ID: MW-1S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 10:50
 Date Received: 08/18/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 11:13
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	112		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-03

Date Collected: 08/18/25 12:20

Client ID: MW-2D

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 11:06

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-03
 Client ID: MW-2D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 12:20
 Date Received: 08/18/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 11:40
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	113		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-04

Date Collected: 08/18/25 12:35

Client ID: MW-2S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 11:14

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-04
 Client ID: MW-2S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 12:35
 Date Received: 08/18/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 12:07
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
--	--	--	--	--	--	--

Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	115		70-130



Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-05

Date Collected: 08/18/25 09:42

Client ID: MW-3D

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 11:22

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-05
 Client ID: MW-3D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 09:42
 Date Received: 08/18/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 12:33
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	0.32	J	ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	114		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-06

Date Collected: 08/18/25 09:55

Client ID: MW-3S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/19/25 08:24

Analytical Date: 08/19/25 11:30

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-06
 Client ID: MW-3S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 09:55
 Date Received: 08/18/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 13:00
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	115		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**SAMPLE RESULTS**

Lab ID: L2551957-07
 Client ID: TRIP BLANK
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 00:00
 Date Received: 08/18/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/19/25 13:26
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	112		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 08/19/25 10:18
Analyst: MHG

Extraction Method: EPA 8011
Extraction Date: 08/19/25 08:23

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01-06 Batch: WG2104520-1					
1,2-Dibromoethane	ND		ug/l	0.010	0.005 A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/19/25 09:00
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2104737-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG2104520-2									
1,2-Dibromoethane	95		-		60-140	-			A

Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2104737-3 WG2104737-4								
Methyl tert butyl ether	84		87		63-130	4		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20
Toluene	93		95		70-130	2		20
Ethylbenzene	90		91		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		90		70-130	0		20
Isopropylbenzene	85		87		70-130	2		20
1,3,5-Trimethylbenzene	89		91		64-130	2		20
1,2,4-Trimethylbenzene	87		88		70-130	1		20
Naphthalene	64	Q	62	Q	70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	123		123		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	90		91		70-130
Dibromofluoromethane	107		109		70-130



Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG2104520-3 QC Sample: L2551957-01 Client ID: MW-1D													
1,2-Dibromoethane	ND	0.201	0.205	102		-	-		60-140	-			A

METALS



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-01
 Client ID: MW-1D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 10:32
 Date Received: 08/18/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 12:39	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-02

Date Collected: 08/18/25 10:50

Client ID: MW-1S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 13:22	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-03
 Client ID: MW-2D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/18/25 12:20
 Date Received: 08/18/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 13:27	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-04

Date Collected: 08/18/25 12:35

Client ID: MW-2S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 13:32	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-05

Date Collected: 08/18/25 09:42

Client ID: MW-3D

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 13:39	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

SAMPLE RESULTS

Lab ID: L2551957-06

Date Collected: 08/18/25 09:55

Client ID: MW-3S

Date Received: 08/18/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 13:44	EPA 3005A	1,6020B	BLR



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-06 Batch: WG2104462-1									
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	08/19/25 07:20	08/19/25 12:13	1,6020B	BLR

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG2104462-2								
Lead, Dissolved	105		-		80-120	-		



Matrix Spike Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2551957

Project Number: PROJ-051861

Report Date: 08/19/25

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>MSD Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>MSD Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>RPD Qual</u>	<u>RPD Limits</u>
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2104462-3 QC Sample: L2551957-01 Client ID: MW-1D												
Lead, Dissolved	ND	0.53	0.5696	107	-	-	-	-	75-125	-	-	-

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2551957

Report Date: 08/19/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2104462-4 QC Sample: L2551957-01 Client ID: MW-1D						
Lead, Dissolved	ND	ND	mg/l	NC		20



Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2551957-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-01D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-01E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-01F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-02D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-02E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-02F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-03D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-03E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-03F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-04D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-04E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2551957-04F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-05D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-05E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-05F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-06D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-06E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2551957-06F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2551957-07A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2551957-07B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25

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: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2551957**Project Number:** PROJ-051861**Report Date:** 08/19/25**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 Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were

Report Format: DU Report with 'J' Qualifiers



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

Data Qualifiers

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2551957
Report Date: 08/19/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, SM4500CI-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, SM4500CL-G, 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.

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, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1: Hg. **EPA 245.7:** Hg.

SM2340B

Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 28

Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

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

CT PH-0826, IL 200077, IN C-MA-03, KY KY98045, 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

MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, 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, LA 245052, 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.



