

Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group: L1707571
Samples Received: 02/07/2024
Project Number: 2060.012.004
Description: Former Sumner Store

Report To: Ellen Woods
700 NE Multnomah St. #600
Portland, OR 97124

Entire Report Reviewed By:



Brian Ford
Project Manager

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SAMPLE SUMMARY

TRIP L1707571-01 GW

Collected by	Collected date/time	Received date/time
BW/RK	02/05/24 00:00	02/07/24 09:00

Collected date/time	Received date/time
02/05/24 00:00	02/07/24 09:00

Received date/time
02/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2233119	1	02/24/24 12:11	02/24/24 12:11	JHH	Mt. Juliet, TN

 ${}^1\text{Cp}$ ${}^2\text{Tc}$

³Ss

$$^4\text{Cn}$$
 ${}^5\text{Sr}$ ${}^6\text{Qc}$

7	Gl
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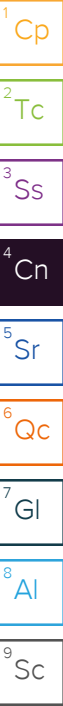
 ${}^8\text{Al}$
$$^9\text{Sc}$$

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.

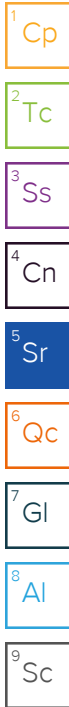


Brian Ford
Project Manager



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	J4	11.3	50.0	1	02/24/2024 12:11	WG2233119
Acrolein	U		2.54	50.0	1	02/24/2024 12:11	WG2233119
Acrylonitrile	U		0.671	10.0	1	02/24/2024 12:11	WG2233119
Benzene	U		0.0941	1.00	1	02/24/2024 12:11	WG2233119
Bromobenzene	U	C3	0.118	1.00	1	02/24/2024 12:11	WG2233119
Bromodichloromethane	U		0.136	1.00	1	02/24/2024 12:11	WG2233119
Bromoform	U		0.129	1.00	1	02/24/2024 12:11	WG2233119
Bromomethane	U		0.605	5.00	1	02/24/2024 12:11	WG2233119
n-Butylbenzene	U		0.157	1.00	1	02/24/2024 12:11	WG2233119
sec-Butylbenzene	U		0.125	1.00	1	02/24/2024 12:11	WG2233119
tert-Butylbenzene	U		0.127	1.00	1	02/24/2024 12:11	WG2233119
Carbon disulfide	U		0.0962	1.00	1	02/24/2024 12:11	WG2233119
Carbon tetrachloride	U	J4	0.128	1.00	1	02/24/2024 12:11	WG2233119
Chlorobenzene	U		0.116	1.00	1	02/24/2024 12:11	WG2233119
Chlorodibromomethane	U		0.140	1.00	1	02/24/2024 12:11	WG2233119
Chloroethane	U		0.192	5.00	1	02/24/2024 12:11	WG2233119
Chloroform	U		0.111	5.00	1	02/24/2024 12:11	WG2233119
Chloromethane	U		0.960	2.50	1	02/24/2024 12:11	WG2233119
2-Chlorotoluene	U		0.106	1.00	1	02/24/2024 12:11	WG2233119
4-Chlorotoluene	U		0.114	1.00	1	02/24/2024 12:11	WG2233119
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/24/2024 12:11	WG2233119
1,2-Dibromoethane	U		0.126	1.00	1	02/24/2024 12:11	WG2233119
Dibromomethane	U		0.122	1.00	1	02/24/2024 12:11	WG2233119
1,2-Dichlorobenzene	U		0.107	1.00	1	02/24/2024 12:11	WG2233119
1,3-Dichlorobenzene	U		0.110	1.00	1	02/24/2024 12:11	WG2233119
1,4-Dichlorobenzene	U		0.120	1.00	1	02/24/2024 12:11	WG2233119
Dichlorodifluoromethane	U		0.374	5.00	1	02/24/2024 12:11	WG2233119
1,1-Dichloroethane	U		0.100	1.00	1	02/24/2024 12:11	WG2233119
1,2-Dichloroethane	U		0.0819	1.00	1	02/24/2024 12:11	WG2233119
1,1-Dichloroethene	U		0.188	1.00	1	02/24/2024 12:11	WG2233119
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/24/2024 12:11	WG2233119
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/24/2024 12:11	WG2233119
1,2-Dichloropropane	U		0.149	1.00	1	02/24/2024 12:11	WG2233119
1,1-Dichloropropene	U		0.142	1.00	1	02/24/2024 12:11	WG2233119
1,3-Dichloropropane	U		0.110	1.00	1	02/24/2024 12:11	WG2233119
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/24/2024 12:11	WG2233119
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/24/2024 12:11	WG2233119
2,2-Dichloropropane	U		0.161	1.00	1	02/24/2024 12:11	WG2233119
Di-isopropyl ether	U	C3	0.105	1.00	1	02/24/2024 12:11	WG2233119
Ethylbenzene	U		0.137	1.00	1	02/24/2024 12:11	WG2233119
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/24/2024 12:11	WG2233119
Isopropylbenzene	U		0.105	1.00	1	02/24/2024 12:11	WG2233119
p-Isopropyltoluene	U		0.120	1.00	1	02/24/2024 12:11	WG2233119
2-Butanone (MEK)	U		1.19	10.0	1	02/24/2024 12:11	WG2233119
Methylene Chloride	U		0.430	5.00	1	02/24/2024 12:11	WG2233119
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/24/2024 12:11	WG2233119
Methyl tert-butyl ether	U		0.101	1.00	1	02/24/2024 12:11	WG2233119
Naphthalene	U	C3	1.00	5.00	1	02/24/2024 12:11	WG2233119
n-Propylbenzene	U		0.0993	1.00	1	02/24/2024 12:11	WG2233119
Styrene	U		0.118	1.00	1	02/24/2024 12:11	WG2233119
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/24/2024 12:11	WG2233119
1,1,2,2-Tetrachloroethane	U	C3	0.133	1.00	1	02/24/2024 12:11	WG2233119
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/24/2024 12:11	WG2233119
Tetrachloroethene	U	J4	0.300	1.00	1	02/24/2024 12:11	WG2233119
Toluene	U		0.278	1.00	1	02/24/2024 12:11	WG2233119
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/24/2024 12:11	WG2233119



