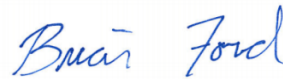


Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group: L1812727
Samples Received: 12/24/2024
Project Number:
Description: DEQ Forest Creek

Report To: Cathy Brown
700 NE Multnomah St. #600
Portland, OR 97124

Entire Report Reviewed By:



Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
EQUIPMENT RINSATE L1812727-01	5
TRIP BLANK L1812727-02	9
Qc: Quality Control Summary	10
Mercury by Method 7470A	10
Metals (ICP) by Method 6010D	11
Volatile Organic Compounds (GC) by Method NWTPHGX	13
Volatile Organic Compounds (GC/MS) by Method 8260D	14
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	19
Chlorinated Acid Herbicides (GC) by Method 8151A	20
Pesticides (GC) by Method 8081B	21
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	23
Gl: Glossary of Terms	25
Al: Accreditations & Locations	26
Sc: Sample Chain of Custody	27

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

SAMPLE SUMMARY

EQUIPMENT RINSATE L1812727-01 GW

Collected by
Connor Anderson

Collected date/time
12/20/24 21:00

Received date/time
12/24/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG2426119	1	12/31/24 14:38	01/01/25 13:50	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426131	1	12/31/24 09:59	12/31/24 16:24	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2426192	1	12/30/24 01:31	12/30/24 01:31	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2427487	1	01/02/25 11:48	01/02/25 11:48	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2426650	1	12/31/24 20:37	01/02/25 19:28	MAA	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2425575	1	12/27/24 22:39	12/30/24 21:39	BMC	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG2425081	1	12/27/24 01:08	12/27/24 18:52	LJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2424808	1	12/26/24 08:18	12/28/24 23:00	MBE	Mt. Juliet, TN

TRIP BLANK L1812727-02 GW

Collected by
Connor Anderson

Collected date/time
12/20/24 00:00

Received date/time
12/24/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2425237	1	12/27/24 01:55	12/27/24 01:55	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.



Brian Ford
Project Manager

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

EQUIPMENT RINSATE

Collected date/time: 12/20/24 21:00

SAMPLE RESULTS - 01

L1812727

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0700	0.200	1	01/01/2025 13:50	WG2426119

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		5.06	10.0	1	12/31/2024 16:24	WG2426131
Arsenic	U		7.83	10.0	1	12/31/2024 16:24	WG2426131
Beryllium	U		0.501	2.00	1	12/31/2024 16:24	WG2426131
Cadmium	0.983	B J	0.538	2.00	1	12/31/2024 16:24	WG2426131
Chromium	U		1.51	10.0	1	12/31/2024 16:24	WG2426131
Copper	U		2.26	10.0	1	12/31/2024 16:24	WG2426131
Lead	U		2.43	6.00	1	12/31/2024 16:24	WG2426131
Nickel	2.54	J	1.96	10.0	1	12/31/2024 16:24	WG2426131
Selenium	U		6.16	10.0	1	12/31/2024 16:24	WG2426131
Silver	U		2.89	5.00	1	12/31/2024 16:24	WG2426131
Thallium	U		6.63	10.0	1	12/31/2024 16:24	WG2426131
Zinc	U		4.67	50.0	1	12/31/2024 16:24	WG2426131

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/30/2024 01:31	WG2426192
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		12/30/2024 01:31	WG2426192

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	01/02/2025 11:48	WG2427487
Acrylonitrile	U		0.671	10.0	1	01/02/2025 11:48	WG2427487
Benzene	0.122	J	0.0941	1.00	1	01/02/2025 11:48	WG2427487
Bromobenzene	U		0.118	1.00	1	01/02/2025 11:48	WG2427487
Bromodichloromethane	U		0.136	1.00	1	01/02/2025 11:48	WG2427487
Bromoform	U		0.129	1.00	1	01/02/2025 11:48	WG2427487
Bromomethane	U	C3	0.605	5.00	1	01/02/2025 11:48	WG2427487
n-Butylbenzene	U		0.157	1.00	1	01/02/2025 11:48	WG2427487
sec-Butylbenzene	U		0.125	1.00	1	01/02/2025 11:48	WG2427487
tert-Butylbenzene	U		0.127	1.00	1	01/02/2025 11:48	WG2427487
Carbon tetrachloride	U		0.128	1.00	1	01/02/2025 11:48	WG2427487
Chlorobenzene	U		0.116	1.00	1	01/02/2025 11:48	WG2427487
Chlorodibromomethane	U		0.140	1.00	1	01/02/2025 11:48	WG2427487
Chloroethane	U		0.192	5.00	1	01/02/2025 11:48	WG2427487
Chloroform	U		0.111	5.00	1	01/02/2025 11:48	WG2427487
Chloromethane	U		0.960	2.50	1	01/02/2025 11:48	WG2427487
2-Chlorotoluene	U		0.106	1.00	1	01/02/2025 11:48	WG2427487
4-Chlorotoluene	U		0.114	1.00	1	01/02/2025 11:48	WG2427487
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	01/02/2025 11:48	WG2427487
1,2-Dibromoethane	U		0.126	1.00	1	01/02/2025 11:48	WG2427487
Dibromomethane	U		0.122	1.00	1	01/02/2025 11:48	WG2427487
1,2-Dichlorobenzene	U		0.107	1.00	1	01/02/2025 11:48	WG2427487
1,3-Dichlorobenzene	U		0.110	1.00	1	01/02/2025 11:48	WG2427487
1,4-Dichlorobenzene	U		0.120	1.00	1	01/02/2025 11:48	WG2427487
Dichlorodifluoromethane	U		0.374	5.00	1	01/02/2025 11:48	WG2427487
1,1-Dichloroethane	U		0.100	1.00	1	01/02/2025 11:48	WG2427487

