Water Supply Well Sampling Event
Cumberland County/Cliffdale LF
Fayetteville, North Carolina
NCDEQ NCD980502900, Task 2900RI-4

PREPARED FOR:

North Carolina Department of Environmental Quality
Division of Waste Management – Special Remediation Branch
Pre-Regulatory Landfill Unit
1646 Mail Service Center
Raleigh, NC 27699-1646

PREPARED BY:

S&ME, Inc.
3201 Spring Forest Road
Raleigh, NC 27616

July 16, 2024

July 16, 2024

North Carolina Department of Environmental Quality
Division of Waste Management – Special Remediation Branch
Pre-Regulatory Landfill Unit
1646 Mail Service Center
Raleigh, NC 27699

Attention: Ms. Analee Thornburg Analee.thornburg@dec.nc.gov

Reference: **Water Supply Well Sampling Event**
Cumberland County/Cliffdale LF
Fayetteville, North Carolina
NCDEQ ID No. NCD980502900, Task Order 2900RI-4
S&ME Project No. 23050459

Dear Ms. Thornburg:

S&ME, Inc. (S&ME), provides this Water Supply Well Sampling Event Report for remedial investigation (RI) activities at the Cumberland County/Cliffdale LF site located in Fayetteville, North Carolina as requested by Pre-Regulatory Landfill Unit. This report outlines all field activities to complete Task Order 2900RI-4 based on S&ME Proposal No. 23050459B, Revision 1, dated February 21, 2024. These services were performed according to the terms of Contract Number N42621-B, dated January 4, 2022, between NCDEQ and S&ME.

We appreciate the opportunity to provide environmental consulting services to NCDEQ. Please contact us if you have any questions about the information included in this report.

Sincerely,
S&ME, Inc.

Thomas Raymond, P. E., PMP
Principal Engineer / Project Manager
traymond@smeinc.com

Connor Hicks, G.I.T
Environmental Staff Professional
connorhicks@smeinc.com

Copy: Gerald Paul, S&ME, Inc. jpaul@smeinc.com

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1.0 Summary of Current Investigation

S&ME completed the scope of services listed below for this investigation in general conformance with Task Order 2900RI-4 based on S&ME Proposal No. 23050459B, Revision 1 dated February 21, 2024.

- Collected one water supply well (WSW) sample (plus one duplicate quality control sample) for laboratory analysis of Volatile Organic Compounds by Method 8260; Semi-Volatile Organic Compound by Method 8270; 1,4 Dioxane by Method 8270 SIM; Metals by Method 6020; Mercury by Method 7470; Hexavalent Chromium by Method 7199; Nitrate and Sulfate by Method 9056; Ammonia by Method 350.1; and
- Prepared this report.

A Site Map with the sample location has been prepared as **Figure 1**.

The following WSWs below are within the 1,000 foot buffer from the edge of the Waste Disposal Area of the Cumberland County/Cliffdale LF. Owner information was obtained from Cumberland County Planning Department and GIS Administration:

Owner	Well ID	Physical Address of Well	Signed Access Agreement
Darryl and Brenda McRae	PW-9402	9402 Tine Road	Yes
Edward E. Simmons	PW-9424	424 Tine Road	No
Sandra Lancaster and Carolyn Purcell	PW-9434	9434 Tine Road	No
Christopher Hilton	PW-9454	9454 Tine Road	No

S&ME's services were performed in general accordance with the North Carolina Department of Environmental Quality (NCDEQ), *Guidelines for Addressing Pre-Regulatory Landfills and Dumps* (March 2022) and S&ME's approved *Standard Operating Procedures and Quality Assurance (SOP/QA) Manual (July 2010)*, previously approved by NCDEQ.

2.0 Water Supply Well Sampling

The residential water supply well sample location at 9402 Tine Road located northeast of the Cumberland County/Cliffdale LF was sampled on June 13, 2024. The WSW was purged for approximately 20 minutes and sampled for Volatile Organic Compounds by Method 8260, Semi-Volatile Organic Compound by Method 8270, 1,4 Dioxane by Method 8270 SIM, Metals by Method 6020, Mercury by Method 7470, Hexavalent Chromium by Method 7199, Nitrate and Sulfate by Method 9056, and Ammonia by Method 350.1. The results were compared to the NCAC 2L North Carolina Groundwater Quality Standards.

Constituents were detected above the laboratory detection limits but did not exceed the NCAC 2L North Carolina Groundwater Quality Standards. All other sample results were reported as non-detect (i.e., below the laboratory method detection limits). Laboratory results are summarized in **Table 1** and illustrated in

Figure 1. Coordinates of the sample locations are included in **Appendix I**. A summary of the field screening results can be found in **Table 2** and a copy of the field notes is included in **Appendix II**. A photograph log showing the sample locations is included as **Appendix III**. The laboratory reports and chain of custody forms are included in **Appendix IV**.

3.0 Quality Control

Quality control samples were collected and analyzed as follows:

- Duplicate: One duplicate sample was collected and analyzed for the same parameters as the record samples. The comparative results of the record sample and the duplicate sample were within an acceptable relative precent difference.

The laboratory conducted USEPA quality assurance and quality control procedures and reporting as required for laboratory analysis according to USEPA Level II Protocols. Reported laboratory analytical data meets data quality objectives.

4.0 Deviation From Work Plan

S&ME personnel attempted multiple methods to obtain access agreements for authorization to sample WSWs and were only able to gain access to one of the four water supply well properties.

5.0 Sole Use Statement

This report is solely intended for use by NCDEQ for the services that were performed in accordance with S&ME Proposal No. 23050459B, Revision 1 dated February 21, 2024, for Task Order 2900RI-4.

6.0 Certification Acknowledgement

"I certify that to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete."

Thomas P. Raymond / S&ME, Inc.
Name of Environmental Consultant / Company

Signature of Environmental Consultant

July 16, 2024
Date

I, Wilma Craft, a Notary Public of said County and State, do hereby certify that Thomas P. Raymond did personally appear and sign before me this day, produced proper identification in the form of NCDL _____, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 16 day of July, 2024.

Wilma Craft
Notary Public (signature)

(OFFICIAL SEAL)
WILMA CRAFT
Notary Public, North Carolina
Wake County
My Commission Expires
March 12, 2028

My commission expires: March 12, 2028

Appendices

Appendix I – Coordinates of Selected Features

APPENDIX I
Coordinates of Selected Features
Cumberland County / Cliffdale Landfill - NCDEQ ID NCD980502900
7583 Lowell Harris Road, Fayetteville, North Carolina
S&ME Project No. 23050459, Task Order 2900RI-4

Site Feature	Type	Location				
		Latitude	Longitude	Northing	Easting	Distance from Property Boundary (FT)
PW-9402	Private Water Supply Well	35.0450854	-79.0502805	471341	1984951	999
PW-9424	Private Water Supply Well	35.0450082	-79.0509253	471313	1984758	740
PW-9434	Private Water Supply Well	35.0446126	-79.0509251	471169	1984758	725
PW-9454	Private Water Supply Well	35.0443706	-79.051259	471081	1984658	520

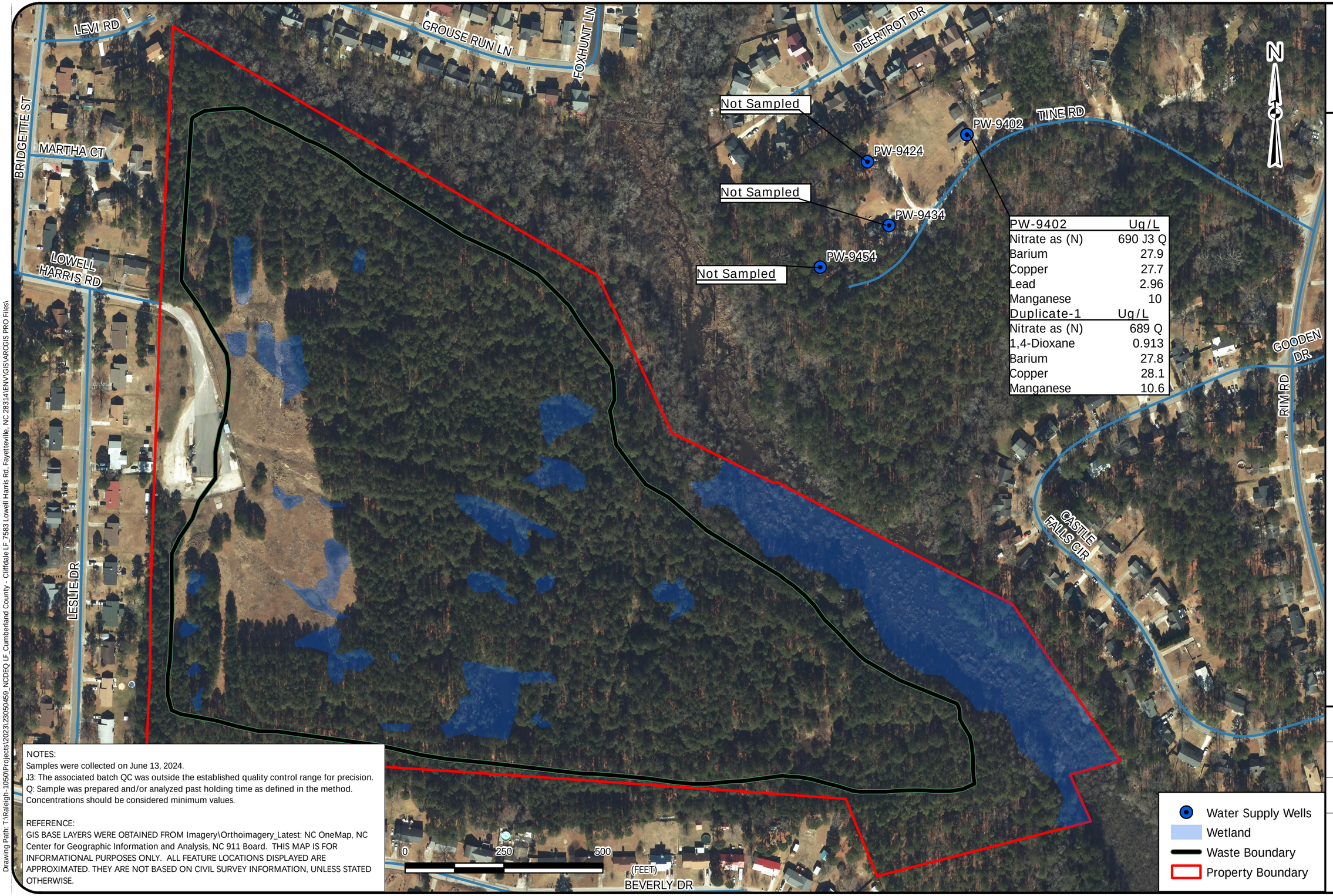
Notes:

Site feature locations are reported in decimal degrees for Latitude/Longitude and in feet in the North Carolina State Plane Coordinate System (NAD83).

Figures

WATER SUPPLY WELL SAMPLE RESULTS MAP

CUMBERLAND COUNTY / CLIFFDALE LANDFILL
NCDEQ ID NCD980502900 TASK ORDER 2900RI-4
7583 LOWELL HARRIS ROAD FAYETTEVILLE, NORTH CAROLINA



NOTES:
Samples were collected on June 13, 2024.
J3: The associated batch QC was outside the established quality control range for precision.
Q: Sample was prepared and/or analyzed past holding time as defined in the method.
Concentrations should be considered minimum values.