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	02/24/2024 12:11	WG2233119
1,1,1-Trichloroethane	U		0.149	1.00	1	02/24/2024 12:11	WG2233119
1,1,2-Trichloroethane	U		0.158	1.00	1	02/24/2024 12:11	WG2233119
Trichloroethene	U	J4	0.190	1.00	1	02/24/2024 12:11	WG2233119
Trichlorofluoromethane	U		0.160	5.00	1	02/24/2024 12:11	WG2233119
1,2,3-Trichloropropane	U		0.237	2.50	1	02/24/2024 12:11	WG2233119
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/24/2024 12:11	WG2233119
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/24/2024 12:11	WG2233119
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/24/2024 12:11	WG2233119
Vinyl chloride	U		0.234	1.00	1	02/24/2024 12:11	WG2233119
Xylenes, Total	U		0.174	3.00	1	02/24/2024 12:11	WG2233119
(S) Toluene-d8	107			80.0-120		02/24/2024 12:11	WG2233119
(S) 4-Bromofluorobenzene	103			77.0-126		02/24/2024 12:11	WG2233119
(S) 1,2-Dichloroethane-d4	110			70.0-130		02/24/2024 12:11	WG2233119

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4038168-3 02/24/24 10:46

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
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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4038168-3 02/24/24 10:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
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	104			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	115			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R4038168-1 02/24/24 09:45 • (LCSD) R4038168-2 02/24/24 10:06

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	44.1	33.6	176	134	19.0-160	J4		27.0	27
Acrolein	25.0	20.9	20.7	83.6	82.8	10.0-160			0.962	26
Acrylonitrile	25.0	24.8	25.0	99.2	100	55.0-149			0.803	20

