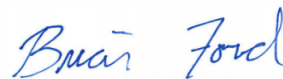


Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group: L1756563
Samples Received: 07/13/2024
Project Number: QCAT #50260
Description: Sukhwinder Rai

Report To: Rachel Long
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

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¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

SAMPLE SUMMARY

FIRE WELL 1 L1756563-01 GW

				Collected by Rachel Long	Collected date/time 07/12/24 10:00	Received date/time 07/13/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2322625	1	07/15/24 16:44	07/16/24 13:32	AUU	Mt. Juliet, TN

FIRE WELL 2 L1756563-02 GW

				Collected by Rachel Long	Collected date/time 07/12/24 10:10	Received date/time 07/13/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2326292	1	07/19/24 14:04	07/19/24 14:04	JAH	Mt. Juliet, TN

FIRE WELL 3 L1756563-03 GW

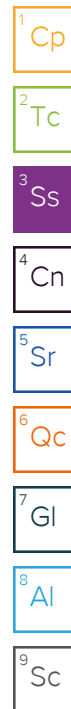
				Collected by Rachel Long	Collected date/time 07/12/24 10:15	Received date/time 07/13/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2326082	1	07/19/24 11:46	07/19/24 23:37	JCH	Mt. Juliet, TN

FIRE WELL 4 L1756563-04 GW

				Collected by Rachel Long	Collected date/time 07/12/24 10:20	Received date/time 07/13/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2324952	1	07/22/24 10:14	07/22/24 16:11	DJS	Mt. Juliet, TN

FIRE WELL 5 L1756563-05 GW

				Collected by Rachel Long	Collected date/time 07/12/24 10:25	Received date/time 07/13/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2326063	1	07/19/24 04:13	07/19/24 04:13	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2327690	1	07/22/24 19:32	07/22/24 19:32	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

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)	60.6	J	33.3	100	1	07/16/2024 13:32	WG2322625
Residual Range Organics (RRO)	U		83.3	250	1	07/16/2024 13:32	WG2322625
(S) o-Terphenyl	82.6			31.0-160		07/16/2024 13:32	WG2322625

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/19/2024 14:04	WG2326292
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/19/2024 14:04	WG2326292

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

FIRE WELL 3

Collected date/time: 07/12/24 10:15

SAMPLE RESULTS - 03

L1756563

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	07/19/2024 23:37	WG2326082
Acenaphthene	U		0.0190	0.0500	1	07/19/2024 23:37	WG2326082
Acenaphthylene	U		0.0171	0.0500	1	07/19/2024 23:37	WG2326082
Benzo(a)anthracene	U		0.0203	0.0500	1	07/19/2024 23:37	WG2326082
Benzo(a)pyrene	U		0.0184	0.0500	1	07/19/2024 23:37	WG2326082
Benzo(b)fluoranthene	U		0.0168	0.0500	1	07/19/2024 23:37	WG2326082
Benzo(g,h,i)perylene	U		0.0184	0.0500	1	07/19/2024 23:37	WG2326082
Benzo(k)fluoranthene	U		0.0202	0.0500	1	07/19/2024 23:37	WG2326082
Chrysene	U		0.0179	0.0500	1	07/19/2024 23:37	WG2326082
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	07/19/2024 23:37	WG2326082
Fluoranthene	U		0.0270	0.100	1	07/19/2024 23:37	WG2326082
Fluorene	U		0.0169	0.0500	1	07/19/2024 23:37	WG2326082
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	07/19/2024 23:37	WG2326082
Naphthalene	U		0.0917	0.250	1	07/19/2024 23:37	WG2326082
Phenanthrene	U		0.0180	0.0500	1	07/19/2024 23:37	WG2326082
Pyrene	U		0.0169	0.0500	1	07/19/2024 23:37	WG2326082
1-Methylnaphthalene	U		0.0687	0.250	1	07/19/2024 23:37	WG2326082
2-Methylnaphthalene	U		0.0674	0.250	1	07/19/2024 23:37	WG2326082
2-Chloronaphthalene	U		0.0682	0.250	1	07/19/2024 23:37	WG2326082
(S) Nitrobenzene-d5	113			31.0-160		07/19/2024 23:37	WG2326082
(S) 2-Fluorobiphenyl	112			48.0-148		07/19/2024 23:37	WG2326082
(S) p-Terphenyl-d14	111			37.0-146		07/19/2024 23:37	WG2326082

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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L1756563