REFERENCE:
GIS BASE LAYERS WERE OBTAINED FROM Imagery\Orthoimagery_Latest: NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

SCALE:
1 in: 225 feet

DATE:
7/17/2024

PROJECT NUMBER
23050459

FIGURE NO.
1

Drawing Path: T:\Raleigh-1050\Projects\2023\23050459_NCDEQ_LF_Cumberland County - Cliffdale LF_7583 Lowell Harris Rd, Fayetteville, NC 28314\ENV\GIS\ARCGIS PRO Files\

Tables

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Cumberland County/Cliffdale Landfill
7583 Lowell Harris Road, Fayetteville, North Carolina
NCDEQ ID NCD980502900, 2900RI-4
S&ME Project No. 23050459

Analytical Method →		Wet Chemistry by Method 9056A (µg/L)		SVOC by Method 8270E-SIM (µg/L)	Metals by Method 6020B (µg/L)				Wet Chemistry by Method 350.1 (µg/L)	Wet Chemistry by Method 3500 Cr C-2011 (µg/L)	Volatile Organic Compounds by Method 8260D (µg/L)	Semi Volatile Organic Compounds by Method 8270E (µg/L)
Contaminants of Concern →		Nitrate as (N)	Sulfate	1,4-Dioxane	Barium	Copper	Lead	Manganese	Ammonia Nitrogen was not detected above the laboratory limit	Hexavalent Chromium was not detected above the laboratory limit	No constituents were detected above the laboratory detection limit	
Monitor Well Sample Location	Date Collected											
PW-9402	6/13/2024	**690 J3 Q**	ND	ND	**27.9**	**27.7**	**2.96**	**10.0**				
Duplicate-1	6/13/2024	**689 Q**	ND	**0.913**	**27.8**	**28.1**	ND	**10.6**				
2L Groundwater Standards		**10,000**	**250,000**	**3**	**700**	**1,000**	**15**	**50**				

Notes:

Lab results reported in micrograms per liter (µg/L)

J3: The associated batch QC was outside the established quality control range for precision

Q: Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

ND: Constituent not detected above laboratory method detection limits.

TABLE 2
Summary of Water Supply Well Field Screening Parameters
Cumberland County/Cliffdale Landfill
7583 Lowell Harris Road, Fayetteville, North Carolina
NCDEQ ID NCD980502900, Task Order 2900RI-4
S&ME Project No. 23050459

Sample Location ID	Date	Field Parameter		
		pH	Temperature (°C)	Conductivity (µS/cm)
PW-9402	6/13/2024	6.7	20.2	72

Notes:

Temperature: degrees Celsius (°C)

Conductivity: microsiemens per centimeter (µS/cm)

Turbidity: Nephelometric Turbidity Units

Appendix II – Field Forms

WATER SUPPLY WELL SAMPLING FORM

Project Name:	Cliffdale Landfill		
Project Location:	7583 Lowell Harris Rd. Fayetteville, NC		
Project Number:	23050459	Sample Date:	Thursday, June 13, 2024
Client Name/Contact:	NCDEQ	Water Supply Well ID:	PW-9402
Weather:	Sunny	Well Address:	125 Lois Lane
Air Temp (°F):	85	Owner Name:	Darryl McRae
POE Present (Y/N):	No	Owner Phone No.:	910-818-0112

Equipment Calibration Information:

Equipment	Date	Time	Calibration Solution		Calibration Check		
pH	6/13/24	14:00	4.00, 7.00,10.00		4.00	7.00	10.00
Conductivity	6/13/24	14:00	1413	µS/cm		1,413	µS/cm

Well Purging Information

Purge Rate (GPM):	7.0	**Purge Start Time:**	14:15
Volume Purged (Gal):		**Purge End Time:**	14:30

Field Parameters and Sampling

Total Volume (Gal)	Time	pH (s.u.)	Temperature	°C	Conductivity	µS/cm
35.00	14:20	9.60	22.1		86	
70.00	14:25	7.42	20.5		68	
105.00	14:30	6.74	20.2		72	

Sample ID	Sample Location	Sample Date	Sample Time
PW-9402	Spigot on Front of House	6/13/2024	14:35

Method	Qty	Container	Pres.	Method	Qty	Container	Pres.
VOCs 8260	3	40mL VOAs	HCl	Ammonia 350.1	1	250mL P	H2SO4
SVOCs 8270	2	100mL A	None	Metals (16) 6020+Hg 7470	1	250mL P	HNO3
SVOCs 8270 SIM 1,4 Dioxane	2	100mL A	HCl	HexCr 7199	1	50mL Plundger Filter/Buffer	NH4(SO4)2/NH4OH
Nitrate/Sulfate	1	250mL P	None				

Additional Comments (description of location of sample port, water well, filters, etc.)

Well house is located near the south corner of the house. The sample spigot is located on the front SE side of the house. The duplicate (Duplicate) is taken at PW-9402.

Well / System Photographs

Site Sketch

North

Well Location

Sample Spigot Location

Name	Signature	Date
(1) James Waters	James A. Waters	6/13/2024
(2)		

Revision: 9/1/17 13:30

Appendix III – Photograph Log

6/13/2024

Photographer: James Waters

1	**Location / Orientation**	Subject Property / Looking West
	Remarks	View of 9402 Tine Road with a water supply well house left of the home.

6/13/2024

Photographer: James Waters

2	**Location / Orientation**	Subject Property / Looking Southwest
	Remarks	View of sample location at 9402 Tine Road (PW-9402).

Appendix IV – Laboratory Report and Chain of Custody

ANALYTICAL REPORT

July 05, 2024

S&ME Inc. - Raleigh NC

Sample Delivery Group:	L1747296
Samples Received:	06/15/2024
Project Number:	
Description:	Cliffdale Landfill
Report To:	Mr. Connor Hicks 3201 Spring Forest Road Raleigh, NC 27616

Entire Report Reviewed By:

Craig Cothron
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

PW-9402 L1747296-01 GW

Collected by	Collected date/time	Received date/time
	06/13/24 14:35	06/15/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG2311471	1	06/25/24 16:15	06/25/24 16:15	LAS	Mt. Juliet, TN
Wet Chemistry by Method 3500Cr C-2011	WG2305351	1	06/19/24 15:00	06/19/24 15:00	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2305402	1	06/15/24 23:47	06/15/24 23:47	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2305948	1	06/16/24 19:19	06/17/24 18:25	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2309861	1	06/26/24 12:44	07/04/24 00:51	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2310286	1	06/23/24 10:43	06/23/24 10:43	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2307746	1	06/20/24 16:04	06/21/24 00:09	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2306943	1	06/18/24 23:05	06/20/24 06:32	AGW	Mt. Juliet, TN

DUPLICATE L1747296-02 GW

Collected by	Collected date/time	Received date/time
	06/13/24 00:00	06/15/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG2311471	1	06/25/24 16:17	06/25/24 16:17	LAS	Mt. Juliet, TN
Wet Chemistry by Method 3500Cr C-2011	WG2305351	1	06/19/24 15:22	06/19/24 15:22	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2305402	1	06/16/24 00:41	06/16/24 00:41	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2305948	1	06/16/24 19:19	06/17/24 18:27	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2309861	1	06/26/24 12:44	07/04/24 00:54	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2310286	1	06/23/24 11:02	06/23/24 11:02	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2306940	1	06/19/24 06:00	06/19/24 17:06	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2306378	1	06/18/24 09:10	06/19/24 18:58	AGW	Mt. Juliet, TN

TRIP BLANK L1747296-03 GW

Collected by	Collected date/time	Received date/time
	06/13/24 00:00	06/15/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2310286	1	06/23/24 10:23	06/23/24 10:23	JHH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Project Manager

Wet Chemistry by Method 350.1

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		250	1	06/25/2024 16:15	WG2311471

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.500	1	06/19/2024 15:00	WG2305351

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate as (N)	690	J3 Q	100	1	06/15/2024 23:47	WG2305402
Sulfate	ND		5000	1	06/15/2024 23:47	WG2305402

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	06/17/2024 18:25	WG2305948

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	ND		4.00	1	07/04/2024 00:51	WG2309861
Arsenic	ND		2.00	1	07/04/2024 00:51	WG2309861
Barium	27.9		2.00	1	07/04/2024 00:51	WG2309861
Beryllium	ND		2.00	1	07/04/2024 00:51	WG2309861
Cadmium	ND		1.00	1	07/04/2024 00:51	WG2309861
Chromium	ND		2.00	1	07/04/2024 00:51	WG2309861
Copper	27.7		5.00	1	07/04/2024 00:51	WG2309861
Cobalt	ND		2.00	1	07/04/2024 00:51	WG2309861
Lead	2.96		2.00	1	07/04/2024 00:51	WG2309861
Manganese	10.0		5.00	1	07/04/2024 00:51	WG2309861
Nickel	ND		2.00	1	07/04/2024 00:51	WG2309861
Selenium	ND		2.00	1	07/04/2024 00:51	WG2309861
Silver	ND		2.00	1	07/04/2024 00:51	WG2309861
Thallium	ND		2.00	1	07/04/2024 00:51	WG2309861
Vanadium	ND		5.00	1	07/04/2024 00:51	WG2309861
Zinc	ND		25.0	1	07/04/2024 00:51	WG2309861

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J4	50.0	1	06/23/2024 10:43	WG2310286
Acrolein	ND	C3	50.0	1	06/23/2024 10:43	WG2310286
Acrylonitrile	ND		10.0	1	06/23/2024 10:43	WG2310286
Benzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Bromobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Bromodichloromethane	ND		1.00	1	06/23/2024 10:43	WG2310286
Bromoform	ND		1.00	1	06/23/2024 10:43	WG2310286
Bromomethane	ND		5.00	1	06/23/2024 10:43	WG2310286
n-Butylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
sec-Butylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
tert-Butylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Carbon tetrachloride	ND		1.00	1	06/23/2024 10:43	WG2310286

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Chlorodibromomethane	ND		1.00	1	06/23/2024 10:43	WG2310286
Chloroethane	ND		5.00	1	06/23/2024 10:43	WG2310286
Chloroform	ND		5.00	1	06/23/2024 10:43	WG2310286
Chloromethane	ND		2.50	1	06/23/2024 10:43	WG2310286
2-Chlorotoluene	ND		1.00	1	06/23/2024 10:43	WG2310286
4-Chlorotoluene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2-Dibromo-3-Chloropropane	ND		5.00	1	06/23/2024 10:43	WG2310286
1,2-Dibromoethane	ND		1.00	1	06/23/2024 10:43	WG2310286
Dibromomethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2-Dichlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,3-Dichlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,4-Dichlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Dichlorodifluoromethane	ND		5.00	1	06/23/2024 10:43	WG2310286
1,1-Dichloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2-Dichloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1-Dichloroethene	ND		1.00	1	06/23/2024 10:43	WG2310286
cis-1,2-Dichloroethene	ND		1.00	1	06/23/2024 10:43	WG2310286
trans-1,2-Dichloroethene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2-Dichloropropane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1-Dichloropropene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,3-Dichloropropane	ND		1.00	1	06/23/2024 10:43	WG2310286
cis-1,3-Dichloropropene	ND		1.00	1	06/23/2024 10:43	WG2310286
trans-1,3-Dichloropropene	ND		1.00	1	06/23/2024 10:43	WG2310286
2,2-Dichloropropane	ND	C3	1.00	1	06/23/2024 10:43	WG2310286
Di-isopropyl ether	ND		1.00	1	06/23/2024 10:43	WG2310286
Ethylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Hexachloro-1,3-butadiene	ND		1.00	1	06/23/2024 10:43	WG2310286
Isopropylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
p-Isopropyltoluene	ND		1.00	1	06/23/2024 10:43	WG2310286
2-Butanone (MEK)	ND		10.0	1	06/23/2024 10:43	WG2310286
Methylene Chloride	ND		5.00	1	06/23/2024 10:43	WG2310286
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	06/23/2024 10:43	WG2310286
Methyl tert-butyl ether	ND		1.00	1	06/23/2024 10:43	WG2310286
Naphthalene	ND		5.00	1	06/23/2024 10:43	WG2310286
n-Propylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Styrene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1,1,2-Tetrachloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1,2,2-Tetrachloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
Tetrachloroethene	ND		1.00	1	06/23/2024 10:43	WG2310286
Toluene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2,3-Trichlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2,4-Trichlorobenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1,1-Trichloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
1,1,2-Trichloroethane	ND		1.00	1	06/23/2024 10:43	WG2310286
Trichloroethene	ND		1.00	1	06/23/2024 10:43	WG2310286
Trichlorofluoromethane	ND		5.00	1	06/23/2024 10:43	WG2310286
1,2,3-Trichloropropane	ND		2.50	1	06/23/2024 10:43	WG2310286
1,2,4-Trimethylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,2,3-Trimethylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
1,3,5-Trimethylbenzene	ND		1.00	1	06/23/2024 10:43	WG2310286
Vinyl chloride	ND		1.00	1	06/23/2024 10:43	WG2310286
Xylenes, Total	ND		3.00	1	06/23/2024 10:43	WG2310286
(S) Toluene-d8	*112*		*80.0-120*		*06/23/2024 10:43*	WG2310286
(S) 4-Bromofluorobenzene	*93.8*		*77.0-126*		*06/23/2024 10:43*	WG2310286