Sample Delivery Group Summary

Pace Job Number : L2551957

Received : 18-AUG-2025

Reviewer : Owen Jefferson

Account Name : Groundwater & Environmental Service

Project Number : PROJ-051861

Project Name : SUNOCO PIPELINE LP (SPLP)

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.9	

Condition Information

- | | |
|---|--------------------------|
| 1) All samples on COC received? | YES |
| 2) Extra samples received? | NO |
| 3) Are there any sample container discrepancies?
Following containers were not received for listed analysis: | YES
-07 (8011) |
| 4) Are there any discrepancies between COC & sample labels? | NO |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis? | YES |
| 7) Are samples within holding time for requested analysis? | YES |
| 8) All sampling equipment returned? | NA |

Volatile Organics/VPH

- | | |
|--|-----------|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|-----------|



ANALYTICAL REPORT

Lab Number:	L2553463
Client:	Groundwater & Environmental Services, In 410 Eagleview Blvd Exton, PA 19341
ATTN:	Stephanie Grillo
Phone:	(641) 458-1077
Project Name:	SUNOCO PIPELINE LP (SPLP)
Project Number:	PROJ-051861
Report Date:	08/27/25

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

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

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



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2553463-01	MW-6S	WATER	E-25060-RL-25300050	08/25/25 09:20	08/25/25
L2553463-02	MW-6D	WATER	E-25060-RL-25300050	08/25/25 10:00	08/25/25
L2553463-03	MW-7S	WATER	E-25060-RL-25300050	08/25/25 10:50	08/25/25
L2553463-04	MW-7D	WATER	E-25060-RL-25300050	08/25/25 11:15	08/25/25
L2553463-05	MW-8S	WATER	E-25060-RL-25300050	08/25/25 12:15	08/25/25
L2553463-06	MW-8D	WATER	E-25060-RL-25300050	08/25/25 12:55	08/25/25
L2553463-07	TRIP BLANK	WATER	E-25060-RL-25300050	08/25/25 00:00	08/25/25

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

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.

Volatile Organics

L2553463-02D: The sample has elevated detection limits due to limited sample volume available for analysis.

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: 08/27/25

ORGANICS

VOLATILES

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-01

Date Collected: 08/25/25 09:20

Client ID: MW-6S

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:06

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-01

Date Collected: 08/25/25 09:20

Client ID: MW-6S

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/26/25 09:40

Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	0.25	J	ug/l	1.0	0.17	1
Benzene	0.84		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	1.2		ug/l	0.50	0.17	1
p/m-Xylene	0.62	J	ug/l	1.0	0.33	1
o-Xylene	0.49	J	ug/l	1.0	0.39	1
Xylenes, Total	1.1	J	ug/l	1.0	0.33	1
Isopropylbenzene	11		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	0.50	J	ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	7.9		ug/l	2.5	0.19	1
Naphthalene	9.2		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-02

Date Collected: 08/25/25 10:00

Client ID: MW-6D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:14

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-02 D

Date Collected: 08/25/25 10:00

Client ID: MW-6D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 08/26/25 10:04

Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	4.0	0.66	4
Benzene	ND		ug/l	2.0	0.64	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
Toluene	ND		ug/l	3.0	0.81	4
Ethylbenzene	ND		ug/l	2.0	0.67	4
p/m-Xylene	ND		ug/l	4.0	1.3	4
o-Xylene	ND		ug/l	4.0	1.6	4
Xylenes, Total	ND		ug/l	4.0	1.3	4
Isopropylbenzene	1.9	J	ug/l	2.0	0.75	4
1,3,5-Trimethylbenzene	ND		ug/l	10	0.87	4
1,2,4-Trimethylbenzene	ND		ug/l	10	0.76	4
Naphthalene	4.5		ug/l	4.0	0.86	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-03

Date Collected: 08/25/25 10:50

Client ID: MW-7S

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:22

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-03
 Client ID: MW-7S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 10:50
 Date Received: 08/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/26/25 10:28
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-04

Date Collected: 08/25/25 11:15

Client ID: MW-7D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:30

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-04
 Client ID: MW-7D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 11:15
 Date Received: 08/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/26/25 10:52
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-05

Date Collected: 08/25/25 12:15

Client ID: MW-8S

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:39

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-05
 Client ID: MW-8S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 12:15
 Date Received: 08/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/26/25 11:16
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	102		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-06

Date Collected: 08/25/25 12:55

Client ID: MW-8D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:47

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-06
 Client ID: MW-8D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 12:55
 Date Received: 08/25/25
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/26/25 11:40
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-07

Date Collected: 08/25/25 00:00

Client ID: TRIP BLANK

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: EPA 8011

Analytical Method: 1,8011

Extraction Date: 08/26/25 14:55

Analytical Date: 08/26/25 17:55

Analyst: MHG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-07
 Client ID: TRIP BLANK
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 00:00
 Date Received: 08/25/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/26/25 12:04
 Analyst: RAW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 08/26/25 16:08
Analyst: MHG