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

(LCS) R4038168-1 02/24/24 09:45 • (LCSD) R4038168-2 02/24/24 10:06

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 %
Benzene	5.00	4.66	4.83	93.2	96.6	70.0-123			3.58	20
Bromobenzene	5.00	3.93	4.03	78.6	80.6	73.0-121			2.51	20
Bromodichloromethane	5.00	5.26	5.44	105	109	75.0-120			3.36	20
Bromoform	5.00	6.47	6.40	129	128	68.0-132			1.09	20
Bromomethane	5.00	5.43	5.68	109	114	10.0-160			4.50	25
n-Butylbenzene	5.00	4.50	4.61	90.0	92.2	73.0-125			2.41	20
sec-Butylbenzene	5.00	4.26	4.38	85.2	87.6	75.0-125			2.78	20
tert-Butylbenzene	5.00	4.50	4.55	90.0	91.0	76.0-124			1.10	20
Carbon disulfide	5.00	4.67	4.73	93.4	94.6	61.0-128			1.28	20
Carbon tetrachloride	5.00	6.21	6.50	124	130	68.0-126		J4	4.56	20
Chlorobenzene	5.00	5.65	5.70	113	114	80.0-121			0.881	20
Chlorodibromomethane	5.00	6.00	5.98	120	120	77.0-125			0.334	20
Chloroethane	5.00	4.60	4.73	92.0	94.6	47.0-150			2.79	20
Chloroform	5.00	5.28	5.35	106	107	73.0-120			1.32	20
Chloromethane	5.00	4.31	4.35	86.2	87.0	41.0-142			0.924	20
2-Chlorotoluene	5.00	4.23	4.26	84.6	85.2	76.0-123			0.707	20
4-Chlorotoluene	5.00	4.19	4.23	83.8	84.6	75.0-122			0.950	20
1,2-Dibromo-3-Chloropropane	5.00	4.47	4.61	89.4	92.2	58.0-134			3.08	20
1,2-Dibromoethane	5.00	5.53	5.42	111	108	80.0-122			2.01	20
Dibromomethane	5.00	5.49	5.57	110	111	80.0-120			1.45	20
1,2-Dichlorobenzene	5.00	5.04	4.93	101	98.6	79.0-121			2.21	20
1,3-Dichlorobenzene	5.00	4.95	5.01	99.0	100	79.0-120			1.20	20
1,4-Dichlorobenzene	5.00	5.04	5.00	101	100	79.0-120			0.797	20
Dichlorodifluoromethane	5.00	6.46	6.47	129	129	51.0-149			0.155	20
1,1-Dichloroethane	5.00	4.73	4.72	94.6	94.4	70.0-126			0.212	20
1,2-Dichloroethane	5.00	5.65	5.60	113	112	70.0-128			0.889	20
1,1-Dichloroethene	5.00	5.21	5.45	104	109	71.0-124			4.50	20
cis-1,2-Dichloroethene	5.00	5.13	5.31	103	106	73.0-120			3.45	20
trans-1,2-Dichloroethene	5.00	5.28	5.43	106	109	73.0-120			2.80	20
1,2-Dichloropropane	5.00	4.25	4.48	85.0	89.6	77.0-125			5.27	20
1,1-Dichloropropene	5.00	4.85	5.03	97.0	101	74.0-126			3.64	20
1,3-Dichloropropane	5.00	4.83	4.79	96.6	95.8	80.0-120			0.832	20
cis-1,3-Dichloropropene	5.00	4.65	4.68	93.0	93.6	80.0-123			0.643	20
trans-1,3-Dichloropropene	5.00	4.83	4.84	96.6	96.8	78.0-124			0.207	20
2,2-Dichloropropane	5.00	5.36	5.18	107	104	58.0-130			3.42	20
Di-isopropyl ether	5.00	3.86	3.86	77.2	77.2	58.0-138			0.000	20
Ethylbenzene	5.00	5.32	5.42	106	108	79.0-123			1.86	20
Hexachloro-1,3-butadiene	5.00	5.24	5.25	105	105	54.0-138			0.191	20
Isopropylbenzene	5.00	5.44	5.41	109	108	76.0-127			0.553	20
p-Isopropyltoluene	5.00	4.46	4.51	89.2	90.2	76.0-125			1.11	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R4038168-1 02/24/24 09:45 • (LCSD) R4038168-2 02/24/24 10:06