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*96.6*		*70.0-130*		*06/23/2024 10:43*	WG2310286

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	06/21/2024 00:09	WG2307746
Acenaphthylene	ND		1.00	1	06/21/2024 00:09	WG2307746
Anthracene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzidine	ND		10.0	1	06/21/2024 00:09	WG2307746
Benzo(a)anthracene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzo(b)fluoranthene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzo(k)fluoranthene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzo(g,h,i)perylene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzo(a)pyrene	ND		1.00	1	06/21/2024 00:09	WG2307746
Bis(2-chlorethoxy)methane	ND		10.0	1	06/21/2024 00:09	WG2307746
Bis(2-chloroethyl)ether	ND		10.0	1	06/21/2024 00:09	WG2307746
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	06/21/2024 00:09	WG2307746
4-Bromophenyl-phenylether	ND		10.0	1	06/21/2024 00:09	WG2307746
2-Chloronaphthalene	ND		1.00	1	06/21/2024 00:09	WG2307746
4-Chlorophenyl-phenylether	ND		10.0	1	06/21/2024 00:09	WG2307746
Chrysene	ND		1.00	1	06/21/2024 00:09	WG2307746
Dibenz(a,h)anthracene	ND		1.00	1	06/21/2024 00:09	WG2307746
3,3-Dichlorobenzidine	ND		10.0	1	06/21/2024 00:09	WG2307746
2,4-Dinitrotoluene	ND		10.0	1	06/21/2024 00:09	WG2307746
2,6-Dinitrotoluene	ND		10.0	1	06/21/2024 00:09	WG2307746
Fluoranthene	ND		1.00	1	06/21/2024 00:09	WG2307746
Fluorene	ND		1.00	1	06/21/2024 00:09	WG2307746
Hexachlorobenzene	ND		1.00	1	06/21/2024 00:09	WG2307746
Hexachloro-1,3-butadiene	ND		10.0	1	06/21/2024 00:09	WG2307746
Hexachlorocyclopentadiene	ND		10.0	1	06/21/2024 00:09	WG2307746
Hexachloroethane	ND		10.0	1	06/21/2024 00:09	WG2307746
Indeno(1,2,3-cd)pyrene	ND		1.00	1	06/21/2024 00:09	WG2307746
Isophorone	ND		10.0	1	06/21/2024 00:09	WG2307746
Naphthalene	ND		1.00	1	06/21/2024 00:09	WG2307746
Nitrobenzene	ND		10.0	1	06/21/2024 00:09	WG2307746
n-Nitrosodimethylamine	ND		10.0	1	06/21/2024 00:09	WG2307746
n-Nitrosodiphenylamine	ND		10.0	1	06/21/2024 00:09	WG2307746
n-Nitrosodi-n-propylamine	ND		10.0	1	06/21/2024 00:09	WG2307746
Phenanthrene	ND		1.00	1	06/21/2024 00:09	WG2307746
Benzylbutyl phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Bis(2-ethylhexyl)phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Di-n-butyl phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Diethyl phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Dimethyl phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Di-n-octyl phthalate	ND		3.00	1	06/21/2024 00:09	WG2307746
Pyrene	ND		1.00	1	06/21/2024 00:09	WG2307746
1,2,4-Trichlorobenzene	ND		10.0	1	06/21/2024 00:09	WG2307746
4-Chloro-3-methylphenol	ND		10.0	1	06/21/2024 00:09	WG2307746
2-Chlorophenol	ND		10.0	1	06/21/2024 00:09	WG2307746
2,4-Dichlorophenol	ND		10.0	1	06/21/2024 00:09	WG2307746
2,4-Dimethylphenol	ND		10.0	1	06/21/2024 00:09	WG2307746
4,6-Dinitro-2-methylphenol	ND		10.0	1	06/21/2024 00:09	WG2307746
2,4-Dinitrophenol	ND	J4	10.0	1	06/21/2024 00:09	WG2307746
2-Nitrophenol	ND		10.0	1	06/21/2024 00:09	WG2307746
4-Nitrophenol	ND		10.0	1	06/21/2024 00:09	WG2307746
Pentachlorophenol	ND		10.0	1	06/21/2024 00:09	WG2307746

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Phenol	ND		10.0	1	06/21/2024 00:09	WG2307746
2,4,6-Trichlorophenol	ND		10.0	1	06/21/2024 00:09	WG2307746
(S) 2-Fluorophenol	*33.5*		*10.0-120*		*06/21/2024 00:09*	WG2307746
(S) Phenol-d5	*24.9*		*10.0-120*		*06/21/2024 00:09*	WG2307746
(S) Nitrobenzene-d5	*65.7*		*10.0-127*		*06/21/2024 00:09*	WG2307746
(S) 2-Fluorobiphenyl	*65.8*		*10.0-130*		*06/21/2024 00:09*	WG2307746
(S) 2,4,6-Tribromophenol	*53.6*		*10.0-155*		*06/21/2024 00:09*	WG2307746
(S) p-Terphenyl-d14	*63.2*		*10.0-128*		*06/21/2024 00:09*	WG2307746

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	ND		0.400	1	06/20/2024 06:32	WG2306943
(S) Nitrobenzene-d5	*56.3*		*10.0-120*		*06/20/2024 06:32*	WG2306943

Wet Chemistry by Method 350.1

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		250	1	06/25/2024 16:17	WG2311471

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.500	1	06/19/2024 15:22	WG2305351

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate as (N)	689	Q	100	1	06/16/2024 00:41	WG2305402
Sulfate	ND		5000	1	06/16/2024 00:41	WG2305402

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	06/17/2024 18:27	WG2305948

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	ND		4.00	1	07/04/2024 00:54	WG2309861
Arsenic	ND		2.00	1	07/04/2024 00:54	WG2309861
Barium	27.8		2.00	1	07/04/2024 00:54	WG2309861
Beryllium	ND		2.00	1	07/04/2024 00:54	WG2309861
Cadmium	ND		1.00	1	07/04/2024 00:54	WG2309861
Chromium	ND		2.00	1	07/04/2024 00:54	WG2309861
Copper	28.1		5.00	1	07/04/2024 00:54	WG2309861
Cobalt	ND		2.00	1	07/04/2024 00:54	WG2309861
Lead	ND		2.00	1	07/04/2024 00:54	WG2309861
Manganese	10.6		5.00	1	07/04/2024 00:54	WG2309861
Nickel	ND		2.00	1	07/04/2024 00:54	WG2309861
Selenium	ND		2.00	1	07/04/2024 00:54	WG2309861
Silver	ND		2.00	1	07/04/2024 00:54	WG2309861
Thallium	ND		2.00	1	07/04/2024 00:54	WG2309861
Vanadium	ND		5.00	1	07/04/2024 00:54	WG2309861
Zinc	ND		25.0	1	07/04/2024 00:54	WG2309861

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J4	50.0	1	06/23/2024 11:02	WG2310286
Acrolein	ND	C3	50.0	1	06/23/2024 11:02	WG2310286
Acrylonitrile	ND		10.0	1	06/23/2024 11:02	WG2310286
Benzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Bromobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Bromodichloromethane	ND		1.00	1	06/23/2024 11:02	WG2310286
Bromoform	ND		1.00	1	06/23/2024 11:02	WG2310286
Bromomethane	ND		5.00	1	06/23/2024 11:02	WG2310286
n-Butylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
sec-Butylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
tert-Butylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Carbon tetrachloride	ND		1.00	1	06/23/2024 11:02	WG2310286

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Chlorodibromomethane	ND		1.00	1	06/23/2024 11:02	WG2310286
Chloroethane	ND		5.00	1	06/23/2024 11:02	WG2310286
Chloroform	ND		5.00	1	06/23/2024 11:02	WG2310286
Chloromethane	ND		2.50	1	06/23/2024 11:02	WG2310286
2-Chlorotoluene	ND		1.00	1	06/23/2024 11:02	WG2310286
4-Chlorotoluene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2-Dibromo-3-Chloropropane	ND		5.00	1	06/23/2024 11:02	WG2310286
1,2-Dibromoethane	ND		1.00	1	06/23/2024 11:02	WG2310286
Dibromomethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2-Dichlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,3-Dichlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,4-Dichlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Dichlorodifluoromethane	ND		5.00	1	06/23/2024 11:02	WG2310286
1,1-Dichloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2-Dichloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1-Dichloroethene	ND		1.00	1	06/23/2024 11:02	WG2310286
cis-1,2-Dichloroethene	ND		1.00	1	06/23/2024 11:02	WG2310286
trans-1,2-Dichloroethene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2-Dichloropropane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1-Dichloropropene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,3-Dichloropropane	ND		1.00	1	06/23/2024 11:02	WG2310286
cis-1,3-Dichloropropene	ND		1.00	1	06/23/2024 11:02	WG2310286
trans-1,3-Dichloropropene	ND		1.00	1	06/23/2024 11:02	WG2310286
2,2-Dichloropropane	ND	C3	1.00	1	06/23/2024 11:02	WG2310286
Di-isopropyl ether	ND		1.00	1	06/23/2024 11:02	WG2310286
Ethylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Hexachloro-1,3-butadiene	ND		1.00	1	06/23/2024 11:02	WG2310286
Isopropylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
p-Isopropyltoluene	ND		1.00	1	06/23/2024 11:02	WG2310286
2-Butanone (MEK)	ND		10.0	1	06/23/2024 11:02	WG2310286
Methylene Chloride	ND		5.00	1	06/23/2024 11:02	WG2310286
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	06/23/2024 11:02	WG2310286
Methyl tert-butyl ether	ND		1.00	1	06/23/2024 11:02	WG2310286
Naphthalene	ND		5.00	1	06/23/2024 11:02	WG2310286
n-Propylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Styrene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1,1,2-Tetrachloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1,2,2-Tetrachloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
Tetrachloroethene	ND		1.00	1	06/23/2024 11:02	WG2310286
Toluene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2,3-Trichlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2,4-Trichlorobenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1,1-Trichloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
1,1,2-Trichloroethane	ND		1.00	1	06/23/2024 11:02	WG2310286
Trichloroethene	ND		1.00	1	06/23/2024 11:02	WG2310286
Trichlorofluoromethane	ND		5.00	1	06/23/2024 11:02	WG2310286
1,2,3-Trichloropropane	ND		2.50	1	06/23/2024 11:02	WG2310286
1,2,4-Trimethylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,2,3-Trimethylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
1,3,5-Trimethylbenzene	ND		1.00	1	06/23/2024 11:02	WG2310286
Vinyl chloride	ND		1.00	1	06/23/2024 11:02	WG2310286
Xylenes, Total	ND		3.00	1	06/23/2024 11:02	WG2310286
(S) Toluene-d8	*112*		*80.0-120*		*06/23/2024 11:02*	WG2310286
(S) 4-Bromofluorobenzene	*94.6*		*77.0-126*		*06/23/2024 11:02*	WG2310286