Extraction Method: EPA 8011
Extraction Date: 08/26/25 14:55

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01-07 Batch: WG2107472-1					
1,2-Dibromoethane	ND		ug/l	0.010	0.005 A

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D
Analytical Date: 08/26/25 09:16
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG2107609-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	ND		ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2553463

Project Number: PROJ-051861

Report Date: 08/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG2107472-2									
1,2-Dibromoethane	78		-		60-140	-			A



Lab Control Sample Analysis Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG2107609-3 WG2107609-4								
Methyl tert butyl ether	91		89		63-130	2		20
Benzene	98		97		70-130	1		20
1,2-Dichloroethane	100		100		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		98		70-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Isopropylbenzene	99		96		70-130	3		20
1,3,5-Trimethylbenzene	100		98		64-130	2		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Naphthalene	95		96		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		104		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	97		98		70-130



METALS



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

SAMPLE RESULTS

Lab ID: L2553463-01
 Client ID: MW-6S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 09:20
 Date Received: 08/25/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 15:27	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-02

Date Collected: 08/25/25 10:00

Client ID: MW-6D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 15:52	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

SAMPLE RESULTS

Lab ID: L2553463-03
 Client ID: MW-7S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 10:50
 Date Received: 08/25/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 15:57	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**SAMPLE RESULTS**

Lab ID: L2553463-04

Date Collected: 08/25/25 11:15

Client ID: MW-7D

Date Received: 08/25/25

Sample Location: E-25060-RL-25300050

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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 16:02	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

SAMPLE RESULTS

Lab ID: L2553463-05
 Client ID: MW-8S
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 12:15
 Date Received: 08/25/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 16:19	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

SAMPLE RESULTS

Lab ID: L2553463-06
 Client ID: MW-8D
 Sample Location: E-25060-RL-25300050

Date Collected: 08/25/25 12:55
 Date Received: 08/25/25
 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
Dissolved Metals - Mansfield Lab											
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 16:24	EPA 3005A	1,6020B	BJM



Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2553463

Project Number: PROJ-051861

Report Date: 08/27/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-06 Batch: WG2107222-1									
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	08/26/25 07:55	08/26/25 15:15	1,6020B	BJM

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2553463

Project Number: PROJ-051861

Report Date: 08/27/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG2107222-2								
Lead, Dissolved	102		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Lab Number: L2553463

Project Number: PROJ-051861

Report Date: 08/27/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2107222-3 QC Sample: L2553463-01 Client ID: MW-6S												
Lead, Dissolved	ND	0.53	0.5506	104		-	-		75-125	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: SUNOCO PIPELINE LP (SPLP)

Project Number: PROJ-051861

Lab Number: L2553463

Report Date: 08/27/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG2107222-4 QC Sample: L2553463-01 Client ID: MW-6S						
Lead, Dissolved	ND	ND	mg/l	NC		20

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2553463-01A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-01B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-01C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-01D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-01E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-01F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-02A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-02B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-02C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-02D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-02E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-02F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-03A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-03B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-03C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-03D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-03E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-03F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-04A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-04B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-04C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-04D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-04E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2553463-04F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-05A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-05B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-05C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-05D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-05E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-05F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-06A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-06B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-06C	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-06D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-06E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-06F	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		PB-6020S(180)
L2553463-07A	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-07B	Vial HCl preserved	NA	NA			Y	Absent		PA-8260(14)
L2553463-07D	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)
L2553463-07E	Vial Na2S2O3 preserved	NA	NA			Y	Absent		8011(14)

Project Name: SUNOCO PIPELINE LP (SPLP)**Lab Number:** L2553463**Project Number:** PROJ-051861**Report Date:** 08/27/25

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: SUNOCO PIPELINE LP (SPLP)
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Lab Number: L2553463
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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



Project Name: SUNOCO PIPELINE LP (SPLP)
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Data Qualifiers

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: SUNOCO PIPELINE LP (SPLP)
Project Number: PROJ-051861

Lab Number: L2553463
Report Date: 08/27/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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.



Pace Analytical Services LLC

ID No.:17873

Facility: **Northeast**

Revision 28

Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

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Certification Information

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

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

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

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

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

Nonpotable Water: EPA RSK-175 Dissolved Gases

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

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

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-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, SM4500CL-G, 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.**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, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1:** Hg. **EPA 245.7:** Hg.**SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

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Department: **Quality Assurance**

Published Date: 07/25/2025

Title: **Certificate/Approval Program Summary**

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

CT PH-0826, IL 200077, IN C-MA-03, KY KY98045, 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

MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, 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, LA 245052, 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.