ACCOUNT:

Oregon Dept. of Env. Quality - ODEQ

PROJECT:

SDG:

L1812727

DATE/TIME:

01/06/25 13:37

PAGE:

5 of 27

EQUIPMENT RINSATE

Collected date/time: 12/20/24 21:00

SAMPLE RESULTS - 01

L1812727

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.0819	1.00	1	01/02/2025 11:48	WG2427487
1,1-Dichloroethene	U		0.188	1.00	1	01/02/2025 11:48	WG2427487
cis-1,2-Dichloroethene	U		0.126	1.00	1	01/02/2025 11:48	WG2427487
trans-1,2-Dichloroethene	U		0.149	1.00	1	01/02/2025 11:48	WG2427487
1,2-Dichloropropane	U		0.149	1.00	1	01/02/2025 11:48	WG2427487
1,1-Dichloropropene	U		0.142	1.00	1	01/02/2025 11:48	WG2427487
1,3-Dichloropropane	U		0.110	1.00	1	01/02/2025 11:48	WG2427487
cis-1,3-Dichloropropene	U		0.111	1.00	1	01/02/2025 11:48	WG2427487
trans-1,3-Dichloropropene	U		0.118	1.00	1	01/02/2025 11:48	WG2427487
2,2-Dichloropropane	U		0.161	1.00	1	01/02/2025 11:48	WG2427487
Di-isopropyl ether	U		0.105	1.00	1	01/02/2025 11:48	WG2427487
Ethylbenzene	U		0.137	1.00	1	01/02/2025 11:48	WG2427487
Hexachloro-1,3-butadiene	U		0.337	1.00	1	01/02/2025 11:48	WG2427487
Isopropylbenzene	U		0.105	1.00	1	01/02/2025 11:48	WG2427487
p-Isopropyltoluene	U		0.120	1.00	1	01/02/2025 11:48	WG2427487
2-Butanone (MEK)	U		1.19	10.0	1	01/02/2025 11:48	WG2427487
Methylene Chloride	U		0.430	5.00	1	01/02/2025 11:48	WG2427487
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	01/02/2025 11:48	WG2427487
Methyl tert-butyl ether	U		0.101	1.00	1	01/02/2025 11:48	WG2427487
Naphthalene	U		1.00	5.00	1	01/02/2025 11:48	WG2427487
n-Propylbenzene	U		0.0993	1.00	1	01/02/2025 11:48	WG2427487
Styrene	U		0.118	1.00	1	01/02/2025 11:48	WG2427487
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	01/02/2025 11:48	WG2427487
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	01/02/2025 11:48	WG2427487
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	01/02/2025 11:48	WG2427487
Tetrachloroethene	U		0.300	1.00	1	01/02/2025 11:48	WG2427487
Toluene	0.299	U	0.278	1.00	1	01/02/2025 11:48	WG2427487
1,2,3-Trichlorobenzene	U		0.230	1.00	1	01/02/2025 11:48	WG2427487
1,2,4-Trichlorobenzene	U		0.481	1.00	1	01/02/2025 11:48	WG2427487
1,1,1-Trichloroethane	U		0.149	1.00	1	01/02/2025 11:48	WG2427487
1,1,2-Trichloroethane	U		0.158	1.00	1	01/02/2025 11:48	WG2427487
Trichloroethene	U		0.190	1.00	1	01/02/2025 11:48	WG2427487
Trichlorofluoromethane	U		0.160	5.00	1	01/02/2025 11:48	WG2427487
1,2,3-Trichloropropane	U		0.237	2.50	1	01/02/2025 11:48	WG2427487
1,2,4-Trimethylbenzene	U		0.322	1.00	1	01/02/2025 11:48	WG2427487
1,2,3-Trimethylbenzene	U		0.104	1.00	1	01/02/2025 11:48	WG2427487
1,3,5-Trimethylbenzene	U		0.104	1.00	1	01/02/2025 11:48	WG2427487
Vinyl chloride	U		0.234	1.00	1	01/02/2025 11:48	WG2427487
Xylenes, Total	0.227	U	0.174	3.00	1	01/02/2025 11:48	WG2427487
(S) Toluene-d8	103			80.0-120		01/02/2025 11:48	WG2427487
(S) 4-Bromofluorobenzene	97.0			77.0-126		01/02/2025 11:48	WG2427487
(S) 1,2-Dichloroethane-d4	100			70.0-130		01/02/2025 11:48	WG2427487