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*97.0*		*70.0-130*		*06/23/2024 11:02*	WG2310286

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	06/19/2024 17:06	WG2306940
Acenaphthylene	ND		1.00	1	06/19/2024 17:06	WG2306940
Anthracene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzidine	ND	C6	10.0	1	06/19/2024 17:06	WG2306940
Benzo(a)anthracene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzo(b)fluoranthene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzo(k)fluoranthene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzo(g,h,i)perylene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzo(a)pyrene	ND		1.00	1	06/19/2024 17:06	WG2306940
Bis(2-chlorethoxy)methane	ND		10.0	1	06/19/2024 17:06	WG2306940
Bis(2-chloroethyl)ether	ND		10.0	1	06/19/2024 17:06	WG2306940
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	06/19/2024 17:06	WG2306940
4-Bromophenyl-phenylether	ND		10.0	1	06/19/2024 17:06	WG2306940
2-Chloronaphthalene	ND		1.00	1	06/19/2024 17:06	WG2306940
4-Chlorophenyl-phenylether	ND		10.0	1	06/19/2024 17:06	WG2306940
Chrysene	ND		1.00	1	06/19/2024 17:06	WG2306940
Dibenz(a,h)anthracene	ND		1.00	1	06/19/2024 17:06	WG2306940
3,3-Dichlorobenzidine	ND		10.0	1	06/19/2024 17:06	WG2306940
2,4-Dinitrotoluene	ND		10.0	1	06/19/2024 17:06	WG2306940
2,6-Dinitrotoluene	ND		10.0	1	06/19/2024 17:06	WG2306940
Fluoranthene	ND		1.00	1	06/19/2024 17:06	WG2306940
Fluorene	ND		1.00	1	06/19/2024 17:06	WG2306940
Hexachlorobenzene	ND		1.00	1	06/19/2024 17:06	WG2306940
Hexachloro-1,3-butadiene	ND		10.0	1	06/19/2024 17:06	WG2306940
Hexachlorocyclopentadiene	ND		10.0	1	06/19/2024 17:06	WG2306940
Hexachloroethane	ND		10.0	1	06/19/2024 17:06	WG2306940
Indeno(1,2,3-cd)pyrene	ND		1.00	1	06/19/2024 17:06	WG2306940
Isophorone	ND		10.0	1	06/19/2024 17:06	WG2306940
Naphthalene	ND		1.00	1	06/19/2024 17:06	WG2306940
Nitrobenzene	ND		10.0	1	06/19/2024 17:06	WG2306940
n-Nitrosodimethylamine	ND		10.0	1	06/19/2024 17:06	WG2306940
n-Nitrosodiphenylamine	ND		10.0	1	06/19/2024 17:06	WG2306940
n-Nitrosodi-n-propylamine	ND		10.0	1	06/19/2024 17:06	WG2306940
Phenanthrene	ND		1.00	1	06/19/2024 17:06	WG2306940
Benzylbutyl phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Bis(2-ethylhexyl)phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Di-n-butyl phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Diethyl phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Dimethyl phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Di-n-octyl phthalate	ND		3.00	1	06/19/2024 17:06	WG2306940
Pyrene	ND		1.00	1	06/19/2024 17:06	WG2306940
1,2,4-Trichlorobenzene	ND		10.0	1	06/19/2024 17:06	WG2306940
4-Chloro-3-methylphenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2-Chlorophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2,4-Dichlorophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2,4-Dimethylphenol	ND		10.0	1	06/19/2024 17:06	WG2306940
4,6-Dinitro-2-methylphenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2,4-Dinitrophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2-Nitrophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
4-Nitrophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
Pentachlorophenol	ND		10.0	1	06/19/2024 17:06	WG2306940

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Phenol	ND		10.0	1	06/19/2024 17:06	WG2306940
2,4,6-Trichlorophenol	ND		10.0	1	06/19/2024 17:06	WG2306940
(S) 2-Fluorophenol	*42.4*		*10.0-120*		*06/19/2024 17:06*	WG2306940
(S) Phenol-d5	*29.7*		*10.0-120*		*06/19/2024 17:06*	WG2306940
(S) Nitrobenzene-d5	*79.4*		*10.0-127*		*06/19/2024 17:06*	WG2306940
(S) 2-Fluorobiphenyl	*67.9*		*10.0-130*		*06/19/2024 17:06*	WG2306940
(S) 2,4,6-Tribromophenol	*66.5*		*10.0-155*		*06/19/2024 17:06*	WG2306940
(S) p-Terphenyl-d14	*75.2*		*10.0-128*		*06/19/2024 17:06*	WG2306940

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.913		0.400	1	06/19/2024 18:58	WG2306378
(S) Nitrobenzene-d5	*58.0*		*10.0-120*		*06/19/2024 18:58*	WG2306378

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J4	50.0	1	06/23/2024 10:23	WG2310286
Acrolein	ND	C3	50.0	1	06/23/2024 10:23	WG2310286
Acrylonitrile	ND		10.0	1	06/23/2024 10:23	WG2310286
Benzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Bromobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Bromodichloromethane	ND		1.00	1	06/23/2024 10:23	WG2310286
Bromoform	ND		1.00	1	06/23/2024 10:23	WG2310286
Bromomethane	ND		5.00	1	06/23/2024 10:23	WG2310286
n-Butylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
sec-Butylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
tert-Butylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Carbon tetrachloride	ND		1.00	1	06/23/2024 10:23	WG2310286
Chlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Chlorodibromomethane	ND		1.00	1	06/23/2024 10:23	WG2310286
Chloroethane	ND		5.00	1	06/23/2024 10:23	WG2310286
Chloroform	ND		5.00	1	06/23/2024 10:23	WG2310286
Chloromethane	ND		2.50	1	06/23/2024 10:23	WG2310286
2-Chlorotoluene	ND		1.00	1	06/23/2024 10:23	WG2310286
4-Chlorotoluene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2-Dibromo-3-Chloropropane	ND		5.00	1	06/23/2024 10:23	WG2310286
1,2-Dibromoethane	ND		1.00	1	06/23/2024 10:23	WG2310286
Dibromomethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2-Dichlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,3-Dichlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,4-Dichlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Dichlorodifluoromethane	ND		5.00	1	06/23/2024 10:23	WG2310286
1,1-Dichloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2-Dichloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1-Dichloroethene	ND		1.00	1	06/23/2024 10:23	WG2310286
cis-1,2-Dichloroethene	ND		1.00	1	06/23/2024 10:23	WG2310286
trans-1,2-Dichloroethene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2-Dichloropropane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1-Dichloropropene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,3-Dichloropropane	ND		1.00	1	06/23/2024 10:23	WG2310286
cis-1,3-Dichloropropene	ND		1.00	1	06/23/2024 10:23	WG2310286
trans-1,3-Dichloropropene	ND		1.00	1	06/23/2024 10:23	WG2310286
2,2-Dichloropropane	ND	C3	1.00	1	06/23/2024 10:23	WG2310286
Di-isopropyl ether	ND		1.00	1	06/23/2024 10:23	WG2310286
Ethylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Hexachloro-1,3-butadiene	ND		1.00	1	06/23/2024 10:23	WG2310286
Isopropylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
p-Isopropyltoluene	ND		1.00	1	06/23/2024 10:23	WG2310286
2-Butanone (MEK)	ND		10.0	1	06/23/2024 10:23	WG2310286
Methylene Chloride	ND		5.00	1	06/23/2024 10:23	WG2310286
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	06/23/2024 10:23	WG2310286
Methyl tert-butyl ether	ND		1.00	1	06/23/2024 10:23	WG2310286
Naphthalene	ND		5.00	1	06/23/2024 10:23	WG2310286
n-Propylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Styrene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1,1,2-Tetrachloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1,2,2-Tetrachloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
Tetrachloroethene	ND		1.00	1	06/23/2024 10:23	WG2310286
Toluene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2,3-Trichlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2,4-Trichlorobenzene	ND		1.00	1	06/23/2024 10:23	WG2310286

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
1,1,2-Trichloroethane	ND		1.00	1	06/23/2024 10:23	WG2310286
Trichloroethene	ND		1.00	1	06/23/2024 10:23	WG2310286
Trichlorofluoromethane	ND		5.00	1	06/23/2024 10:23	WG2310286
1,2,3-Trichloropropane	ND		2.50	1	06/23/2024 10:23	WG2310286
1,2,4-Trimethylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,2,3-Trimethylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
1,3,5-Trimethylbenzene	ND		1.00	1	06/23/2024 10:23	WG2310286
Vinyl chloride	ND		1.00	1	06/23/2024 10:23	WG2310286
Xylenes, Total	ND		3.00	1	06/23/2024 10:23	WG2310286
(S) Toluene-d8	*112*		*80.0-120*		*06/23/2024 10:23*	WG2310286
(S) 4-Bromofluorobenzene	*91.3*		*77.0-126*		*06/23/2024 10:23*	WG2310286
(S) 1,2-Dichloroethane-d4	*95.9*		*70.0-130*		*06/23/2024 10:23*	WG2310286

QUALITY CONTROL SUMMARY

L1747296-01,02

Method Blank (MB)

(MB) R4086341-1 06/25/24 15:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ammonia Nitrogen	U		117	250

L1747236-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1747236-04 06/25/24 15:41 • (DUP) R4086341-3 06/25/24 15:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	3120	3060	1	1.94		10

L1747236-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1747236-05 06/25/24 15:51 • (DUP) R4086341-6 06/25/24 15:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	3450	3650	1	5.80		10

Laboratory Control Sample (LCS)

(LCS) R4086341-2 06/25/24 15:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7500	7460	99.5	90.0-110	

L1747236-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747236-04 06/25/24 15:41 • (MS) R4086341-4 06/25/24 15:44 • (MSD) R4086341-5 06/25/24 15:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5000	3120	8050	8190	98.5	101	1	90.0-110			1.81	10

L1747236-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1747236-05 06/25/24 15:51 • (MS) R4086341-7 06/25/24 15:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	5000	3450	8820	107	1	90.0-110	

QUALITY CONTROL SUMMARY

L1747296-01,02

Method Blank (MB)

(MB) R4084044-1 06/19/24 13:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexavalent Chromium	U		0.150	0.500

L1747302-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1747302-01 06/19/24 15:55 • (DUP) R4084044-4 06/19/24 16:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	3.73		20

L1747784-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1747784-01 06/19/24 18:07 • (DUP) R4084044-7 06/19/24 18:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	1.67	1.66	1	0.678		20

Laboratory Control Sample (LCS)

(LCS) R4084044-2 06/19/24 13:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	2.00	2.14	107	90.0-110	

L1747296-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1747296-01 06/19/24 15:00 • (MS) R4084044-3 06/19/24 15:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	50.0	ND	50.9	102	1	90.0-110	