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Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	U		2.99	6.00	1	07/22/2024 16:11	WG2324952

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

FIRE WELL 5

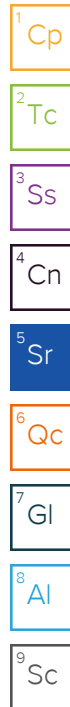
Collected date/time: 07/12/24 10:25

SAMPLE RESULTS - 05

L1756563

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	07/19/2024 04:13	WG2326063
Acrolein	U		2.54	50.0	1	07/19/2024 04:13	WG2326063
Acrylonitrile	U		0.671	10.0	1	07/19/2024 04:13	WG2326063
Benzene	U		0.0941	1.00	1	07/19/2024 04:13	WG2326063
Bromobenzene	U		0.118	1.00	1	07/19/2024 04:13	WG2326063
Bromodichloromethane	U		0.136	1.00	1	07/19/2024 04:13	WG2326063
Bromoform	U	C3	0.129	1.00	1	07/19/2024 04:13	WG2326063
Bromomethane	U		0.605	5.00	1	07/19/2024 04:13	WG2326063
n-Butylbenzene	U		0.157	1.00	1	07/19/2024 04:13	WG2326063
sec-Butylbenzene	U		0.125	1.00	1	07/19/2024 04:13	WG2326063
tert-Butylbenzene	U		0.127	1.00	1	07/19/2024 04:13	WG2326063
Carbon disulfide	U		0.0962	1.00	1	07/19/2024 04:13	WG2326063
Carbon tetrachloride	U		0.128	1.00	1	07/19/2024 04:13	WG2326063
Chlorobenzene	U		0.116	1.00	1	07/19/2024 04:13	WG2326063
Chlorodibromomethane	U		0.140	1.00	1	07/19/2024 04:13	WG2326063
Chloroethane	U		0.192	5.00	1	07/19/2024 04:13	WG2326063
Chloroform	U		0.111	5.00	1	07/19/2024 04:13	WG2326063
Chloromethane	U		0.960	2.50	1	07/19/2024 04:13	WG2326063
2-Chlorotoluene	U		0.106	1.00	1	07/19/2024 04:13	WG2326063
4-Chlorotoluene	U		0.114	1.00	1	07/19/2024 04:13	WG2326063
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	07/19/2024 04:13	WG2326063
1,2-Dibromoethane	U		0.126	1.00	1	07/19/2024 04:13	WG2326063
Dibromomethane	U		0.122	1.00	1	07/19/2024 04:13	WG2326063
1,2-Dichlorobenzene	U		0.107	1.00	1	07/19/2024 04:13	WG2326063
1,3-Dichlorobenzene	U		0.110	1.00	1	07/19/2024 04:13	WG2326063
1,4-Dichlorobenzene	U		0.120	1.00	1	07/22/2024 19:32	WG2327690
Dichlorodifluoromethane	U	C3 J3	0.374	5.00	1	07/19/2024 04:13	WG2326063
1,1-Dichloroethane	U		0.100	1.00	1	07/19/2024 04:13	WG2326063
1,2-Dichloroethane	U		0.0819	1.00	1	07/19/2024 04:13	WG2326063
1,1-Dichloroethene	U		0.188	1.00	1	07/19/2024 04:13	WG2326063
cis-1,2-Dichloroethene	U		0.126	1.00	1	07/19/2024 04:13	WG2326063
trans-1,2-Dichloroethene	U		0.149	1.00	1	07/19/2024 04:13	WG2326063
1,2-Dichloropropane	U		0.149	1.00	1	07/19/2024 04:13	WG2326063
1,1-Dichloropropene	U		0.142	1.00	1	07/19/2024 04:13	WG2326063
1,3-Dichloropropane	U		0.110	1.00	1	07/19/2024 04:13	WG2326063
cis-1,3-Dichloropropene	U		0.111	1.00	1	07/19/2024 04:13	WG2326063
trans-1,3-Dichloropropene	U		0.118	1.00	1	07/19/2024 04:13	WG2326063
2,2-Dichloropropane	U		0.161	1.00	1	07/19/2024 04:13	WG2326063
Di-isopropyl ether	U		0.105	1.00	1	07/19/2024 04:13	WG2326063
Ethylbenzene	U		0.137	1.00	1	07/22/2024 19:32	WG2327690
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/19/2024 04:13	WG2326063
Isopropylbenzene	U		0.105	1.00	1	07/19/2024 04:13	WG2326063
p-Isopropyltoluene	U		0.120	1.00	1	07/19/2024 04:13	WG2326063
2-Butanone (MEK)	U		1.19	10.0	1	07/19/2024 04:13	WG2326063
Methylene Chloride	U		0.430	5.00	1	07/19/2024 04:13	WG2326063
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	07/19/2024 04:13	WG2326063
Methyl tert-butyl ether	U		0.101	1.00	1	07/19/2024 04:13	WG2326063
Naphthalene	U		1.00	5.00	1	07/19/2024 04:13	WG2326063
n-Propylbenzene	U		0.0993	1.00	1	07/19/2024 04:13	WG2326063
Styrene	U		0.118	1.00	1	07/19/2024 04:13	WG2326063
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	07/19/2024 04:13	WG2326063
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	07/19/2024 04:13	WG2326063
1,1,2-Trichlorotrifluoroethane	U	J3	0.180	1.00	1	07/19/2024 04:13	WG2326063
Tetrachloroethene	U		0.300	1.00	1	07/19/2024 04:13	WG2326063
Toluene	U		0.278	1.00	1	07/19/2024 04:13	WG2326063
1,2,3-Trichlorobenzene	U		0.230	1.00	1	07/19/2024 04:13	WG2326063