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	78.1	U	67.8	100	1	01/02/2025 19:28	WG2426650
Residual Range Organics (RRO)	U		96.1	250	1	01/02/2025 19:28	WG2426650
(S) o-Terphenyl	75.0			31.0-160		01/02/2025 19:28	WG2426650

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

EQUIPMENT RINSATE

SAMPLE RESULTS - 01

Collected date/time: 12/20/24 21:00

L1812727

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
2,4-D	U		0.671	2.00	1	12/30/2024 21:39	WG2425575
Dalapon	U	J3	0.734	2.00	1	12/30/2024 21:39	WG2425575
2,4-DB	U		0.686	2.00	1	12/30/2024 21:39	WG2425575
Dicamba	U		0.395	2.00	1	12/30/2024 21:39	WG2425575
Dichloroprop	U	J4	0.954	2.00	1	12/30/2024 21:39	WG2425575
Dinoseb	U		0.455	2.00	1	12/30/2024 21:39	WG2425575
MCPA	U		85.8	100	1	12/30/2024 21:39	WG2425575
MCPP	U		74.3	100	1	12/30/2024 21:39	WG2425575
2,4,5-T	U		0.858	2.00	1	12/30/2024 21:39	WG2425575
2,4,5-TP (Silvex)	U		0.505	2.00	1	12/30/2024 21:39	WG2425575
(S) 2,4-Dichlorophenyl Acetic Acid	27.0			14.0-158		12/30/2024 21:39	WG2425575

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	U		0.0249	0.0500	1	12/27/2024 18:52	WG2425081
Alpha BHC	U		0.0277	0.0500	1	12/27/2024 18:52	WG2425081
Beta BHC	U		0.0326	0.0500	1	12/27/2024 18:52	WG2425081
Delta BHC	U		0.0403	0.0500	1	12/27/2024 18:52	WG2425081
Gamma BHC	U		0.0267	0.0500	1	12/27/2024 18:52	WG2425081
Chlordane	U		0.700	5.00	1	12/27/2024 18:52	WG2425081
4,4-DDD	U		0.0297	0.0500	1	12/27/2024 18:52	WG2425081
4,4-DDE	U		0.0276	0.0500	1	12/27/2024 18:52	WG2425081
4,4-DDT	U		0.0211	0.0500	1	12/27/2024 18:52	WG2425081
Dieldrin	U		0.0298	0.0500	1	12/27/2024 18:52	WG2425081
Endosulfan I	U		0.0306	0.0500	1	12/27/2024 18:52	WG2425081
Endosulfan II	U		0.0311	0.0500	1	12/27/2024 18:52	WG2425081
Endosulfan sulfate	U		0.0306	0.0500	1	12/27/2024 18:52	WG2425081
Endrin	U		0.0329	0.0500	1	12/27/2024 18:52	WG2425081
Endrin aldehyde	U		0.0358	0.0500	1	12/27/2024 18:52	WG2425081
Endrin ketone	U		0.0322	0.0500	1	12/27/2024 18:52	WG2425081
Hexachlorobenzene	U		0.0425	0.0500	1	12/27/2024 18:52	WG2425081
Heptachlor	U		0.0290	0.0500	1	12/27/2024 18:52	WG2425081
Heptachlor epoxide	U		0.0307	0.0500	1	12/27/2024 18:52	WG2425081
Methoxychlor	U		0.0400	0.0500	1	12/27/2024 18:52	WG2425081
Toxaphene	U		0.400	0.500	1	12/27/2024 18:52	WG2425081
(S) Decachlorobiphenyl	64.0			10.0-128		12/27/2024 18:52	WG2425081
(S) Tetrachloro-m-xylene	89.4			10.0-127		12/27/2024 18:52	WG2425081

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0190	0.0500	1	12/28/2024 23:00	WG2424808
Acenaphthene	U		0.0190	0.0500	1	12/28/2024 23:00	WG2424808
Acenaphthylene	U		0.0171	0.0500	1	12/28/2024 23:00	WG2424808
Benzo(a)anthracene	U		0.0203	0.0500	1	12/28/2024 23:00	WG2424808
Benzo(a)pyrene	U		0.0184	0.0500	1	12/28/2024 23:00	WG2424808
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/28/2024 23:00	WG2424808
Benzo(g,h,i)perylene	U		0.0184	0.0500	1	12/28/2024 23:00	WG2424808
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/28/2024 23:00	WG2424808
Chrysene	U		0.0179	0.0500	1	12/28/2024 23:00	WG2424808
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/28/2024 23:00	WG2424808
Fluoranthene	U		0.0270	0.100	1	12/28/2024 23:00	WG2424808
Fluorene	U		0.0169	0.0500	1	12/28/2024 23:00	WG2424808
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/28/2024 23:00	WG2424808

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	U		0.0917	0.250	1	12/28/2024 23:00	WG2424808
Phenanthrene	U		0.0180	0.0500	1	12/28/2024 23:00	WG2424808
Pyrene	U		0.0169	0.0500	1	12/28/2024 23:00	WG2424808
1-Methylnaphthalene	U		0.0687	0.250	1	12/28/2024 23:00	WG2424808
2-Methylnaphthalene	U		0.0674	0.250	1	12/28/2024 23:00	WG2424808
2-Chloronaphthalene	U		0.0682	0.250	1	12/28/2024 23:00	WG2424808
(S) Nitrobenzene-d5	97.9			31.0-160		12/28/2024 23:00	WG2424808
(S) 2-Fluorobiphenyl	105			48.0-148		12/28/2024 23:00	WG2424808
(S) p-Terphenyl-d14	101			37.0-146		12/28/2024 23:00	WG2424808

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	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/27/2024 01:55	WG2425237
Toluene	U		0.278	1.00	1	12/27/2024 01:55	WG2425237
Ethylbenzene	U		0.137	1.00	1	12/27/2024 01:55	WG2425237
Total Xylenes	U		0.174	3.00	1	12/27/2024 01:55	WG2425237
(S) Toluene-d8	95.1			80.0-120		12/27/2024 01:55	WG2425237
(S) 4-Bromofluorobenzene	91.0			77.0-126		12/27/2024 01:55	WG2425237
(S) 1,2-Dichloroethane-d4	125			70.0-130		12/27/2024 01:55	WG2425237

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4163596-1 01/01/25 13:21

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Mercury	U		0.0700	0.200

Laboratory Control Sample (LCS)

(LCS) R4163596-2 01/01/25 13:25

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Mercury	3.00	3.47	116	80.0-120	

L1812908-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1812908-02 01/01/25 13:28 • (MS) R4163596-4 01/01/25 13:33 • (MSD) R4163596-5 01/01/25 13:36

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	U	3.42	3.44	114	115	1	75.0-125			0.524	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4163516-1 12/31/24 16:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		5.06	10.0
Arsenic	U		7.83	10.0
Beryllium	U		0.501	2.00
Cadmium	0.618	U	0.538	2.00
Chromium	U		1.51	10.0
Copper	U		2.26	10.0
Lead	U		2.43	6.00
Nickel	U		1.96	10.0
Selenium	U		6.16	10.0
Silver	U		2.89	5.00
Thallium	U		6.63	10.0
Zinc	U		4.67	50.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4163516-2 12/31/24 16:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	1000	972	97.2	80.0-120	
Arsenic	1000	976	97.6	80.0-120	
Beryllium	1000	994	99.4	80.0-120	
Cadmium	1000	992	99.2	80.0-120	
Chromium	1000	1010	101	80.0-120	
Copper	1000	1070	107	80.0-120	
Lead	1000	960	96.0	80.0-120	
Nickel	1000	957	95.7	80.0-120	
Selenium	1000	964	96.4	80.0-120	
Silver	200	198	99.1	80.0-120	
Thallium	1000	977	97.7	80.0-120	
Zinc	1000	1030	103	80.0-120	

L1812713-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1812713-01 12/31/24 16:35 • (MS) R4163516-4 12/31/24 16:38 • (MSD) R4163516-5 12/31/24 16:40

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	1000	U	1000	1020	100	102	1	75.0-125			1.82	20
Arsenic	1000	U	1020	1030	102	103	1	75.0-125			1.47	20
Beryllium	1000	U	999	1010	99.9	101	1	75.0-125			1.11	20

L1812713-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1812713-01 12/31/24 16:35 • (MS) R4163516-4 12/31/24 16:38 • (MSD) R4163516-5 12/31/24 16:40

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 %
Cadmium	1000	0.736	1020	1040	102	104	1	75.0-125			1.94	20
Chromium	1000	1.55	1020	1030	102	103	1	75.0-125			0.427	20
Copper	1000	24.5	1090	1100	106	108	1	75.0-125			1.15	20
Lead	1000	5.51	991	1000	98.6	99.7	1	75.0-125			1.14	20
Nickel	1000	38.5	1030	1060	99.5	102	1	75.0-125			2.47	20
Selenium	1000	U	1020	1020	102	102	1	75.0-125			0.507	20
Silver	200	U	203	206	101	103	1	75.0-125			1.44	20
Thallium	1000	U	967	980	96.7	98.0	1	75.0-125			1.28	20
Zinc	1000	156	1210	1230	106	107	1	75.0-125			1.34	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R4163121-3 12/29/24 22:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	45.4	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120

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

(LCS) R4163121-1 12/29/24 21:00 • (LCSD) R4163121-2 12/29/24 21:23

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 %
Gasoline Range Organics-NWTPH	5000	5150	5320	103	106	70.0-124			3.25	20
(S) a,a,a-Trifluorotoluene(FID)				108	109	78.0-120				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R4164376-3 12/27/24 01:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	93.2			77.0-126
(S) 1,2-Dichloroethane-d4	124			70.0-130