L1747608-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747608-01 06/19/24 16:39 • (MS) R4084044-5 06/19/24 16:50 • (MSD) R4084044-6 06/19/24 17:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	50.0	ND	51.8	52.2	104	104	1	90.0-110			0.766	20

Method Blank (MB)

(MB) R4082946-1 06/15/24 15:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Nitrate as (N)	U		48.0	100
Sulfate	U		594	5000

L1747293-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1747293-01 06/15/24 23:08 • (DUP) R4082946-3 06/15/24 23:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate as (N)	250	ND	1	200	P1	15
Sulfate	86300	86800	1	0.586		15

L1747296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1747296-01 06/15/24 23:47 • (DUP) R4082946-5 06/16/24 00:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate as (N)	690	840	1	19.6	J3	15
Sulfate	ND	ND	1	3.15		15

Laboratory Control Sample (LCS)

(LCS) R4082946-2 06/15/24 15:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate as (N)	8000	7880	98.5	80.0-120	
Sulfate	40000	39700	99.2	80.0-120	

L1747293-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1747293-01 06/15/24 23:08 • (MS) R4082946-4 06/15/24 23:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate as (N)	8000	250	8100	98.1	1	80.0-120	
Sulfate	40000	86300	109000	55.7	1	80.0-120	J6

L1747296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747296-01 06/15/24 23:47 • (MS) R4082946-6 06/16/24 00:14 • (MSD) R4082946-7 06/16/24 00:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate as (N)	8000	690	8230	8430	94.2	96.8	1	80.0-120			2.49	15
Sulfate	40000	ND	41600	41400	96.8	96.2	1	80.0-120			0.594	15

Method Blank (MB)

(MB) R4082934-1 06/17/24 17:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4082934-2 06/17/24 17:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Mercury	3.00	3.15	105	80.0-120	

L1747302-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747302-01 06/17/24 18:01 • (MS) R4082934-4 06/17/24 18:10 • (MSD) R4082934-5 06/17/24 18:13

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	ND	3.02	3.03	101	101	1	75.0-125			0.408	20

Method Blank (MB)

(MB) R4090034-1 07/04/24 00:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	U		0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Cadmium	U		0.150	1.00
Chromium	U		1.24	2.00
Copper	U		1.51	5.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Manganese	U		0.704	5.00
Nickel	U		0.816	2.00
Selenium	U		0.300	2.00
Silver	U		0.0700	2.00
Thallium	U		0.121	2.00
Vanadium	U		0.664	5.00
Zinc	U		3.02	25.0

Laboratory Control Sample (LCS)

(LCS) R4090034-2 07/04/24 00:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	45.9	91.8	80.0-120	
Arsenic	50.0	49.8	99.7	80.0-120	
Barium	50.0	46.4	92.8	80.0-120	
Beryllium	50.0	49.3	98.7	80.0-120	
Cadmium	50.0	54.9	110	80.0-120	
Chromium	50.0	51.1	102	80.0-120	
Copper	50.0	49.9	99.9	80.0-120	
Cobalt	50.0	51.5	103	80.0-120	
Lead	50.0	49.5	99.1	80.0-120	
Manganese	50.0	50.4	101	80.0-120	
Nickel	50.0	51.0	102	80.0-120	
Selenium	50.0	49.2	98.4	80.0-120	
Silver	50.0	50.4	101	80.0-120	
Thallium	50.0	47.7	95.4	80.0-120	
Vanadium	50.0	49.9	99.9	80.0-120	
Zinc	50.0	49.3	98.5	80.0-120	

L1747287-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747287-01 07/04/24 00:31 • (MS) R4090034-4 07/04/24 00:38 • (MSD) R4090034-5 07/04/24 00:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	ND	48.6	46.6	97.2	93.1	1	75.0-125			4.28	20
Arsenic	50.0	18.2	66.5	71.4	96.6	106	1	75.0-125			7.11	20
Barium	50.0	140	196	233	111	186	1	75.0-125		J5	17.4	20
Beryllium	50.0	ND	46.4	44.5	91.8	88.0	1	75.0-125			4.18	20
Cadmium	50.0	ND	54.6	54.2	109	108	1	75.0-125			0.851	20
Chromium	50.0	60.0	106	109	91.5	98.5	1	75.0-125			3.26	20
Copper	50.0	76.4	121	127	88.4	101	1	75.0-125			5.15	20
Cobalt	50.0	5.75	51.8	51.1	92.1	90.7	1	75.0-125			1.39	20
Lead	50.0	9.58	59.6	60.3	100	101	1	75.0-125			1.07	20
Manganese	50.0	895	931	921	71.2	51.5	1	75.0-125	V	V	1.06	20
Nickel	50.0	25.3	71.4	70.9	92.4	91.3	1	75.0-125			0.780	20
Selenium	50.0	27.9	78.3	77.8	101	99.9	1	75.0-125			0.578	20
Silver	50.0	ND	50.8	50.8	101	101	1	75.0-125			0.107	20
Thallium	50.0	ND	48.4	47.8	96.7	95.5	1	75.0-125			1.26	20
Vanadium	50.0	28.7	74.2	77.3	91.1	97.2	1	75.0-125			4.02	20
Zinc	50.0	124	153	204	58.3	159	1	75.0-125	J6	J3 J5	28.1	20

Method Blank (MB)

(MB) R4085711-3 06/23/24 08:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R4085711-3 06/23/24 08:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*115*			*80.0-120*
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*93.1*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4085711-1 06/23/24 07:12 • (LCSD) R4085711-2 06/23/24 07:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	42.7	37.4	171	150	19.0-160	J4		13.2	27
Acrolein	25.0	19.7	18.3	78.8	73.2	10.0-160			7.37	26
Acrylonitrile	25.0	26.6	24.9	106	99.6	55.0-149			6.60	20
Benzene	5.00	4.81	4.62	96.2	92.4	70.0-123			4.03	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4085711-1 06/23/24 07:12 • (LCSD) R4085711-2 06/23/24 07:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	5.60	5.83	112	117	73.0-121			4.02	20
Bromodichloromethane	5.00	4.64	4.62	92.8	92.4	75.0-120			0.432	20
Bromoform	5.00	4.66	4.55	93.2	91.0	68.0-132			2.39	20
Bromomethane	5.00	4.55	4.43	91.0	88.6	10.0-160			2.67	25
n-Butylbenzene	5.00	5.43	5.47	109	109	73.0-125			0.734	20
sec-Butylbenzene	5.00	5.82	5.79	116	116	75.0-125			0.517	20
tert-Butylbenzene	5.00	5.71	5.78	114	116	76.0-124			1.22	20
Carbon tetrachloride	5.00	4.58	4.54	91.6	90.8	68.0-126			0.877	20
Chlorobenzene	5.00	5.60	5.48	112	110	80.0-121			2.17	20
Chlorodibromomethane	5.00	4.90	4.89	98.0	97.8	77.0-125			0.204	20
Chloroethane	5.00	4.94	4.61	98.8	92.2	47.0-150			6.91	20
Chloroform	5.00	4.72	4.62	94.4	92.4	73.0-120			2.14	20
Chloromethane	5.00	4.88	4.72	97.6	94.4	41.0-142			3.33	20
2-Chlorotoluene	5.00	5.84	5.36	117	107	76.0-123			8.57	20
4-Chlorotoluene	5.00	5.70	5.81	114	116	75.0-122			1.91	20
1,2-Dibromo-3-Chloropropane	5.00	5.57	5.73	111	115	58.0-134			2.83	20
1,2-Dibromoethane	5.00	5.54	5.37	111	107	80.0-122			3.12	20
Dibromomethane	5.00	4.69	4.51	93.8	90.2	80.0-120			3.91	20
1,2-Dichlorobenzene	5.00	5.93	5.82	119	116	79.0-121			1.87	20
1,3-Dichlorobenzene	5.00	5.63	5.69	113	114	79.0-120			1.06	20
1,4-Dichlorobenzene	5.00	5.29	5.49	106	110	79.0-120			3.71	20
Dichlorodifluoromethane	5.00	4.36	4.15	87.2	83.0	51.0-149			4.94	20
1,1-Dichloroethane	5.00	4.80	4.72	96.0	94.4	70.0-126			1.68	20
1,2-Dichloroethane	5.00	4.64	4.64	92.8	92.8	70.0-128			0.000	20
1,1-Dichloroethene	5.00	4.76	4.59	95.2	91.8	71.0-124			3.64	20
cis-1,2-Dichloroethene	5.00	4.58	4.71	91.6	94.2	73.0-120			2.80	20
trans-1,2-Dichloroethene	5.00	4.89	4.63	97.8	92.6	73.0-120			5.46	20
1,2-Dichloropropane	5.00	4.75	4.55	95.0	91.0	77.0-125			4.30	20
1,1-Dichloropropene	5.00	4.67	4.68	93.4	93.6	74.0-126			0.214	20
1,3-Dichloropropane	5.00	5.44	5.47	109	109	80.0-120			0.550	20
cis-1,3-Dichloropropene	5.00	4.37	4.48	87.4	89.6	80.0-123			2.49	20
trans-1,3-Dichloropropene	5.00	4.90	5.01	98.0	100	78.0-124			2.22	20
2,2-Dichloropropane	5.00	3.95	3.78	79.0	75.6	58.0-130			4.40	20
Di-isopropyl ether	5.00	4.86	4.53	97.2	90.6	58.0-138			7.03	20
Ethylbenzene	5.00	5.60	5.40	112	108	79.0-123			3.64	20
Hexachloro-1,3-butadiene	5.00	5.58	5.59	112	112	54.0-138			0.179	20
Isopropylbenzene	5.00	5.53	5.34	111	107	76.0-127			3.50	20
p-Isopropyltoluene	5.00	5.74	5.64	115	113	76.0-125			1.76	20
2-Butanone (MEK)	25.0	28.3	26.5	113	106	44.0-160			6.57	20
Methylene Chloride	5.00	4.57	4.31	91.4	86.2	67.0-120			5.86	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4085711-1 06/23/24 07:12 • (LCSD) R4085711-2 06/23/24 07:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	28.8	28.5	115	114	68.0-142			1.05	20
Methyl tert-butyl ether	5.00	4.74	4.60	94.8	92.0	68.0-125			3.00	20
Naphthalene	5.00	5.79	6.04	116	121	54.0-135			4.23	20
n-Propylbenzene	5.00	5.75	5.68	115	114	77.0-124			1.22	20
Styrene	5.00	5.35	5.34	107	107	73.0-130			0.187	20
1,1,1,2-Tetrachloroethane	5.00	5.53	5.33	111	107	75.0-125			3.68	20
1,1,2,2-Tetrachloroethane	5.00	5.49	5.60	110	112	65.0-130			1.98	20
1,1,2-Trichlorotrifluoroethane	5.00	4.33	4.05	86.6	81.0	69.0-132			6.68	20
Tetrachloroethene	5.00	5.32	5.30	106	106	72.0-132			0.377	20
Toluene	5.00	5.51	5.49	110	110	79.0-120			0.364	20
1,2,3-Trichlorobenzene	5.00	6.00	5.98	120	120	50.0-138			0.334	20
1,2,4-Trichlorobenzene	5.00	5.75	5.69	115	114	57.0-137			1.05	20
1,1,1-Trichloroethane	5.00	4.76	4.62	95.2	92.4	73.0-124			2.99	20
1,1,2-Trichloroethane	5.00	5.29	5.44	106	109	80.0-120			2.80	20
Trichloroethene	5.00	5.02	4.82	100	96.4	78.0-124			4.07	20
Trichlorofluoromethane	5.00	4.70	4.29	94.0	85.8	59.0-147			9.12	20
1,2,3-Trichloropropane	5.00	5.86	5.79	117	116	73.0-130			1.20	20
1,2,4-Trimethylbenzene	5.00	5.87	5.82	117	116	76.0-121			0.855	20
1,2,3-Trimethylbenzene	5.00	5.84	5.81	117	116	77.0-120			0.515	20
1,3,5-Trimethylbenzene	5.00	5.81	5.97	116	119	76.0-122			2.72	20
Vinyl chloride	5.00	4.96	4.78	99.2	95.6	67.0-131			3.70	20
Xylenes, Total	15.0	16.6	16.1	111	107	79.0-123			3.06	20
(S) Toluene-d8				*110*	*109*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.8*	*95.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*98.7*	*97.2*	*70.0-130*				