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/19/2024 04:13	WG2326063
1,1,1-Trichloroethane	U		0.149	1.00	1	07/19/2024 04:13	WG2326063
1,1,2-Trichloroethane	U		0.158	1.00	1	07/19/2024 04:13	WG2326063
Trichloroethene	U		0.190	1.00	1	07/19/2024 04:13	WG2326063
Trichlorofluoromethane	U	J3	0.160	5.00	1	07/19/2024 04:13	WG2326063
1,2,3-Trichloropropane	U		0.237	2.50	1	07/19/2024 04:13	WG2326063
1,2,4-Trimethylbenzene	U		0.322	1.00	1	07/19/2024 04:13	WG2326063
1,2,3-Trimethylbenzene	U		0.104	1.00	1	07/19/2024 04:13	WG2326063
1,3,5-Trimethylbenzene	U		0.104	1.00	1	07/19/2024 04:13	WG2326063
Vinyl chloride	U		0.234	1.00	1	07/19/2024 04:13	WG2326063
Xylenes, Total	U		0.174	3.00	1	07/19/2024 04:13	WG2326063
(S) Toluene-d8	103			80.0-120		07/19/2024 04:13	WG2326063
(S) Toluene-d8	101			80.0-120		07/22/2024 19:32	WG2327690
(S) 4-Bromofluorobenzene	109			77.0-126		07/19/2024 04:13	WG2326063
(S) 4-Bromofluorobenzene	105			77.0-126		07/22/2024 19:32	WG2327690
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/19/2024 04:13	WG2326063
(S) 1,2-Dichloroethane-d4	128			70.0-130		07/22/2024 19:32	WG2327690

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4097071-1 07/22/24 15:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Lead	U		2.99	6.00

Laboratory Control Sample (LCS)

(LCS) R4097071-2 07/22/24 15:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	1000	942	94.2	80.0-120	

L1756526-47 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1756526-47 07/22/24 15:34 • (MS) R4097071-4 07/22/24 15:37 • (MSD) R4097071-5 07/22/24 15:39

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 %
Lead	1000	U	965	968	96.5	96.8	1	75.0-125			0.319	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4096776-3 07/19/24 10:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	50.1	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120

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

(LCS) R4096776-1 07/19/24 09:18 • (LCSD) R4096776-2 07/19/24 09:40

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	4880	5140	97.6	103	70.0-124			5.19	20
(S) a,a,a-Trifluorotoluene(FID)				104	108	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) R4096202-3 07/19/24 01:43

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 disulfide	U		0.0962	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
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
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) R4096202-3 07/19/24 01:43

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	103			80.0-120
(S) 4-Bromofluorobenzene	110			77.0-126
(S) 1,2-Dichloroethane-d4	111			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R4096202-1 07/19/24 00:10 • (LCSD) R4096202-2 07/19/24 00:33

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	25.6	25.8	102	103	19.0-160	J	J	0.778	27
Acrolein	25.0	28.9	28.1	116	112	10.0-160	J	J	2.81	26
Acrylonitrile	25.0	26.3	26.6	105	106	55.0-149			1.13	20
Benzene	5.00	5.69	5.23	114	105	70.0-123			8.42	20
Bromobenzene	5.00	5.45	5.07	109	101	73.0-121			7.22	20