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

(LCS) R4164376-1 12/27/24 00:31 • (LCSD) R4164376-2 12/27/24 00:52

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 %
Benzene	5.00	5.33	5.08	107	102	70.0-123			4.80	20
Toluene	5.00	4.80	4.90	96.0	98.0	79.0-120			2.06	20
Ethylbenzene	5.00	4.31	4.54	86.2	90.8	79.0-123			5.20	20
Total Xylenes	15.0	13.3	13.6	88.7	90.7	79.0-123			2.23	20
(S) Toluene-d8				96.5	98.7	80.0-120				
(S) 4-Bromofluorobenzene				91.8	93.6	77.0-126				
(S) 1,2-Dichloroethane-d4				124	120	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4164397-4 01/02/25 11:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	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
Isopropylbenzene	U		0.105	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4164397-4 01/02/25 11:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
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	104			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	91.1			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R4164397-1 01/02/25 09:34 • (LCSD) R4164397-2 01/02/25 09:54

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	22.0	19.8	88.0	79.2	19.0-160	J	J	10.5	27
Acrylonitrile	25.0	21.7	20.2	86.8	80.8	55.0-149			7.16	20
Benzene	5.00	5.32	5.26	106	105	70.0-123			1.13	20
Bromobenzene	5.00	5.31	5.34	106	107	73.0-121			0.563	20
Bromodichloromethane	5.00	4.89	5.04	97.8	101	75.0-120			3.02	20

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

(LCS) R4164397-1 01/02/25 09:34 • (LCSD) R4164397-2 01/02/25 09:54

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 %
Bromoform	5.00	4.37	4.39	87.4	87.8	68.0-132			0.457	20
Bromomethane	5.00	2.92	3.12	58.4	62.4	10.0-160	U	U	6.62	25
n-Butylbenzene	5.00	5.46	5.48	109	110	73.0-125			0.366	20
sec-Butylbenzene	5.00	5.63	5.59	113	112	75.0-125			0.713	20
tert-Butylbenzene	5.00	5.49	5.55	110	111	76.0-124			1.09	20
Carbon tetrachloride	5.00	4.93	4.71	98.6	94.2	68.0-126			4.56	20
Chlorobenzene	5.00	5.54	5.35	111	107	80.0-121			3.49	20
Chlorodibromomethane	5.00	4.81	4.79	96.2	95.8	77.0-125			0.417	20
Chloroethane	5.00	5.47	5.41	109	108	47.0-150			1.10	20
Chloroform	5.00	4.99	5.12	99.8	102	73.0-120	U		2.57	20
Chloromethane	5.00	6.80	6.34	136	127	41.0-142			7.00	20
2-Chlorotoluene	5.00	5.33	5.47	107	109	76.0-123			2.59	20
4-Chlorotoluene	5.00	5.20	5.43	104	109	75.0-122			4.33	20
1,2-Dibromo-3-Chloropropane	5.00	4.18	3.96	83.6	79.2	58.0-134	U	U	5.41	20
1,2-Dibromoethane	5.00	5.16	5.19	103	104	80.0-122			0.580	20
Dibromomethane	5.00	4.94	4.87	98.8	97.4	80.0-120			1.43	20
1,2-Dichlorobenzene	5.00	5.43	5.67	109	113	79.0-121			4.32	20
1,3-Dichlorobenzene	5.00	5.44	5.44	109	109	79.0-120			0.000	20
1,4-Dichlorobenzene	5.00	5.21	5.50	104	110	79.0-120			5.42	20
Dichlorodifluoromethane	5.00	5.43	5.26	109	105	51.0-149			3.18	20
1,1-Dichloroethane	5.00	5.12	5.24	102	105	70.0-126			2.32	20
1,2-Dichloroethane	5.00	5.20	5.24	104	105	70.0-128			0.766	20
1,1-Dichloroethene	5.00	5.52	5.54	110	111	71.0-124			0.362	20
cis-1,2-Dichloroethene	5.00	5.08	5.08	102	102	73.0-120			0.000	20
trans-1,2-Dichloroethene	5.00	5.01	5.16	100	103	73.0-120			2.95	20
1,2-Dichloropropane	5.00	5.30	5.39	106	108	77.0-125			1.68	20
1,1-Dichloropropene	5.00	5.67	5.52	113	110	74.0-126			2.68	20
1,3-Dichloropropane	5.00	5.35	5.43	107	109	80.0-120			1.48	20
cis-1,3-Dichloropropene	5.00	5.22	5.22	104	104	80.0-123			0.000	20
trans-1,3-Dichloropropene	5.00	5.12	5.24	102	105	78.0-124			2.32	20
2,2-Dichloropropane	5.00	4.87	4.94	97.4	98.8	58.0-130			1.43	20
Di-isopropyl ether	5.00	5.09	5.04	102	101	58.0-138			0.987	20
Ethylbenzene	5.00	5.46	5.32	109	106	79.0-123			2.60	20
Hexachloro-1,3-butadiene	5.00	5.39	5.63	108	113	54.0-138			4.36	20
Isopropylbenzene	5.00	5.47	5.38	109	108	76.0-127			1.66	20
p-Isopropyltoluene	5.00	5.80	5.56	116	111	76.0-125			4.23	20
2-Butanone (MEK)	25.0	21.3	20.6	85.2	82.4	44.0-160			3.34	20
Methylene Chloride	5.00	5.16	5.37	103	107	67.0-120			3.99	20
4-Methyl-2-pentanone (MIBK)	25.0	25.8	24.4	103	97.6	68.0-142			5.58	20
Methyl tert-butyl ether	5.00	5.02	5.32	100	106	68.0-125			5.80	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R4164397-1 01/02/25 09:34 • (LCSD) R4164397-2 01/02/25 09:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	5.00	4.58	4.65	91.6	93.0	54.0-135	U	U	1.52	20
n-Propylbenzene	5.00	5.42	5.52	108	110	77.0-124			1.83	20
Styrene	5.00	4.90	4.91	98.0	98.2	73.0-130			0.204	20
1,1,1,2-Tetrachloroethane	5.00	4.98	4.91	99.6	98.2	75.0-125			1.42	20
1,1,2,2-Tetrachloroethane	5.00	5.21	5.24	104	105	65.0-130			0.574	20
1,1,2-Trichlorotrifluoroethane	5.00	5.60	5.45	112	109	69.0-132			2.71	20
Tetrachloroethene	5.00	5.44	5.53	109	111	72.0-132			1.64	20
Toluene	5.00	5.37	5.35	107	107	79.0-120			0.373	20
1,2,3-Trichlorobenzene	5.00	5.28	5.32	106	106	50.0-138			0.755	20
1,2,4-Trichlorobenzene	5.00	4.81	5.05	96.2	101	57.0-137			4.87	20
1,1,1-Trichloroethane	5.00	5.47	5.37	109	107	73.0-124			1.85	20
1,1,2-Trichloroethane	5.00	5.46	5.34	109	107	80.0-120			2.22	20
Trichloroethene	5.00	5.36	5.27	107	105	78.0-124			1.69	20
Trichlorofluoromethane	5.00	4.99	4.78	99.8	95.6	59.0-147	U	U	4.30	20
1,2,3-Trichloropropane	5.00	5.40	5.24	108	105	73.0-130			3.01	20
1,2,4-Trimethylbenzene	5.00	5.36	5.25	107	105	76.0-121			2.07	20
1,2,3-Trimethylbenzene	5.00	5.42	5.55	108	111	77.0-120			2.37	20
1,3,5-Trimethylbenzene	5.00	5.31	5.32	106	106	76.0-122			0.188	20
Vinyl chloride	5.00	5.50	5.45	110	109	67.0-131			0.913	20
Xylenes, Total	15.0	16.2	15.8	108	105	79.0-123			2.50	20
(S) Toluene-d8				98.8	98.8	80.0-120				
(S) 4-Bromofluorobenzene				98.9	101	77.0-126				
(S) 1,2-Dichloroethane-d4				98.8	96.5	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4164399-1 01/02/25 16:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Diesel Range Organics (DRO)	U		67.8	100
Residual Range Organics (RRO)	U		96.1	250
(S) o-Terphenyl	78.0			31.0-160

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

(LCS) R4164399-2 01/02/25 16:51 • (LCSD) R4164399-3 01/02/25 17:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Diesel Range Organics (DRO)	1500	1360	1130	90.7	75.3	50.0-150			18.5	20
(S) o-Terphenyl				94.0	84.0	31.0-160				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4163168-1 12/30/24 16:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
2,4-D	U		0.671	2.00
Dalapon	U		0.734	2.00
2,4-DB	U		0.686	2.00
Dicamba	U		0.395	2.00
Dichloroprop	U		0.954	2.00
Dinoseb	U		0.455	2.00
MCPA	U		85.8	100
MCPP	U		74.3	100
2,4,5-T	U		0.858	2.00
2,4,5-TP (Silvex)	U		0.505	2.00
(S) 2,4-Dichlorophenyl Acetic Acid	91.6			14.0-158

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

(LCS) R4163168-2 12/30/24 16:47 • (LCSD) R4163168-3 12/30/24 16:58

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 %
2,4-D	2.50	2.68	2.48	107	99.2	50.0-120			7.75	20
Dalapon	2.50	2.33	1.76	93.2	70.4	32.0-120		J J3	27.9	20
2,4-DB	2.50	2.48	2.62	99.2	105	53.0-140			5.49	20
Dicamba	2.50	2.24	2.13	89.6	85.2	51.0-120			5.03	20
Dichloroprop	2.50	3.44	3.13	138	125	55.0-127	J4		9.44	20
Dinoseb	2.50	1.26	1.25	50.4	50.0	36.0-134	J	J	0.797	20
MCPA	250	241	234	96.4	93.6	10.0-160			2.95	40
MCPP	250	148	140	59.2	56.0	10.0-160			5.56	23
2,4,5-T	2.50	1.77	1.77	70.8	70.8	54.0-120	J	J	0.000	20
2,4,5-TP (Silvex)	2.50	2.41	2.32	96.4	92.8	50.0-125			3.81	20
(S) 2,4-Dichlorophenyl Acetic Acid				82.6	78.2	14.0-158				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4163043-1 12/27/24 15:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Aldrin	U		0.0249	0.0500
Alpha BHC	U		0.0277	0.0500
Beta BHC	U		0.0326	0.0500
Delta BHC	U		0.0403	0.0500
Gamma BHC	U		0.0267	0.0500
Chlordane	U		0.700	5.00
4,4-DDD	U		0.0297	0.0500
4,4-DDE	U		0.0276	0.0500
4,4-DDT	U		0.0211	0.0500
Dieldrin	U		0.0298	0.0500
Endosulfan I	U		0.0306	0.0500
Endosulfan II	U		0.0311	0.0500
Endosulfan sulfate	U		0.0306	0.0500
Endrin	U		0.0329	0.0500
Endrin aldehyde	U		0.0358	0.0500
Endrin ketone	U		0.0322	0.0500
Hexachlorobenzene	U		0.0425	0.0500
Heptachlor	U		0.0290	0.0500
Heptachlor epoxide	U		0.0307	0.0500
Methoxychlor	U		0.0400	0.0500
Toxaphene	U		0.400	0.500
(S) Decachlorobiphenyl	83.1			10.0-128
(S) Tetrachloro-m-xylene	75.2			10.0-127

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R4163043-2 12/27/24 16:00 • (LCSD) R4163043-3 12/27/24 16:10

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 %
Aldrin	1.00	0.982	1.02	98.2	102	22.0-124			3.80	34
Alpha BHC	1.00	1.00	1.08	100	108	54.0-130			7.69	23
Beta BHC	1.00	0.975	1.05	97.5	105	53.0-136			7.41	20
Delta BHC	1.00	0.800	0.865	80.0	86.5	54.0-133			7.81	20
Gamma BHC	1.00	1.05	1.13	105	113	55.0-129			7.34	20
4,4-DDD	1.00	1.18	1.28	118	128	56.0-140			8.13	22
4,4-DDE	1.00	1.04	1.13	104	113	52.0-128			8.29	22
4,4-DDT	1.00	1.24	1.34	124	134	50.0-141			7.75	23
Dieldrin	1.00	1.06	1.13	106	113	59.0-133			6.39	20
Endosulfan I	1.00	1.10	1.18	110	118	57.0-131			7.02	20

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

(LCS) R4163043-2 12/27/24 16:00 • (LCSD) R4163043-3 12/27/24 16:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Endosulfan II	1.00	1.10	1.17	110	117	58.0-133			6.17	20
Endosulfan sulfate	1.00	1.04	1.10	104	110	58.0-133			5.61	21
Endrin	1.00	1.09	1.16	109	116	57.0-134			6.22	21
Endrin aldehyde	1.00	1.06	1.12	106	112	53.0-129			5.50	20
Endrin ketone	1.00	1.14	1.21	114	121	60.0-145			5.96	20
Hexachlorobenzene	1.00	0.884	0.925	88.4	92.5	30.0-114			4.53	30
Heptachlor	1.00	1.20	1.29	120	129	27.0-132			7.23	31
Heptachlor epoxide	1.00	1.06	1.14	106	114	57.0-130			7.27	20
Methoxychlor	1.00	1.32	1.35	132	135	54.0-155			2.25	24
(S) Decachlorobiphenyl				78.2	83.8	10.0-128				
(S) Tetrachloro-m-xylene				88.1	80.7	10.0-127				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4164022-3 12/28/24 14:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0190	0.0500
Acenaphthene	U		0.0190	0.0500
Acenaphthylene	U		0.0171	0.0500
Benzo(a)anthracene	U		0.0203	0.0500
Benzo(a)pyrene	U		0.0184	0.0500
Benzo(b)fluoranthene	U		0.0168	0.0500
Benzo(g,h,i)perylene	U		0.0184	0.0500
Benzo(k)fluoranthene	U		0.0202	0.0500
Chrysene	U		0.0179	0.0500
Dibenz(a,h)anthracene	U		0.0160	0.0500
Fluoranthene	U		0.0270	0.100
Fluorene	U		0.0169	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500
Naphthalene	U		0.0917	0.250
Phenanthrene	U		0.0180	0.0500
Pyrene	U		0.0169	0.0500
1-Methylnaphthalene	U		0.0687	0.250
2-Methylnaphthalene	U		0.0674	0.250
2-Chloronaphthalene	U		0.0682	0.250
(S) Nitrobenzene-d5	105			31.0-160
(S) 2-Fluorobiphenyl	110			48.0-148
(S) p-Terphenyl-d14	102			37.0-146

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R4164022-1 12/28/24 13:29 • (LCSD) R4164022-2 12/28/24 13:47

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 %
Anthracene	2.00	1.71	1.73	85.5	86.5	67.0-150			1.16	20
Acenaphthene	2.00	1.88	1.93	94.0	96.5	65.0-138			2.62	20
Acenaphthylene	2.00	1.88	1.92	94.0	96.0	66.0-140			2.11	20
Benzo(a)anthracene	2.00	1.66	1.68	83.0	84.0	61.0-140			1.20	20
Benzo(a)pyrene	2.00	1.65	1.70	82.5	85.0	60.0-143			2.99	20
Benzo(b)fluoranthene	2.00	1.84	1.88	92.0	94.0	58.0-141			2.15	20
Benzo(g,h,i)perylene	2.00	1.81	1.88	90.5	94.0	52.0-153			3.79	20
Benzo(k)fluoranthene	2.00	1.71	1.74	85.5	87.0	58.0-148			1.74	20
Chrysene	2.00	1.90	1.97	95.0	98.5	64.0-144			3.62	20
Dibenz(a,h)anthracene	2.00	1.61	1.70	80.5	85.0	52.0-155			5.44	20
Fluoranthene	2.00	2.04	2.09	102	104	69.0-153			2.42	20

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

(LCS) R4164022-1 12/28/24 13:29 • (LCSD) R4164022-2 12/28/24 13:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Fluorene	2.00	1.96	2.00	98.0	100	64.0-136			2.02	20
Indeno(1,2,3-cd)pyrene	2.00	1.46	1.59	73.0	79.5	54.0-153			8.52	20
Naphthalene	2.00	1.97	2.01	98.5	100	61.0-137			2.01	20
Phenanthrene	2.00	1.92	1.99	96.0	99.5	62.0-137			3.58	20
Pyrene	2.00	2.08	2.15	104	107	60.0-142			3.31	20
1-Methylnaphthalene	2.00	2.05	2.09	103	104	66.0-142			1.93	20
2-Methylnaphthalene	2.00	1.96	2.01	98.0	100	62.0-136			2.52	20
2-Chloronaphthalene	2.00	2.00	2.04	100	102	64.0-140			1.98	20
(S) Nitrobenzene-d5				103	103	31.0-160				
(S) 2-Fluorobiphenyl				106	107	48.0-148				
(S) p-Terphenyl-d14				97.0	99.0	37.0-146				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

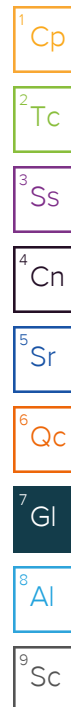
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
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
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.



ACCREDITATIONS & LOCATIONS

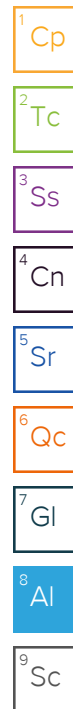
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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	LA000356
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.



State of Oregon Chain of Custody

B175

Agency, Authorized Purchaser or Agent: Oregon DEQ				Contract Laboratory Name: ESC				Lab Selection Criteria: ☐ Proximity (if TAT < 48 hrs) ☐ Prior work on same project ☒ Cost (for anticipated analyses) ☐ Other labs disqualified or unable to perform requested services ☐ Emergency work				Turn Around Time: ☒ 10 days (std.) ☐ 5 days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ Other	
Send Lab Report To: Cathy Brown Address: 165 E. 7 th Avenue, Suite 100 Eugene, OR 97401 Tel. #: 503-753-6153 E-mail: cathy.brown@deq.oregon.gov				Lab Batch #: Invoice To: ODEQ/Business Office Address: 700 NE Multnomah St, Suite 600 Portland, OR 97232 Tel. #: 503-229-5696									
Project Name: DEQ Forest Creek				Sample Preservative									
Sampler Name: Connor Anderson													
Sample ID#	Collection Date/Time	Matrix	Number of Containers	NWTPH-Gx	NWTPH-Dx	VOCs EPA 8260D	SVOCs EPA 8270E-SIM	Dioxins/Furans EPA 1613B	*Priority Pollutant Metals EPA 6010D/7471B	Herbicides EPA 8151A	Pesticides EPA 8081B	BTEX EPA 8260D	Comments
EQUIPMENT RINSATE	12/20/24; 21:00	W	17	X	X	X	X	X	X	X	X		U812727 -01
TRIP BLANK												X	-02

*Priority Pollutant Metals: antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.

Relinquished By: <i>Connor Anderson</i>	Agency/Agent: <i>MFA</i>	Received By: <i>Christopher Gallin</i>	Agency/Agent: <i>ODEQ</i>
Signature: <i>Connor Anderson</i>	Time & Date: <i>12/23/24, 1100</i>	Signature: <i>Christopher Gallin</i>	Time & Date: <i>12/24/24 0900</i>
Relinquished By: <i>Connor Anderson</i>	Agency/Agent: <i>MFA</i>	Received By: <i>Christopher Gallin</i>	Agency/Agent: <i>ODEQ</i>
Signature: <i>Connor Anderson</i>	Time & Date: <i>12/23/24, 1100</i>	Signature: <i>Christopher Gallin</i>	Time & Date: <i>12/24/24 0900</i>

1.0 to 1.0

Sample Receipt Checklist

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

17 TOTAL

ATION #102-1098-07 AND PRICE AGREEMENT # 8903. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY FLICTING T'S AND C'S, EXPRESS OR IMPLIED.