Method Blank (MB)

(MB) R4083922-3 06/19/24 13:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-Oxybis(1-Chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00

Method Blank (MB)

(MB) R4083922-3 06/19/24 13:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
(S) 2-Fluorophenol	*28.3*			*10.0-120*
(S) Phenol-d5	*18.9*			*10.0-120*
(S) Nitrobenzene-d5	*61.4*			*10.0-127*
(S) 2-Fluorobiphenyl	*54.3*			*10.0-130*
(S) 2,4,6-Tribromophenol	*44.4*			*10.0-155*
(S) p-Terphenyl-d14	*59.7*			*10.0-128*

Method Blank (MB)

(MB) R4083922-4 06/19/24 13:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-Oxybis(1-Chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00

Method Blank (MB)

(MB) R4083922-4 06/19/24 13:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
(S) 2-Fluorophenol	*28.3*			*10.0-120*

Method Blank (MB)

(MB) R4083922-4 06/19/24 13:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
(S) Phenol-d5	*18.9*			*10.0-120*
(S) Nitrobenzene-d5	*61.4*			*10.0-127*
(S) 2-Fluorobiphenyl	*54.3*			*10.0-130*
(S) 2,4,6-Tribromophenol	*44.4*			*10.0-155*
(S) p-Terphenyl-d14	*59.7*			*10.0-128*

Laboratory Control Sample (LCS)

(LCS) R4083922-1 06/19/24 12:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	26.4	52.8	41.0-120	
Acenaphthylene	50.0	28.7	57.4	43.0-120	
Anthracene	50.0	28.2	56.4	45.0-120	
Benzidine	100	16.6	16.6	10.0-120	
Benzo(a)anthracene	50.0	31.1	62.2	47.0-120	
Benzo(b)fluoranthene	50.0	31.9	63.8	46.0-120	
Benzo(k)fluoranthene	50.0	33.4	66.8	46.0-120	
Benzo(g,h,i)perylene	50.0	28.4	56.8	48.0-121	
Benzo(a)pyrene	50.0	27.5	55.0	47.0-120	
Bis(2-chlorethoxy)methane	50.0	29.5	59.0	33.0-120	
Bis(2-chloroethyl)ether	50.0	30.2	60.4	23.0-120	
2,2-Oxybis(1-Chloropropane)	50.0	26.6	53.2	28.0-120	
4-Bromophenyl-phenylether	50.0	27.3	54.6	45.0-120	
2-Chloronaphthalene	50.0	26.3	52.6	37.0-120	
4-Chlorophenyl-phenylether	50.0	27.7	55.4	44.0-120	
Chrysene	50.0	30.9	61.8	48.0-120	
Dibenz(a,h)anthracene	50.0	28.7	57.4	47.0-120	
3,3-Dichlorobenzidine	100	58.1	58.1	44.0-120	
2,4-Dinitrotoluene	50.0	32.0	64.0	49.0-124	
2,6-Dinitrotoluene	50.0	30.2	60.4	46.0-120	
Fluoranthene	50.0	30.5	61.0	51.0-120	
Fluorene	50.0	27.0	54.0	47.0-120	
Hexachlorobenzene	50.0	25.3	50.6	44.0-120	
Hexachloro-1,3-butadiene	50.0	24.5	49.0	19.0-120	
Hexachlorocyclopentadiene	50.0	7.79	15.6	15.0-120	
Hexachloroethane	50.0	25.0	50.0	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	26.4	52.8	49.0-122	
Isophorone	50.0	28.3	56.6	36.0-120	

Laboratory Control Sample (LCS)

(LCS) R4083922-1 06/19/24 12:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	50.0	24.2	48.4	27.0-120	
Nitrobenzene	50.0	29.3	58.6	27.0-120	
n-Nitrosodimethylamine	50.0	26.8	53.6	10.0-120	
n-Nitrosodiphenylamine	50.0	29.3	58.6	47.0-120	
n-Nitrosodi-n-propylamine	50.0	29.6	59.2	31.0-120	
Phenanthrene	50.0	29.2	58.4	46.0-120	
Benzylbutyl phthalate	50.0	31.0	62.0	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	29.7	59.4	43.0-122	
Di-n-butyl phthalate	50.0	29.5	59.0	49.0-121	
Diethyl phthalate	50.0	29.1	58.2	48.0-122	
Dimethyl phthalate	50.0	29.5	59.0	48.0-120	
Di-n-octyl phthalate	50.0	28.4	56.8	42.0-125	
Pyrene	50.0	31.8	63.6	47.0-120	
1,2,4-Trichlorobenzene	50.0	25.2	50.4	24.0-120	
4-Chloro-3-methylphenol	50.0	25.6	51.2	40.0-120	
2-Chlorophenol	50.0	26.1	52.2	25.0-120	
2,4-Dichlorophenol	50.0	27.7	55.4	36.0-120	
2,4-Dimethylphenol	50.0	34.2	68.4	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	38.8	77.6	38.0-138	
2,4-Dinitrophenol	50.0	33.0	66.0	10.0-120	
2-Nitrophenol	50.0	30.4	60.8	31.0-120	
4-Nitrophenol	50.0	9.28	18.6	10.0-120	
Pentachlorophenol	50.0	20.3	40.6	23.0-120	
Phenol	50.0	12.4	24.8	10.0-120	
2,4,6-Trichlorophenol	50.0	31.9	63.8	42.0-120	
(S) 2-Fluorophenol			*42.4*	*10.0-120*	
(S) Phenol-d5			*27.0*	*10.0-120*	
(S) Nitrobenzene-d5			*67.0*	*10.0-127*	
(S) 2-Fluorobiphenyl			*64.2*	*10.0-130*	
(S) 2,4,6-Tribromophenol			*58.0*	*10.0-155*	
(S) p-Terphenyl-d14			*67.2*	*10.0-128*	

Laboratory Control Sample (LCS)

(LCS) R4083922-1 06/19/24 12:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	26.4	52.8	41.0-120	
Acenaphthylene	50.0	28.7	57.4	43.0-120	

Laboratory Control Sample (LCS)

(LCS) R4083922-1 06/19/24 12:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	50.0	28.2	56.4	45.0-120	
Benzidine	100	16.6	16.6	10.0-120	
Benzo(a)anthracene	50.0	31.1	62.2	47.0-120	
Benzo(b)fluoranthene	50.0	31.9	63.8	46.0-120	
Benzo(k)fluoranthene	50.0	33.4	66.8	46.0-120	
Benzo(g,h,i)perylene	50.0	28.4	56.8	48.0-121	
Benzo(a)pyrene	50.0	27.5	55.0	47.0-120	
Bis(2-chlorethoxy)methane	50.0	29.5	59.0	33.0-120	
Bis(2-chloroethyl)ether	50.0	30.2	60.4	23.0-120	
2,2-Oxybis(1-Chloropropane)	50.0	26.6	53.2	28.0-120	
4-Bromophenyl-phenylether	50.0	27.3	54.6	45.0-120	
2-Chloronaphthalene	50.0	26.3	52.6	37.0-120	
4-Chlorophenyl-phenylether	50.0	27.7	55.4	44.0-120	
Chrysene	50.0	30.9	61.8	48.0-120	
Dibenz(a,h)anthracene	50.0	28.7	57.4	47.0-120	
3,3-Dichlorobenzidine	100	58.1	58.1	44.0-120	
2,4-Dinitrotoluene	50.0	32.0	64.0	49.0-124	
2,6-Dinitrotoluene	50.0	30.2	60.4	46.0-120	
Fluoranthene	50.0	30.5	61.0	51.0-120	
Fluorene	50.0	27.0	54.0	47.0-120	
Hexachlorobenzene	50.0	25.3	50.6	44.0-120	
Hexachloro-1,3-butadiene	50.0	24.5	49.0	19.0-120	
Hexachlorocyclopentadiene	50.0	7.79	15.6	15.0-120	
Hexachloroethane	50.0	25.0	50.0	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	26.4	52.8	49.0-122	
Isophorone	50.0	28.3	56.6	36.0-120	
Naphthalene	50.0	24.2	48.4	27.0-120	
Nitrobenzene	50.0	29.3	58.6	27.0-120	
n-Nitrosodimethylamine	50.0	26.8	53.6	10.0-120	
n-Nitrosodiphenylamine	50.0	29.3	58.6	47.0-120	
n-Nitrosodi-n-propylamine	50.0	29.6	59.2	31.0-120	
Phenanthrene	50.0	29.2	58.4	46.0-120	
Benzylbutyl phthalate	50.0	31.0	62.0	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	29.7	59.4	43.0-122	
Di-n-butyl phthalate	50.0	29.5	59.0	49.0-121	
Diethyl phthalate	50.0	29.1	58.2	48.0-122	
Dimethyl phthalate	50.0	29.5	59.0	48.0-120	
Di-n-octyl phthalate	50.0	28.4	56.8	42.0-125	
Pyrene	50.0	31.8	63.6	47.0-120	
1,2,4-Trichlorobenzene	50.0	25.2	50.4	24.0-120	

Laboratory Control Sample (LCS)

(LCS) R4083922-1 06/19/24 12:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Chloro-3-methylphenol	50.0	25.6	51.2	40.0-120	
2-Chlorophenol	50.0	26.1	52.2	25.0-120	
2,4-Dichlorophenol	50.0	27.7	55.4	36.0-120	
2,4-Dimethylphenol	50.0	34.2	68.4	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	38.8	77.6	38.0-138	
2,4-Dinitrophenol	50.0	33.0	66.0	10.0-120	
2-Nitrophenol	50.0	30.4	60.8	31.0-120	
4-Nitrophenol	50.0	9.28	18.6	10.0-120	
Pentachlorophenol	50.0	20.3	40.6	23.0-120	
Phenol	50.0	12.4	24.8	10.0-120	
2,4,6-Trichlorophenol	50.0	31.9	63.8	42.0-120	
(S) 2-Fluorophenol			*42.4*	*10.0-120*	
(S) Phenol-d5			*27.0*	*10.0-120*	
(S) Nitrobenzene-d5			*67.0*	*10.0-127*	
(S) 2-Fluorobiphenyl			*64.2*	*10.0-130*	
(S) 2,4,6-Tribromophenol			*58.0*	*10.0-155*	
(S) p-Terphenyl-d14			*67.2*	*10.0-128*	