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

(LCS) R4096202-1 07/19/24 00:10 • (LCSD) R4096202-2 07/19/24 00:33

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 %
Bromodichloromethane	5.00	5.15	4.97	103	99.4	75.0-120			3.56	20
Bromoform	5.00	3.88	3.83	77.6	76.6	68.0-132			1.30	20
Bromomethane	5.00	4.18	3.59	83.6	71.8	10.0-160	U	U	15.2	25
n-Butylbenzene	5.00	5.48	4.94	110	98.8	73.0-125			10.4	20
sec-Butylbenzene	5.00	5.54	5.03	111	101	75.0-125			9.65	20
tert-Butylbenzene	5.00	5.49	4.99	110	99.8	76.0-124			9.54	20
Carbon disulfide	5.00	5.44	4.78	109	95.6	61.0-128			12.9	20
Carbon tetrachloride	5.00	5.16	4.43	103	88.6	68.0-126			15.2	20
Chlorobenzene	5.00	4.83	4.48	96.6	89.6	80.0-121			7.52	20
Chlorodibromomethane	5.00	4.42	4.28	88.4	85.6	77.0-125			3.22	20
Chloroethane	5.00	5.92	5.19	118	104	47.0-150			13.1	20
Chloroform	5.00	5.32	4.87	106	97.4	73.0-120		U	8.83	20
Chloromethane	5.00	4.11	3.71	82.2	74.2	41.0-142			10.2	20
2-Chlorotoluene	5.00	5.47	5.14	109	103	76.0-123			6.22	20
4-Chlorotoluene	5.00	5.34	4.89	107	97.8	75.0-122			8.80	20
1,2-Dibromo-3-Chloropropane	5.00	4.28	4.02	85.6	80.4	58.0-134	U	U	6.27	20
1,2-Dibromoethane	5.00	4.62	4.50	92.4	90.0	80.0-122			2.63	20
Dibromomethane	5.00	5.18	5.04	104	101	80.0-120			2.74	20
1,2-Dichlorobenzene	5.00	4.77	4.57	95.4	91.4	79.0-121			4.28	20
1,3-Dichlorobenzene	5.00	4.73	4.48	94.6	89.6	79.0-120			5.43	20
Dichlorodifluoromethane	5.00	3.90	3.08	78.0	61.6	51.0-149	U	UJ3	23.5	20
1,1-Dichloroethane	5.00	5.37	5.02	107	100	70.0-126			6.74	20
1,2-Dichloroethane	5.00	5.31	5.06	106	101	70.0-128			4.82	20
1,1-Dichloroethene	5.00	5.29	4.60	106	92.0	71.0-124			14.0	20
cis-1,2-Dichloroethene	5.00	5.45	4.96	109	99.2	73.0-120			9.41	20
trans-1,2-Dichloroethene	5.00	5.23	4.95	105	99.0	73.0-120			5.50	20
1,2-Dichloropropane	5.00	5.69	5.06	114	101	77.0-125			11.7	20
1,1-Dichloropropene	5.00	5.47	4.70	109	94.0	74.0-126			15.1	20
1,3-Dichloropropane	5.00	5.16	4.89	103	97.8	80.0-120			5.37	20
cis-1,3-Dichloropropene	5.00	5.30	4.96	106	99.2	80.0-123			6.63	20
trans-1,3-Dichloropropene	5.00	4.98	4.73	99.6	94.6	78.0-124			5.15	20
2,2-Dichloropropane	5.00	5.03	4.53	101	90.6	58.0-130			10.5	20
Di-isopropyl ether	5.00	5.64	5.31	113	106	58.0-138			6.03	20
Hexachloro-1,3-butadiene	5.00	4.64	4.18	92.8	83.6	54.0-138			10.4	20
Isopropylbenzene	5.00	5.08	4.63	102	92.6	76.0-127			9.27	20
p-Isopropyltoluene	5.00	5.49	5.01	110	100	76.0-125			9.14	20
2-Butanone (MEK)	25.0	26.4	26.2	106	105	44.0-160			0.760	20
Methylene Chloride	5.00	5.01	4.95	100	99.0	67.0-120		U	1.20	20
4-Methyl-2-pentanone (MIBK)	25.0	26.7	26.3	107	105	68.0-142			1.51	20
Methyl tert-butyl ether	5.00	5.47	5.42	109	108	68.0-125			0.918	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R4096202-1 07/19/24 00:10 • (LCSD) R4096202-2 07/19/24 00:33

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	5.07	4.90	101	98.0	54.0-135		J	3.41	20
n-Propylbenzene	5.00	5.81	5.27	116	105	77.0-124			9.75	20
Styrene	5.00	4.69	4.32	93.8	86.4	73.0-130			8.21	20
1,1,1,2-Tetrachloroethane	5.00	4.57	4.19	91.4	83.8	75.0-125			8.68	20
1,1,2,2-Tetrachloroethane	5.00	4.98	4.94	99.6	98.8	65.0-130			0.806	20
1,1,2-Trichlorotrifluoroethane	5.00	5.16	4.11	103	82.2	69.0-132		J3	22.7	20
Tetrachloroethene	5.00	4.36	3.86	87.2	77.2	72.0-132			12.2	20
Toluene	5.00	5.06	4.64	101	92.8	79.0-120			8.66	20
1,2,3-Trichlorobenzene	5.00	4.43	4.20	88.6	84.0	50.0-138			5.33	20
1,2,4-Trichlorobenzene	5.00	4.44	4.24	88.8	84.8	57.0-137			4.61	20
1,1,1-Trichloroethane	5.00	5.37	4.85	107	97.0	73.0-124			10.2	20
1,1,2-Trichloroethane	5.00	4.78	4.61	95.6	92.2	80.0-120			3.62	20
Trichloroethene	5.00	5.15	4.68	103	93.6	78.0-124			9.56	20
Trichlorofluoromethane	5.00	5.03	4.04	101	80.8	59.0-147		J J3	21.8	20
1,2,3-Trichloropropane	5.00	4.74	4.79	94.8	95.8	73.0-130			1.05	20
1,2,4-Trimethylbenzene	5.00	5.39	5.10	108	102	76.0-121			5.53	20
1,2,3-Trimethylbenzene	5.00	5.41	5.06	108	101	77.0-120			6.69	20
1,3,5-Trimethylbenzene	5.00	5.51	4.99	110	99.8	76.0-122			9.90	20
Vinyl chloride	5.00	4.98	4.23	99.6	84.6	67.0-131			16.3	20
Xylenes, Total	15.0	14.7	13.4	98.0	89.3	79.0-123			9.25	20
(S) Toluene-d8				103	103	80.0-120				
(S) 4-Bromofluorobenzene				110	110	77.0-126				
(S) 1,2-Dichloroethane-d4				109	110	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4097878-2 07/22/24 10:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dichlorobenzene	U		0.120	1.00
Ethylbenzene	U		0.137	1.00
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	125			70.0-130

Laboratory Control Sample (LCS)

(LCS) R4097878-1 07/22/24 10:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	5.00	5.06	101	79.0-120	
Ethylbenzene	5.00	4.87	97.4	79.0-123	
(S) Toluene-d8			99.7	80.0-120	
(S) 4-Bromofluorobenzene			106	77.0-126	
(S) 1,2-Dichloroethane-d4			128	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4094184-1 07/16/24 01:46

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Diesel Range Organics (DRO)	U		33.3	100
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	88.0			31.0-160

Laboratory Control Sample (LCS)

(LCS) R4094184-2 07/16/24 02:07

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Diesel Range Organics (DRO)	1500	979	65.3	50.0-150	
(S) o-Terphenyl			78.5	31.0-160	

L1756080-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1756080-01 07/16/24 04:32 • (MS) R4094184-3 07/16/24 04:53 • (MSD) R4094184-4 07/16/24 05:13

	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	%	%		%			%	%
Diesel Range Organics (DRO)	1500	54.8	1080	965	68.3	60.7	1	50.0-150			11.2	20
(S) o-Terphenyl					87.0	76.5		31.0-160				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4096216-3 07/19/24 17:06

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	109			31.0-160
(S) 2-Fluorobiphenyl	108			48.0-148
(S) p-Terphenyl-d14	105			37.0-146

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R4096216-1 07/19/24 16:30 • (LCSD) R4096216-2 07/19/24 16:48

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	1.96	1.84	98.0	92.0	67.0-150			6.32	20
Acenaphthene	2.00	1.85	1.78	92.5	89.0	65.0-138			3.86	20
Acenaphthylene	2.00	2.01	1.91	100	95.5	66.0-140			5.10	20
Benzo(a)anthracene	2.00	1.76	1.74	88.0	87.0	61.0-140			1.14	20
Benzo(a)pyrene	2.00	1.45	1.55	72.5	77.5	60.0-143			6.67	20
Benzo(b)fluoranthene	2.00	1.63	1.66	81.5	83.0	58.0-141			1.82	20
Benzo(g,h,i)perylene	2.00	1.38	1.53	69.0	76.5	52.0-153			10.3	20
Benzo(k)fluoranthene	2.00	1.42	1.58	71.0	79.0	58.0-148			10.7	20
Chrysene	2.00	1.74	1.80	87.0	90.0	64.0-144			3.39	20
Dibenz(a,h)anthracene	2.00	1.38	1.52	69.0	76.0	52.0-155			9.66	20
Fluoranthene	2.00	2.09	1.96	104	98.0	69.0-153			6.42	20

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

(LCS) R4096216-1 07/19/24 16:30 • (LCSD) R4096216-2 07/19/24 16:48

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	2.07	1.97	104	98.5	64.0-136			4.95	20
Indeno(1,2,3-cd)pyrene	2.00	1.32	1.42	66.0	71.0	54.0-153			7.30	20
Naphthalene	2.00	1.93	1.83	96.5	91.5	61.0-137			5.32	20
Phenanthrene	2.00	1.99	1.93	99.5	96.5	62.0-137			3.06	20
Pyrene	2.00	1.93	1.88	96.5	94.0	60.0-142			2.62	20
1-Methylnaphthalene	2.00	2.05	1.96	103	98.0	66.0-142			4.49	20
2-Methylnaphthalene	2.00	1.98	1.89	99.0	94.5	62.0-136			4.65	20
2-Chloronaphthalene	2.00	1.98	1.90	99.0	95.0	64.0-140			4.12	20
(S) Nitrobenzene-d5				115	106	31.0-160				
(S) 2-Fluorobiphenyl				112	109	48.0-148				
(S) p-Terphenyl-d14				101	102	37.0-146				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

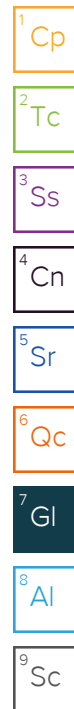
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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
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.



ACCREDITATIONS & LOCATIONS

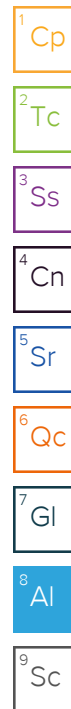
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

C102

Agency, Authorized Purchaser or Agent: DEQ				Contract Laboratory Name: Pace Analytical				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: Rachel Long Address: 165 East 7 th Ave, Suite 100 Eugene, OR, 97401 Tel. #: (503) 954-8350 E-mail: Rachel.long@deq.oregon.gov				Lab Batch #: Invoice To: Address: bryn.thoms@deq.oregon.gov										
Project Name: Sukhwinder Rai Project #: 310200- AL QCAT #50260 Sampler Name: Rachel Long				Sample Preservative										
				Requested Analyses										
Sample ID#	Collection Date/Time	Matrix	Number of Containers	NWTPH-Dx	NWTPH-Gx	PAH 8270C	Lead by ICPMS	VOCs by 8260					Comments L1756563	
Fire Well 1	7/12 10:00AM	W	2	X										-01
Fire Well 2	7/12 10:10A	W	3		X									-02
Fire Well 3	7/12 10:15A	W	2			X								-03
Fire Well 4	7/12 10:20	W	1				X							-04
Fire Well 5	7/12 10:20A	W	3					X						-05
can update lead from 6020 to 6010 confirmed with Rachel Long-bjf 07/15/24														
								Invoice: Date : 04Jun24 Customer : Weight : 10 LBS Phone : (615)758-5858 COD : SAT Del : Y DV : 0.00 Total : 0.00 Svos: PRIORITY OVERNIGHT TRCK: 7464 0844 0383						
Notes:														
Relinquished By: Rachel Long				Agency/Agent: OR-DEQ				Received By: Alex Mitchell				Agency/Agent: PACE		
Signature:				Time & Date: 7/12/24 10:35A				Signature: alexa mitchell				Time & Date: 7/13/24 0900		
Relinquished By:				Agency/Agent:				Received By:				Agency/Agent:		
Signature:				Time & Date:				Signature:				Time & Date:		

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # . THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S & C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

7464 0844 0383