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-Butanone (MEK)	25.0	22.2	22.7	88.8	90.8	44.0-160			2.23	20
Methylene Chloride	5.00	5.02	5.12	100	102	67.0-120			1.97	20
4-Methyl-2-pentanone (MIBK)	25.0	20.2	20.3	80.8	81.2	68.0-142			0.494	20
Methyl tert-butyl ether	5.00	5.19	5.18	104	104	68.0-125			0.193	20
Naphthalene	5.00	3.67	3.82	73.4	76.4	54.0-135			4.01	20
n-Propylbenzene	5.00	4.09	4.15	81.8	83.0	77.0-124			1.46	20
Styrene	5.00	5.21	5.10	104	102	73.0-130			2.13	20
1,1,1,2-Tetrachloroethane	5.00	6.05	6.11	121	122	75.0-125			0.987	20
1,1,2,2-Tetrachloroethane	5.00	3.87	3.94	77.4	78.8	65.0-130			1.79	20
1,1,2-Trichlorotrifluoroethane	5.00	5.44	5.84	109	117	69.0-132			7.09	20
Tetrachloroethene	5.00	6.55	6.67	131	133	72.0-132		J4	1.82	20
Toluene	5.00	5.07	5.09	101	102	79.0-120			0.394	20
1,2,3-Trichlorobenzene	5.00	4.71	4.71	94.2	94.2	50.0-138			0.000	20
1,2,4-Trichlorobenzene	5.00	4.94	4.88	98.8	97.6	57.0-137			1.22	20
1,1,1-Trichloroethane	5.00	5.95	5.98	119	120	73.0-124			0.503	20
1,1,2-Trichloroethane	5.00	5.20	5.22	104	104	80.0-120			0.384	20
Trichloroethene	5.00	5.89	6.32	118	126	78.0-124		J4	7.04	20
Trichlorofluoromethane	5.00	6.94	7.23	139	145	59.0-147			4.09	20
1,2,3-Trichloropropane	5.00	4.67	5.01	93.4	100	73.0-130			7.02	20
1,2,4-Trimethylbenzene	5.00	4.37	4.37	87.4	87.4	76.0-121			0.000	20
1,2,3-Trimethylbenzene	5.00	4.42	4.42	88.4	88.4	77.0-120			0.000	20
1,3,5-Trimethylbenzene	5.00	4.46	4.53	89.2	90.6	76.0-122			1.56	20
Vinyl chloride	5.00	4.76	4.93	95.2	98.6	67.0-131			3.51	20
Xylenes, Total	15.0	16.4	16.4	109	109	79.0-123			0.000	20
(S) Toluene-d8				105	104	80.0-120				
(S) 4-Bromofluorobenzene				104	102	77.0-126				
(S) 1,2-Dichloroethane-d4				112	112	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1707016-47 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707016-47 02/24/24 14:54 • (MS) R4038168-4 02/24/24 18:17 • (MSD) R4038168-5 02/24/24 18:37

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 %
Acetone	25.0	U	43.6	35.4	174	142	1	10.0-160	J5		20.8	35
Acrolein	25.0	U	47.2	38.4	189	154	1	10.0-160	J5		20.6	39
Acrylonitrile	25.0	U	28.3	25.6	113	102	1	21.0-160			10.0	32
Benzene	5.00	U	6.83	6.11	137	122	1	17.0-158			11.1	27
Bromobenzene	5.00	U	4.67	4.88	93.4	97.6	1	30.0-149			4.40	28
Bromodichloromethane	5.00	U	6.18	6.12	124	122	1	31.0-150			0.976	27

L1707016-47 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707016-47 02/24/24 14:54 • (MS) R4038168-4 02/24/24 18:17 • (MSD) R4038168-5 02/24/24 18:37

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 %
Bromoform	5.00	U	7.25	7.36	145	147	1	29.0-150			1.51	29
Bromomethane	5.00	U	6.04	6.08	121	122	1	10.0-160			0.660	38
n-Butylbenzene	5.00	U	5.88	5.50	118	110	1	31.0-150			6.68	30
sec-Butylbenzene	5.00	U	5.48	5.56	110	111	1	33.0-155			1.45	29
tert-Butylbenzene	5.00	U	5.64	5.87	113	117	1	34.0-153			4.00	28
Carbon disulfide	5.00	0.157	6.08	5.40	118	105	1	10.0-156			11.8	28
Carbon tetrachloride	5.00	U	7.76	7.66	155	153	1	23.0-159			1.30	28
Chlorobenzene	5.00	U	6.48	6.75	130	135	1	33.0-152			4.08	27
Chlorodibromomethane	5.00	U	6.78	6.88	136	138	1	37.0-149			1.46	27
Chloroethane	5.00	U	5.46	5.19	109	104	1	10.0-160			5.07	30
Chloroform	5.00	U	6.38	6.06	128	121	1	29.0-154			5.14	28
Chloromethane	5.00	U	4.62	4.50	92.4	90.0	1	10.0-160			2.63	29
2-Chlorotoluene	5.00	U	5.30	5.31	106	106	1	32.0-153			0.189	28
4-Chlorotoluene	5.00	U	4.83	5.13	96.6	103	1	32.0-150			6.02	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.23	5.71	105	114	1	22.0-151			8.78	34
1,2-Dibromoethane	5.00	U	6.91	6.64	138	133	1	34.0-147			3.99	27
Dibromomethane	5.00	U	6.47	6.21	129	124	1	30.0-151			4.10	27
1,2-Dichlorobenzene	5.00	U	5.57	5.84	111	117	1	34.0-149			4.73	28
1,3-Dichlorobenzene	5.00	U	5.45	5.69	109	114	1	36.0-146			4.31	27
1,4-Dichlorobenzene	5.00	U	5.47	5.76	109	115	1	35.0-142			5.16	27
Dichlorodifluoromethane	5.00	U	7.72	7.50	154	150	1	10.0-160			2.89	29
1,1-Dichloroethane	5.00	U	5.57	5.49	111	110	1	25.0-158			1.45	27
1,2-Dichloroethane	5.00	0.607	6.49	6.21	118	112	1	29.0-151			4.41	27
1,1-Dichloroethene	5.00	U	6.71	6.64	134	133	1	11.0-160			1.05	29
cis-1,2-Dichloroethene	5.00	U	6.25	6.13	125	123	1	10.0-160			1.94	27
trans-1,2-Dichloroethene	5.00	U	6.53	6.38	131	128	1	17.0-153			2.32	27
1,2-Dichloropropane	5.00	U	5.39	5.18	108	104	1	30.0-156			3.97	27
1,1-Dichloropropene	5.00	U	6.23	6.14	125	123	1	25.0-158			1.46	27
1,3-Dichloropropane	5.00	U	5.69	5.77	114	115	1	38.0-147			1.40	27
cis-1,3-Dichloropropene	5.00	U	5.58	5.49	112	110	1	34.0-149			1.63	28
trans-1,3-Dichloropropene	5.00	U	5.71	5.79	114	116	1	32.0-149			1.39	28
2,2-Dichloropropane	5.00	U	6.73	6.18	135	124	1	24.0-152			8.52	29
Di-isopropyl ether	5.00	U	4.45	4.39	89.0	87.8	1	21.0-160			1.36	28
Ethylbenzene	5.00	U	9.71	7.59	194	152	1	30.0-155	J5		24.5	27
Hexachloro-1,3-butadiene	5.00	U	5.63	6.15	113	123	1	20.0-154			8.83	34
Isopropylbenzene	5.00	U	7.17	6.93	143	139	1	28.0-157			3.40	27
p-Isopropyltoluene	5.00	U	5.73	5.74	115	115	1	30.0-154			0.174	29
2-Butanone (MEK)	25.0	U	24.7	23.2	98.8	92.8	1	10.0-160			6.26	32
Methylene Chloride	5.00	U	5.90	5.86	118	117	1	23.0-144			0.680	28
4-Methyl-2-pentanone (MIBK)	25.0	U	23.4	22.8	93.6	91.2	1	29.0-160			2.60	29

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1707016-47 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707016-47 02/24/24 14:54 • (MS) R4038168-4 02/24/24 18:17 • (MSD) R4038168-5 02/24/24 18:37

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 %
Methyl tert-butyl ether	5.00	U	6.03	5.87	121	117	1	28.0-150			2.69	29
Naphthalene	5.00	U	32.1	8.50	642	170	1	12.0-156	J5	J3 J5	116	35
n-Propylbenzene	5.00	U	5.90	5.34	118	107	1	31.0-154			9.96	28
Styrene	5.00	U	5.58	5.78	112	116	1	33.0-155			3.52	28
1,1,1,2-Tetrachloroethane	5.00	U	7.13	7.15	143	143	1	36.0-151			0.280	29
1,1,2,2-Tetrachloroethane	5.00	U	4.88	4.95	97.6	99.0	1	33.0-150			1.42	28
1,1,2-Trichlorotrifluoroethane	5.00	U	7.34	7.14	147	143	1	23.0-160			2.76	30
Tetrachloroethene	5.00	U	7.80	7.97	156	159	1	10.0-160			2.16	27
Toluene	5.00	U	16.5	8.93	330	179	1	26.0-154	J5	J3 J5	59.5	28
1,2,3-Trichlorobenzene	5.00	U	4.71	5.38	94.2	108	1	17.0-150			13.3	36
1,2,4-Trichlorobenzene	5.00	U	5.06	5.50	101	110	1	24.0-150			8.33	33
1,1,1-Trichloroethane	5.00	U	7.45	7.17	149	143	1	23.0-160			3.83	28
1,1,2-Trichloroethane	5.00	U	6.22	6.34	124	127	1	35.0-147			1.91	27
Trichloroethene	5.00	U	6.97	7.06	139	141	1	10.0-160			1.28	25
Trichlorofluoromethane	5.00	U	8.47	8.33	169	167	1	17.0-160	J5	J5	1.67	31
1,2,3-Trichloropropane	5.00	U	5.89	6.00	118	120	1	34.0-151			1.85	29
1,2,4-Trimethylbenzene	5.00	U	16.1	7.60	322	152	1	26.0-154	J5	J3	71.7	27
1,2,3-Trimethylbenzene	5.00	U	8.40	6.18	168	124	1	32.0-149	J5	J3	30.5	28
1,3,5-Trimethylbenzene	5.00	U	8.22	6.18	164	124	1	28.0-153	J5	J3	28.3	27
Vinyl chloride	5.00	U	5.56	5.39	111	108	1	10.0-160			3.11	27
Xylenes, Total	15.0	U	39.5	24.5	263	163	1	29.0-154	J5	J3 J5	46.9	28
(S) Toluene-d8					104	105		80.0-120				
(S) 4-Bromofluorobenzene					105	102		77.0-126				
(S) 1,2-Dichloroethane-d4					108	102		70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

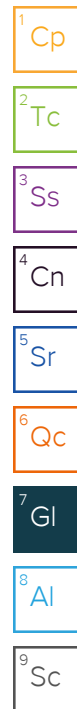
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
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.



ACCREDITATIONS & LOCATIONS

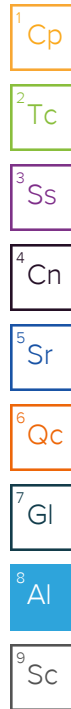
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



Agency, Authorized Purchaser or Agent:

GSI Water Solutions for ODEQ

State of Oregon Chain of Custody

Send Lab Report To:

Ellen Woods

Address:

700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100

Tel #: 541-608-0490

Email: ellen.woods@deq.or.gov, remst@gsiws.com, bwarner@gsiws.com

Contract Laboratory Name:

Pace Analytical National

Lab Batch #:

Invoice:

ODEQ/Business Office
700 NE Multnomah Street, Suite 600
Portland, OR 97232
Email: DEQEXP@deq.state.or.us

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

Project Name: Former Sumner Store

Project #: 2060.012.004

Sampler Name: B. Warner, R. Kemp

Sample Preservative

C025

Requested Analyses

Sample ID#	Collection Date	Collection Time	Matrix	Number of Containers	TPH Gasoline by NWTPH-Gx	TPH as Dissolved by NWTPH-Gx with SCC	VOCs (Full List) by EPA8260D	PAHs by EPA8270E-SIM	Dissolved Pb by EPA 8220B (Field Filtered)	Total Pb by EPA 8220B	GRO and VOCs by EPA TO-15	Comments
P1-S1	2/5/24	9:00	S	2	X	X	X	X		X		L1707571
P1		10:20	W	12	X	X	X	X	X			L1703299
P2-S1		9:50	S	2	X	X	X	X		X		-01
P2-S2		9:35	S	2	X	X	X	X				-02
P2-S3 P2-S1-D		9:31	S	2 tm	X	X	X	X		X		-03
P2-D		10:16	S	2 12	X	X	X	X				-04
P2		10:15	W	12	X	X	X	X	X			-05
P3-S1		10:45	S	2	X	X	X					-06
P3-S2		10:50	S	2	X	X	X					-07
P3-S3		10:55	S	2								-08
P3		12:50	W	12	X	X	X	X	X			-09
P3-S1 P4-S1		12:15	S	2	X	X	X					-10
P3-S2 P4-S2		12:20	S	2	X	X	X					-11
P3-S3 P4-S3		12:25	S	2								-12
P4		13:25	W	12	X	X	X	X	X			-13