L1746970-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746970-01 06/19/24 16:02 • (MS) R4084490-1 06/19/24 16:23 • (MSD) R4084490-2 06/19/24 16:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	50.0	ND	13.0	29.4	26.0	58.8	1	28.0-120	J6	J3	77.4	25
Acenaphthylene	50.0	ND	12.8	29.4	25.6	58.8	1	31.0-121	J6	J3	78.7	25
Anthracene	50.0	ND	9.90	21.7	19.8	43.4	1	36.0-120	J6	J3	74.7	23
Benzidine	100	ND	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	37
Benzo(a)anthracene	50.0	ND	18.7	32.3	37.4	64.6	1	39.0-120	J6	J3	53.3	23
Benzo(b)fluoranthene	50.0	ND	18.8	31.2	37.6	62.4	1	37.0-120		J3	49.6	23
Benzo(k)fluoranthene	50.0	ND	19.2	32.8	38.4	65.6	1	37.0-120		J3	52.3	26
Benzo(g,h,i)perylene	50.0	ND	17.5	28.1	35.0	56.2	1	37.0-123	J6	J3	46.5	25
Benzo(a)pyrene	50.0	ND	15.6	26.5	31.2	53.0	1	37.0-120	J6	J3	51.8	24
Bis(2-chlorethoxy)methane	50.0	ND	16.2	30.5	32.4	61.0	1	17.0-120		J3	61.2	31
Bis(2-chloroethyl)ether	50.0	ND	20.8	38.4	41.6	76.8	1	14.0-120		J3	59.5	33
2,2-Oxybis(1-Chloropropane)	50.0	ND	14.8	30.2	29.6	60.4	1	18.0-120		J3	68.4	34
4-Bromophenyl-phenylether	50.0	ND	13.7	29.5	27.4	59.0	1	37.0-120	J6	J3	73.1	24
2-Chloronaphthalene	50.0	ND	12.1	27.1	24.2	54.2	1	29.0-120	J6	J3	76.5	28
4-Chlorophenyl-phenylether	50.0	ND	13.1	28.5	26.2	57.0	1	36.0-120	J6	J3	74.0	23
Chrysene	50.0	ND	20.0	33.0	40.0	66.0	1	38.0-120		J3	49.1	23

L1746970-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746970-01 06/19/24 16:02 • (MS) R4084490-1 06/19/24 16:23 • (MSD) R4084490-2 06/19/24 16:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dibenz(a,h)anthracene	50.0	ND	20.4	33.5	40.8	67.0	1	36.0-121		J3	48.6	24
3,3-Dichlorobenzidine	100	ND	ND	ND	0.000	0.000	1	10.0-134	J6	J6	0.000	30
2,4-Dinitrotoluene	50.0	ND	15.5	36.5	31.0	73.0	1	39.0-125	J6	J3	80.8	25
2,6-Dinitrotoluene	50.0	ND	14.8	35.0	29.6	70.0	1	36.0-120	J6	J3	81.1	27
Fluoranthene	50.0	ND	15.7	31.6	31.4	63.2	1	41.0-121	J6	J3	67.2	22
Fluorene	50.0	ND	14.0	31.0	28.0	62.0	1	37.0-120	J6	J3	75.6	24
Hexachlorobenzene	50.0	ND	15.1	27.6	30.2	55.2	1	35.0-122	J6	J3	58.5	24
Hexachloro-1,3-butadiene	50.0	ND	11.4	23.1	22.8	46.2	1	12.0-120		J3	67.8	34
Hexachlorocyclopentadiene	50.0	ND	ND	12.4	9.86	24.8	1	10.0-120	J6	J3	86.2	33
Hexachloroethane	50.0	ND	12.5	28.8	25.0	57.6	1	10.0-120		J3	78.9	40
Indeno(1,2,3-cd)pyrene	50.0	ND	16.7	27.1	33.4	54.2	1	38.0-125	J6	J3	47.5	24
Isophorone	50.0	ND	13.6	25.9	27.2	51.8	1	21.0-120		J3	62.3	27
Naphthalene	50.0	ND	11.6	25.5	23.2	51.0	1	10.0-120		J3	74.9	31
Nitrobenzene	50.0	ND	23.2	43.2	46.4	86.4	1	12.0-120		J3	60.2	30
n-Nitrosodimethylamine	50.0	ND	25.9	29.8	51.8	59.6	1	10.0-120			14.0	40
n-Nitrosodiphenylamine	50.0	ND	13.6	31.9	27.2	63.8	1	37.0-120	J6	J3	80.4	24
n-Nitrosodi-n-propylamine	50.0	ND	17.4	28.1	34.8	56.2	1	16.0-120		J3	47.0	30
Phenanthrene	50.0	ND	14.5	31.6	29.0	63.2	1	33.0-120	J6	J3	74.2	22
Benzylbutyl phthalate	50.0	ND	19.5	39.6	39.0	79.2	1	34.0-126		J3	68.0	24
Bis(2-ethylhexyl)phthalate	50.0	ND	22.8	37.4	45.6	74.8	1	33.0-126		J3	48.5	25
Di-n-butyl phthalate	50.0	ND	18.2	38.1	36.4	76.2	1	35.0-128		J3	70.7	23
Diethyl phthalate	50.0	ND	15.2	35.7	30.4	71.4	1	39.0-125	J6	J3	80.6	24
Dimethyl phthalate	50.0	ND	15.2	33.8	30.4	67.6	1	37.0-120	J6	J3	75.9	24
Di-n-octyl phthalate	50.0	ND	23.3	38.4	46.6	76.8	1	25.0-135		J3	48.9	26
Pyrene	50.0	ND	17.0	34.1	34.0	68.2	1	39.0-120	J6	J3	66.9	22
1,2,4-Trichlorobenzene	50.0	ND	11.4	24.8	22.8	49.6	1	15.0-120		J3	74.0	31
4-Chloro-3-methylphenol	50.0	ND	19.5	29.2	39.0	58.4	1	26.0-120		J3	39.8	27
2-Chlorophenol	50.0	ND	20.0	28.4	40.0	56.8	1	18.0-120		J3	34.7	34
2,4-Dichlorophenol	50.0	ND	18.1	30.4	36.2	60.8	1	19.0-120		J3	50.7	27
2,4-Dimethylphenol	50.0	ND	12.9	25.4	25.8	50.8	1	15.0-120		J3	65.3	28
4,6-Dinitro-2-methylphenol	50.0	ND	14.0	30.7	28.0	61.4	1	10.0-144		J3	74.7	39
2,4-Dinitrophenol	50.0	ND	15.9	31.6	31.8	63.2	1	10.0-120		J3	66.1	40
2-Nitrophenol	50.0	ND	20.6	41.2	41.2	82.4	1	20.0-120		J3	66.7	30
4-Nitrophenol	50.0	ND	ND	14.2	19.0	28.4	1	10.0-120			39.8	40
Pentachlorophenol	50.0	ND	10.6	27.7	21.2	55.4	1	10.0-128		J3	89.3	37
Phenol	50.0	ND	11.7	14.8	23.4	29.6	1	10.0-120			23.4	40
2,4,6-Trichlorophenol	50.0	ND	15.3	33.6	30.6	67.2	1	26.0-120		J3	74.8	31
(S) 2-Fluorophenol					*33.2*	*41.1*		*10.0-120*				
(S) Phenol-d5					*24.8*	*31.3*		*10.0-120*				
(S) Nitrobenzene-d5					*32.3*	*67.8*		*10.0-127*				

L1746970-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746970-01 06/19/24 16:02 • (MS) R4084490-1 06/19/24 16:23 • (MSD) R4084490-2 06/19/24 16:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) 2-Fluorobiphenyl					*28.4*	*62.6*		*10.0-130*				
(S) 2,4,6-Tribromophenol					*27.3*	*67.5*		*10.0-155*				
(S) p-Terphenyl-d14					*43.1*	*61.9*		*10.0-128*				

Method Blank (MB)

(MB) R4084771-2 06/20/24 23:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-Oxybis(1-Chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00

Method Blank (MB)

(MB) R4084771-2 06/20/24 23:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
(S) 2-Fluorophenol	*52.0*			*10.0-120*
(S) Phenol-d5	*34.8*			*10.0-120*
(S) Nitrobenzene-d5	*80.5*			*10.0-127*
(S) 2-Fluorobiphenyl	*83.1*			*10.0-130*
(S) 2,4,6-Tribromophenol	*88.0*			*10.0-155*
(S) p-Terphenyl-d14	*101*			*10.0-128*

Laboratory Control Sample (LCS)

(LCS) R4084771-1 06/20/24 23:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	37.9	75.8	41.0-120	
Acenaphthylene	50.0	40.9	81.8	43.0-120	
Anthracene	50.0	40.9	81.8	45.0-120	
Benzidine	100	13.8	13.8	10.0-120	
Benzo(a)anthracene	50.0	44.4	88.8	47.0-120	
Benzo(b)fluoranthene	50.0	44.6	89.2	46.0-120	
Benzo(k)fluoranthene	50.0	45.4	90.8	46.0-120	
Benzo(g,h,i)perylene	50.0	43.4	86.8	48.0-121	
Benzo(a)pyrene	50.0	42.4	84.8	47.0-120	
Bis(2-chlorethoxy)methane	50.0	36.8	73.6	33.0-120	
Bis(2-chloroethyl)ether	50.0	38.9	77.8	23.0-120	
2,2-Oxybis(1-Chloropropane)	50.0	35.2	70.4	28.0-120	
4-Bromophenyl-phenylether	50.0	44.7	89.4	45.0-120	
2-Chloronaphthalene	50.0	35.9	71.8	37.0-120	

Laboratory Control Sample (LCS)

(LCS) R4084771-1 06/20/24 23:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Chlorophenyl-phenylether	50.0	43.0	86.0	44.0-120	
Chrysene	50.0	42.9	85.8	48.0-120	
Dibenz(a,h)anthracene	50.0	44.6	89.2	47.0-120	
3,3-Dichlorobenzidine	100	84.2	84.2	44.0-120	
2,4-Dinitrotoluene	50.0	50.2	100	49.0-124	
2,6-Dinitrotoluene	50.0	46.4	92.8	46.0-120	
Fluoranthene	50.0	43.5	87.0	51.0-120	
Fluorene	50.0	41.9	83.8	47.0-120	
Hexachlorobenzene	50.0	43.0	86.0	44.0-120	
Hexachloro-1,3-butadiene	50.0	26.9	53.8	19.0-120	
Hexachlorocyclopentadiene	50.0	18.6	37.2	15.0-120	
Hexachloroethane	50.0	28.4	56.8	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	41.1	82.2	49.0-122	
Isophorone	50.0	36.9	73.8	36.0-120	
Naphthalene	50.0	30.6	61.2	27.0-120	
Nitrobenzene	50.0	33.0	66.0	27.0-120	
n-Nitrosodimethylamine	50.0	26.5	53.0	10.0-120	
n-Nitrosodiphenylamine	50.0	41.9	83.8	47.0-120	
n-Nitrosodi-n-propylamine	50.0	41.7	83.4	31.0-120	
Phenanthrene	50.0	40.4	80.8	46.0-120	
Benzylbutyl phthalate	50.0	46.6	93.2	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	46.2	92.4	43.0-122	
Di-n-butyl phthalate	50.0	46.3	92.6	49.0-121	
Diethyl phthalate	50.0	44.8	89.6	48.0-122	
Dimethyl phthalate	50.0	43.3	86.6	48.0-120	
Di-n-octyl phthalate	50.0	46.6	93.2	42.0-125	
Pyrene	50.0	43.4	86.8	47.0-120	
1,2,4-Trichlorobenzene	50.0	29.0	58.0	24.0-120	
4-Chloro-3-methylphenol	50.0	40.7	81.4	40.0-120	
2-Chlorophenol	50.0	34.8	69.6	25.0-120	
2,4-Dichlorophenol	50.0	35.6	71.2	36.0-120	
2,4-Dimethylphenol	50.0	44.8	89.6	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	57.1	114	38.0-138	
2,4-Dinitrophenol	50.0	61.4	123	10.0-120	J4
2-Nitrophenol	50.0	36.4	72.8	31.0-120	
4-Nitrophenol	50.0	22.9	45.8	10.0-120	
Pentachlorophenol	50.0	42.8	85.6	23.0-120	
Phenol	50.0	18.9	37.8	10.0-120	
2,4,6-Trichlorophenol	50.0	40.1	80.2	42.0-120	
(S) 2-Fluorophenol			*50.0*	*10.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4084771-1 06/20/24 23:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) Phenol-d5			*35.9*	*10.0-120*	
(S) Nitrobenzene-d5			*59.0*	*10.0-127*	
(S) 2-Fluorobiphenyl			*76.8*	*10.0-130*	
(S) 2,4,6-Tribromophenol			*96.0*	*10.0-155*	
(S) p-Terphenyl-d14			*97.7*	*10.0-128*	