L2553463
GES - PA - ER



CHAIN-OF-CUSTODY Analytical Request Document

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: GES, Inc.		Contact/Report To: Stephanie Grillo							
Street Address: 410 Eagleview Blvd, Suite 110 Exton, PA 19341		Phone #: (610) 458-1077x3064							
		E-mail: Sgrillo@gesonline.com; gesinbox@gesonline.com							
		CTEH_Deliverables@envst.com; labresults@cteh.com; gesinbox@gesonline.com							
Customer Project #:		Invoice To: Energy Transfer							
Project Name: Sunoco Pipeline LP (SPLP) Washington Crossing		Invoice E-Mail: aplinecestp@mailbox@energytransfer.com							
Site Collection Info/Facility ID (if applicable): Washington Crossing, PA		Purchase Order # (if applicable): 112203239							
Time Zone Collected: AK PT MT CT ET		County/State origin of sample(s): PA							
Data Deliverables: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input checked="" type="checkbox"/> EQUIS <input type="checkbox"/> Other: _____		Regulatory Program (DW, RCRA, etc.) as applicable: DW Rush (Pre-approval Required): <input checked="" type="checkbox"/> 2 day <input type="checkbox"/> 3 day <input type="checkbox"/> 5 day <input type="checkbox"/> Other: Date Results Requested: DW PWSID # or WW Permit # as applicable: Field Filtered (if applicable): <input type="checkbox"/> Yes <input type="checkbox"/> No Analysis: Lead							
*Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Sediment (SS), Oil (OI), Wastewater (WV), Tissue (TL), Sludge (SL), Vapor (V), Other (OT), Surface Water (SW), Sediment (SD), Sludge (SL), Coal (C)		Specify Container Size ** 6 3 6 Identify Container Preservative Type*** 4 2 8							
		Analysis Requested Target VOCs (EPA 8260D) BTEX, MTBE, cumene, naphthalene, 1,2,4 TMB, 1,3,5 TMB, EDC Lead (dissolved) (EPA 6020B) EDB (EPA 8011)							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Proj. Mgr.</td></tr> <tr><td>Account/Client ID</td></tr> <tr><td>Table #</td></tr> <tr><td>Form/Template</td></tr> </table>		Proj. Mgr.	Account/Client ID	Table #	Form/Template		
Proj. Mgr.									
Account/Client ID									
Table #									
Form/Template									
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Sample Comment</td></tr> <tr><td>All dissolved lead samples were field filtered</td></tr> </table>		Sample Comment	All dissolved lead samples were field filtered				
Sample Comment									
All dissolved lead samples were field filtered									
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td># containers</td></tr> <tr><td>Thermometer ID</td></tr> <tr><td>Correction Factor</td></tr> <tr><td>Temp (°C)</td></tr> <tr><td>Corrected Temp (°C)</td></tr> <tr><td> on 88</td></tr> </table>		# containers	Thermometer ID	Correction Factor	Temp (°C)	Corrected Temp (°C)	on 88
# containers									
Thermometer ID									
Correction Factor									
Temp (°C)									
Corrected Temp (°C)									
on 88									
Additional Instructions from Pace: Target VOCs by EPA 8260 list; BTEX, Isopropylbenzene, MTBE, Naphthalene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloroethane, EDB; Also dissolved lead		Collected By: _____ Signature: _____							
Requisitioned By / Company Signature: <i>[Signature]</i> GES		Date/Time: 8-25-25 1330							
Requisitioned By / Company Signature: <i>[Signature]</i> PACE		Date/Time: 8/25/25 1445							
Requisitioned By / Company Signature: <i>[Signature]</i>		Date/Time: _____							
Requisitioned By / Company Signature: <i>[Signature]</i> Anthony Green		Date/Time: AUG 25 2025 1342							
Requisitioned By / Company Signature: <i>[Signature]</i> Alberto Liz		Date/Time: 8-26-25 0210							
		Page _____ of _____							

1
2
3
4
5
6
7

Alberto Liz

8-26-25 0400

[Signature] *8/26 0400*



Sample Delivery Group Summary

Pace Job Number : L2553463

Received : 25-AUG-2025

Reviewer : Mohammed Wahed

Account Name : Groundwater & Environmental Service

Project Number : PROJ-051861

Project Name : SUNOCO PIPELINE LP (SPLP)

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.6	

Condition Information

- | | |
|--|------------|
| 1) All samples on COC received? | YES |
| 2) Extra samples received? | NO |
| 3) Are there any sample container discrepancies? | NO |
| 4) Are there any discrepancies between COC & sample labels? | NO |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis? | YES |
| 7) Are samples within holding time for requested analysis? | YES |
| 8) All sampling equipment returned? | NA |

Volatile Organics/VPH

- | | |
|--|-----------|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|-----------|