NOTES: Contact Rick Ernst (503 708 5945, remst@gsiws.com) or Brendon Warner (208 991 6713) with questions. Include ODEQ EDO with final lab report.

Return new analyzed samples in hotel.

Relinquished By: BRENDON WARNER	Agency/Agent: GSI WATER SOL.	Received By: TAYLOR MCARDY	Agency/Agent: Pace
Signature: [Signature]	Time & Date: 10/5 2/6/24	Signature: [Signature]	Time & Date: 2/7-24 0900
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED
HEREBY INCORPORATED BYCOC Seal Present/Intact:
COC Signed/Accurate:
Bottles sealed intact:
Correct bottles used:
Sufficient volume sent:
RA Screen <0.5 mR/hr:

Sample Receipt Checklist

If Applicable
VOR Zero Headspace: ☒ N
Pres. Correct/Check: ☒ NINCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S & C'S) CONTAINED IN THE PRICE AGREEMENT ARE
AND C'S, EXPRESS OR IMPLIED.PH-10BDH5021 TRC-2352362
CR6-20221V

State of Oregon Chain of Custody

Agency, Authorized Purchaser or Agent:

GSI Water Solutions for ODEQ

Send Lab Report To:

Ellen Woods
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100

Tel #: 541-606-0490

Email: ellen.woods@deq.or.gov, remst@gsws.com, bwarnar@gsws.com

Contract Laboratory Name:

Pace Analytical National

Lab Batch #:

Invoice:

ODEQ/Business Office
700 NE Multnomah Street, Suite 600
Portland, OR 97232
Email: DEQEXP@deq.state.or.us

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 _____

Project Name: Former Sumner Store

Project #: 2050.012.004

Sampler Name: B. Warner, R. Kemp

Sample ID#	Collection Date	Collection Time	Matrix	Number of Containers	Requested Analyses								GRQ and VOCs by EPA TO-15		Comments
					TPH Gasoline by NMTPH-GX	TPH as Diesel by NMTPH-DX with SGC	VOCs (Full List) by EPA8260D	PAHs by EPA8270E-SIM	Dissolved Pb by EPA 6020B (Field Filtered)	Total Pb by EPA 6020B					
P5-S1	2/5/24	13:20	S	2	X	X	X	X		X					L1707571
P5-S1-D		13:21	S	2	X	X	X	X							L1703299
P5-S2		13:25	S	2	X	X	X								-16
P5-S3		13:30	S	2	X	X	X								-17
P5		14:15	W	12	X	X	X	X	X						-18
P6-S1		14:35	S	2	X	X	X	X		X					-19
P6-S2		14:45	S	2	X	X	X								-20
P6-S3		14:45	S	2	X	X	X								-21
P6		15:50	W	12	X	X	X	X	X						-22
IDW-S		15:35	S	2	X	X	X								-23
IDW-W		16:20	W	2	X	X	X			X					-24
Rinse		15:20	W	12	X	X	X	X	X	X					-25

NOTES: Contact Rick Ernst (503.708.5845, remst@gsws.com) or Braedon Warner (208.991.6713) with questions. Include DEQ EDO with final lab report.

Return non-analyzed samples on Gold.

Relinquished By: <i>BRAEDON WARNER</i>	Agency/Agent: GSI WATER SOL.	Received By: <i>Taylor Newby</i>	Agency/Agent: Pace
Signature: <i>[Signature]</i>	Time & Date: 105 2/6/24	Signature: <i>Taylor Newby</i>	Time & Date: 2:7:24 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 # 8903. 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.

L1703299 OREGONDEQ re-log

R5

Please re-log for TRIP which is a Trip Blank for V8260 as R5 due 02/27.

Time estimate: oh

Time spent: oh

Members

BF Brian Ford