L1747370-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747370-03 06/21/24 03:42 • (MS) R4084771-3 06/21/24 04:03 • (MSD) R4084771-4 06/21/24 04:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	46.3	ND	36.7	39.6	79.3	84.8	1	28.0-120			7.60	25
Acenaphthylene	46.3	ND	39.2	42.7	84.7	91.4	1	31.0-121			8.55	25
Anthracene	46.3	ND	37.7	41.0	81.4	87.8	1	36.0-120			8.39	23
Benzidine	92.6	ND	40.2	35.7	43.4	38.2	1	10.0-120			11.9	37
Benzo(a)anthracene	46.3	ND	38.5	42.2	83.2	90.4	1	39.0-120			9.17	23
Benzo(b)fluoranthene	46.3	ND	37.8	40.9	81.6	87.6	1	37.0-120			7.88	23
Benzo(k)fluoranthene	46.3	ND	38.0	41.7	82.1	89.3	1	37.0-120			9.28	26
Benzo(g,h,i)perylene	46.3	ND	35.5	39.0	76.7	83.5	1	37.0-123			9.40	25
Benzo(a)pyrene	46.3	ND	35.6	40.1	76.9	85.9	1	37.0-120			11.9	24
Bis(2-chlorethoxy)methane	46.3	ND	36.6	39.8	79.0	85.2	1	17.0-120			8.38	31
Bis(2-chloroethyl)ether	46.3	ND	38.0	44.9	82.1	96.1	1	14.0-120			16.6	33
2,2-Oxybis(1-Chloropropane)	46.3	ND	35.6	40.2	76.9	86.1	1	18.0-120			12.1	34
4-Bromophenyl-phenylether	46.3	ND	40.5	44.8	87.5	95.9	1	37.0-120			10.1	24
2-Chloronaphthalene	46.3	ND	35.4	38.3	76.5	82.0	1	29.0-120			7.87	28
4-Chlorophenyl-phenylether	46.3	ND	40.5	44.2	87.5	94.6	1	36.0-120			8.74	23
Chrysene	46.3	ND	36.7	40.8	79.3	87.4	1	38.0-120			10.6	23
Dibenz(a,h)anthracene	46.3	ND	35.9	39.7	77.5	85.0	1	36.0-121			10.1	24
3,3-Dichlorobenzidine	92.6	ND	66.8	69.9	72.1	74.8	1	10.0-134			4.54	30
2,4-Dinitrotoluene	46.3	ND	48.8	52.9	105	113	1	39.0-125			8.06	25
2,6-Dinitrotoluene	46.3	ND	45.1	49.1	97.4	105	1	36.0-120			8.49	27
Fluoranthene	46.3	ND	40.9	43.1	88.3	92.3	1	41.0-121			5.24	22
Fluorene	46.3	ND	39.9	43.4	86.2	92.9	1	37.0-120			8.40	24
Hexachlorobenzene	46.3	ND	38.3	42.6	82.7	91.2	1	35.0-122			10.6	24
Hexachloro-1,3-butadiene	46.3	ND	28.0	29.8	60.5	63.8	1	12.0-120			6.23	34
Hexachlorocyclopentadiene	46.3	ND	22.2	29.7	47.9	63.6	1	10.0-120			28.9	33
Hexachloroethane	46.3	ND	30.9	33.4	66.7	71.5	1	10.0-120			7.78	40
Indeno(1,2,3-cd)pyrene	46.3	ND	33.7	37.7	72.8	80.7	1	38.0-125			11.2	24
Isophorone	46.3	ND	36.4	40.1	78.6	85.9	1	21.0-120			9.67	27

L1747370-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747370-03 06/21/24 03:42 • (MS) R4084771-3 06/21/24 04:03 • (MSD) R4084771-4 06/21/24 04:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Naphthalene	46.3	ND	31.8	34.1	68.7	73.0	1	10.0-120			6.98	31
Nitrobenzene	46.3	ND	34.3	37.1	74.1	79.4	1	12.0-120			7.84	30
n-Nitrosodimethylamine	46.3	ND	22.2	24.7	47.9	52.9	1	10.0-120			10.7	40
n-Nitrosodiphenylamine	46.3	ND	32.9	31.8	71.1	68.1	1	37.0-120			3.40	24
n-Nitrosodi-n-propylamine	46.3	ND	41.0	48.0	88.6	103	1	16.0-120			15.7	30
Phenanthrene	46.3	ND	37.9	40.2	81.9	86.1	1	33.0-120			5.89	22
Benzylbutyl phthalate	46.3	ND	42.1	46.4	90.9	99.4	1	34.0-126			9.72	24
Bis(2-ethylhexyl)phthalate	46.3	ND	38.5	42.7	83.2	91.4	1	33.0-126			10.3	25
Di-n-butyl phthalate	46.3	ND	42.3	45.3	91.4	97.0	1	35.0-128			6.85	23
Diethyl phthalate	46.3	ND	42.9	46.2	92.7	98.9	1	39.0-125			7.41	24
Dimethyl phthalate	46.3	ND	40.6	44.6	87.7	95.5	1	37.0-120			9.39	24
Di-n-octyl phthalate	46.3	ND	39.1	43.4	84.4	92.9	1	25.0-135			10.4	26
Pyrene	46.3	ND	39.2	43.2	84.7	92.5	1	39.0-120			9.71	22
1,2,4-Trichlorobenzene	46.3	ND	30.1	32.4	65.0	69.4	1	15.0-120			7.36	31
4-Chloro-3-methylphenol	46.3	ND	32.2	37.1	69.5	79.4	1	26.0-120			14.1	27
2-Chlorophenol	46.3	ND	29.2	34.8	63.1	74.5	1	18.0-120			17.5	34
2,4-Dichlorophenol	46.3	ND	30.6	34.8	66.1	74.5	1	19.0-120			12.8	27
2,4-Dimethylphenol	46.3	ND	38.1	43.0	82.3	92.1	1	15.0-120			12.1	28
4,6-Dinitro-2-methylphenol	46.3	ND	49.4	54.4	107	116	1	10.0-144			9.63	39
2,4-Dinitrophenol	46.3	ND	55.4	60.6	120	130	1	10.0-120		J5	8.97	40
2-Nitrophenol	46.3	ND	34.6	39.1	74.7	83.7	1	20.0-120			12.2	30
4-Nitrophenol	46.3	ND	19.5	20.6	42.1	44.1	1	10.0-120			5.49	40
Pentachlorophenol	46.3	ND	37.9	41.0	81.9	87.8	1	10.0-128			7.86	37
Phenol	46.3	ND	14.8	17.6	32.0	37.7	1	10.0-120			17.3	40
2,4,6-Trichlorophenol	46.3	ND	36.4	39.7	78.6	85.0	1	26.0-120			8.67	31
(S) 2-Fluorophenol					*41.5*	*48.2*		*10.0-120*				
(S) Phenol-d5					*29.8*	*35.3*		*10.0-120*				
(S) Nitrobenzene-d5					*60.2*	*70.8*		*10.0-127*				
(S) 2-Fluorobiphenyl					*77.2*	*84.9*		*10.0-130*				
(S) 2,4,6-Tribromophenol					*86.5*	*93.6*		*10.0-155*				
(S) p-Terphenyl-d14					*85.2*	*94.1*		*10.0-128*				

Method Blank (MB)

(MB) R4084467-2 06/19/24 11:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,4-Dioxane	U		0.300	0.400
(S) Nitrobenzene-d5	*79.3*			*10.0-120*

Laboratory Control Sample (LCS)

(LCS) R4084467-1 06/19/24 10:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
1,4-Dioxane	50.0	64.1	128	73.0-146	
(S) Nitrobenzene-d5			*82.8*	*10.0-120*	

L1746398-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746398-01 06/19/24 14:30 • (MS) R4084467-3 06/19/24 14:49 • (MSD) R4084467-4 06/19/24 15:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
1,4-Dioxane	50.0	0.841	56.0	59.2	110	117	1	38.0-160			5.56	21
(S) Nitrobenzene-d5					*74.9*	*73.4*		*10.0-120*				

Method Blank (MB)

(MB) R4084219-2 06/20/24 02:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.300	0.400
(S) Nitrobenzene-d5	*61.8*			*10.0-120*

Laboratory Control Sample (LCS)

(LCS) R4084219-1 06/20/24 02:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dioxane	50.0	64.6	129	73.0-146	
(S) Nitrobenzene-d5			*57.6*	*10.0-120*	

L1746536-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746536-10 06/20/24 06:52 • (MS) R4084219-3 06/20/24 07:11 • (MSD) R4084219-4 06/20/24 07:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	1.37	67.8	67.3	133	132	1	38.0-160			0.740	21
(S) Nitrobenzene-d5					*70.8*	*69.7*		*10.0-120*				

L1746962-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746962-01 06/20/24 07:49 • (MS) R4084219-5 06/20/24 08:08 • (MSD) R4084219-6 06/20/24 08:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	ND	65.7	66.0	131	132	1	38.0-160			0.456	21
(S) Nitrobenzene-d5					*57.4*	*69.2*		*10.0-120*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C6	The initial calibration verification standard (SSCV) associated with this data responded low.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
S & ME (SMERLNC)
3201 Spring Forest Road
Raleigh, North Carolina 27616

Billing Information:

Report to: Connor Hicks
Email To: ConnorHicks@smeinc.com

Project Description: **Cliffdale Landfill**
City/State Collected:

Phone:
Fax:
Client Project #
Lab Project # **23050456**

Collected by (print):
Site/Facility ID #
P.O. #

Collected by (signature):
Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed
Email? ___No ✓Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8260 VOC's - 40mL amber HCL	8270 SVOC's - x2 100mL amber	1,4 Dioxane by 8270SIM - x2 100mL amber	Metals (16) 6020 + Hg 7470 - 250mL HDPE HNO3 ✓N	HexCr 7199 - 50mL plunger filter/bufer	Ammonia 350.1 - 250mL HDPE H2SO4 ✓N	Nitrate/Sulfate - 250mL HDPE				Rem./Contaminant	Sample # (lab only)
PW-4402	G	GW	-	6/13/24	1435	11	X	X	X	X	X	X	X					-01
DUPLICATE	G	GW	-	6/13/24		11	X	X	X	X	X	X	X					-02
Trip Blank						1	X											-03

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1747296
Table # H155
Acctnum: SMERLNC
Template:
Prelogin:
TSR: Mellette
Cooler:
Shipped Via: Raleigh Serv

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RA Screen <0.5 mR/hr: Y N
If Applicable
VOA Zero Headspace: Y N
Pres. Correct/Check: Y N
6337 2243 9404

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
STMG	6/13/24	1710	
	6/14/24	1511	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: EDM °C Bottles Received: 22
1.9+0.3=2.2

Condition: (lab use only)

COC Seal Intact: ____Y ____N ____NA

Received for lab by: (Signature) Easton Organ
Date: 6/15/24 Time: 0900

pH Checked: NCF: