

HANSON Don * DEQ

From: Guy Tanz <gtanz@pngenv.com>
Sent: Monday, May 5, 2025 10:06 AM
To: HANSON Don * DEQ
Cc: CHINITZ Amy; Jamie Porter - Rainbow Water District
Subject: 1176 Springvilla Q Street Well April 2025 Sample Result
Attachments: 1176 Q Street Supply Well L1852178.pdf

Don:

On April 23, 2025 PNG completed sampling of the Q Street water-supply well. Rainbow Water District (RWD) generally decreases production at Q Street in the fall through early spring via an approximate three times weekly maintenance discharge schedule. RWD generally increases Q Street production in late May to June to supplement seasonal summertime production. The Q Street well is constructed of 16-inch steel casing with three separate 14-inch Johnson well screens placed in three zones from 110 to 280 feet below ground surface.

Prior to PNG's sampling, RWD had run the well for approximately 90 minutes at a discharge rate of approximately 250 gpm. Therefore an estimated 22,500 gallons of water were purged from the Q Street well prior to sampling. This volume is equivalent to just over 9.5 volumes (approximately 2,360 gallons per volume).

The laboratory analytical report for the April 23, 2025, water sample analysis is attached. Target Springvilla solvent compounds were not detected above low level laboratory detection limits (0.5 parts per billion). The analysis also included a duplicate sample and dedicated trip blank for the sample shipment.

Please let us know if you have any questions.

Thanks and regards,

Guy

Guy Tanz, R.G., L.G.
PNG Environmental, Inc.
Senior Geologist
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
503.620.5714 Direct
503.853.1295 Cell

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PNG Environmental

Sample Delivery Group: L1852178
Samples Received: 04/25/2025
Project Number: 1176
Description:
Site: SPRINGFIELD, OR
Report To: Guy Tanz
6665 SW Hampton St., Suite 101
Tigard, OR 97223

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 National

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

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SAMPLE SUMMARY

TB-042325 L1852178-01 GW

				Collected by Jay Greifer	Collected date/time 04/23/25 09:55	Received date/time 04/25/25 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2503466	1	04/30/25 14:38	04/30/25 14:38	DYW	Mt. Juliet, TN

Q STREET L1852178-02 GW

				Collected by Jay Greifer	Collected date/time 04/23/25 10:05	Received date/time 04/25/25 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2503466	1	04/30/25 16:17	04/30/25 16:17	DYW	Mt. Juliet, TN

MW-95 L1852178-03 GW

				Collected by Jay Greifer	Collected date/time 04/23/25 10:07	Received date/time 04/25/25 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2503466	1	04/30/25 16:41	04/30/25 16:41	DYW	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

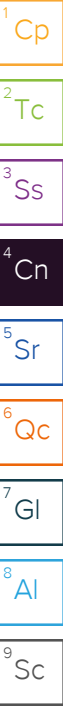
9 Sc

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



TB-042325

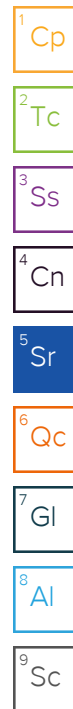
SAMPLE RESULTS - 01

Collected date/time: 04/23/25 09:55

L1852178

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	04/30/2025 14:38	WG2503466
Acrylonitrile	ND		5.00	1	04/30/2025 14:38	WG2503466
Benzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Bromobenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Bromodichloromethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Bromochloromethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Bromoform	ND	C3	0.500	1	04/30/2025 14:38	WG2503466
Bromomethane	ND	C3	2.50	1	04/30/2025 14:38	WG2503466
n-Butylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
sec-Butylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
tert-Butylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Carbon disulfide	ND		0.500	1	04/30/2025 14:38	WG2503466
Carbon tetrachloride	ND		0.500	1	04/30/2025 14:38	WG2503466
Chlorobenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Chlorodibromomethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Chloroethane	ND		2.50	1	04/30/2025 14:38	WG2503466
Chloroform	ND		0.500	1	04/30/2025 14:38	WG2503466
Chloromethane	ND		1.25	1	04/30/2025 14:38	WG2503466
2-Chlorotoluene	ND		0.500	1	04/30/2025 14:38	WG2503466
4-Chlorotoluene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2-Dibromo-3-Chloropropane	ND		2.50	1	04/30/2025 14:38	WG2503466
1,2-Dibromoethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Dibromomethane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2-Dichlorobenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,3-Dichlorobenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,4-Dichlorobenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Dichlorodifluoromethane	ND	J4	2.50	1	04/30/2025 14:38	WG2503466
1,1-Dichloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2-Dichloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,1-Dichloroethene	ND		0.500	1	04/30/2025 14:38	WG2503466
cis-1,2-Dichloroethene	ND		0.500	1	04/30/2025 14:38	WG2503466
trans-1,2-Dichloroethene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2-Dichloropropane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,1-Dichloropropene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,3-Dichloropropane	ND		1.00	1	04/30/2025 14:38	WG2503466
cis-1,3-Dichloropropene	ND		0.500	1	04/30/2025 14:38	WG2503466
trans-1,3-Dichloropropene	ND		0.500	1	04/30/2025 14:38	WG2503466
trans-1,4-Dichloro-2-butene	ND		5.00	1	04/30/2025 14:38	WG2503466
2,2-Dichloropropane	ND	C3	0.500	1	04/30/2025 14:38	WG2503466
Di-isopropyl ether	ND		0.500	1	04/30/2025 14:38	WG2503466
Ethylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Hexachloro-1,3-butadiene	ND	C3	1.00	1	04/30/2025 14:38	WG2503466
2-Hexanone	ND		5.00	1	04/30/2025 14:38	WG2503466
n-Hexane	ND		5.00	1	04/30/2025 14:38	WG2503466
Iodomethane	ND		5.00	1	04/30/2025 14:38	WG2503466
Isopropylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
p-Isopropyltoluene	ND		0.500	1	04/30/2025 14:38	WG2503466
2-Butanone (MEK)	ND		5.00	1	04/30/2025 14:38	WG2503466
Methylene Chloride	ND		2.50	1	04/30/2025 14:38	WG2503466
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	04/30/2025 14:38	WG2503466
Methyl tert-butyl ether	ND		0.500	1	04/30/2025 14:38	WG2503466
Naphthalene	ND	C3	2.50	1	04/30/2025 14:38	WG2503466
n-Propylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Styrene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,1,1,2-Tetrachloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,1,2,2-Tetrachloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466



ACCOUNT:

PNG Environmental

PROJECT:

1176

SDG:

L1852178

DATE/TIME:

05/02/25 14:04

PAGE:

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TB-042325

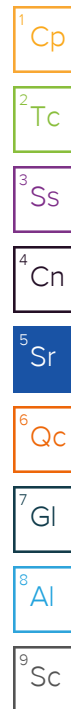
SAMPLE RESULTS - 01

Collected date/time: 04/23/25 09:55

L1852178

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Tetrachloroethene	ND		0.500	1	04/30/2025 14:38	WG2503466
Toluene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2,3-Trichlorobenzene	ND	C3	0.500	1	04/30/2025 14:38	WG2503466
1,2,4-Trichlorobenzene	ND	C3	1.00	1	04/30/2025 14:38	WG2503466
1,1,1-Trichloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
1,1,2-Trichloroethane	ND		0.500	1	04/30/2025 14:38	WG2503466
Trichloroethene	ND		0.500	1	04/30/2025 14:38	WG2503466
Trichlorofluoromethane	ND		2.50	1	04/30/2025 14:38	WG2503466
1,2,3-Trichloropropane	ND		2.50	1	04/30/2025 14:38	WG2503466
1,2,4-Trimethylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,2,3-Trimethylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
1,3,5-Trimethylbenzene	ND		0.500	1	04/30/2025 14:38	WG2503466
Vinyl acetate	ND	C3	5.00	1	04/30/2025 14:38	WG2503466
Vinyl chloride	ND		0.500	1	04/30/2025 14:38	WG2503466
Xylenes, Total	ND		1.50	1	04/30/2025 14:38	WG2503466
(S) Toluene-d8	98.3		80.0-120		04/30/2025 14:38	WG2503466
(S) 4-Bromofluorobenzene	93.6		77.0-126		04/30/2025 14:38	WG2503466
(S) 1,2-Dichloroethane-d4	118		70.0-130		04/30/2025 14:38	WG2503466



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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	04/30/2025 16:17	WG2503466
Acrylonitrile	ND		5.00	1	04/30/2025 16:17	WG2503466
Benzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Bromobenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Bromodichloromethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Bromochloromethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Bromoform	ND	C3	0.500	1	04/30/2025 16:17	WG2503466
Bromomethane	ND	C3	2.50	1	04/30/2025 16:17	WG2503466
n-Butylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
sec-Butylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
tert-Butylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Carbon disulfide	ND		0.500	1	04/30/2025 16:17	WG2503466
Carbon tetrachloride	ND		0.500	1	04/30/2025 16:17	WG2503466
Chlorobenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Chlorodibromomethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Chloroethane	ND		2.50	1	04/30/2025 16:17	WG2503466
Chloroform	ND		0.500	1	04/30/2025 16:17	WG2503466
Chloromethane	ND		1.25	1	04/30/2025 16:17	WG2503466
2-Chlorotoluene	ND		0.500	1	04/30/2025 16:17	WG2503466
4-Chlorotoluene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2-Dibromo-3-Chloropropane	ND		2.50	1	04/30/2025 16:17	WG2503466
1,2-Dibromoethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Dibromomethane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2-Dichlorobenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,3-Dichlorobenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,4-Dichlorobenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Dichlorodifluoromethane	ND	J4	2.50	1	04/30/2025 16:17	WG2503466
1,1-Dichloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2-Dichloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,1-Dichloroethene	ND		0.500	1	04/30/2025 16:17	WG2503466
cis-1,2-Dichloroethene	ND		0.500	1	04/30/2025 16:17	WG2503466
trans-1,2-Dichloroethene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2-Dichloropropane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,1-Dichloropropene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,3-Dichloropropane	ND		1.00	1	04/30/2025 16:17	WG2503466
cis-1,3-Dichloropropene	ND		0.500	1	04/30/2025 16:17	WG2503466
trans-1,3-Dichloropropene	ND		0.500	1	04/30/2025 16:17	WG2503466
trans-1,4-Dichloro-2-butene	ND		5.00	1	04/30/2025 16:17	WG2503466
2,2-Dichloropropane	ND	C3	0.500	1	04/30/2025 16:17	WG2503466
Di-isopropyl ether	ND		0.500	1	04/30/2025 16:17	WG2503466
Ethylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Hexachloro-1,3-butadiene	ND	C3	1.00	1	04/30/2025 16:17	WG2503466
2-Hexanone	ND		5.00	1	04/30/2025 16:17	WG2503466
n-Hexane	ND		5.00	1	04/30/2025 16:17	WG2503466
Iodomethane	ND		5.00	1	04/30/2025 16:17	WG2503466
Isopropylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
p-Isopropyltoluene	ND		0.500	1	04/30/2025 16:17	WG2503466
2-Butanone (MEK)	ND		5.00	1	04/30/2025 16:17	WG2503466
Methylene Chloride	ND		2.50	1	04/30/2025 16:17	WG2503466
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	04/30/2025 16:17	WG2503466
Methyl tert-butyl ether	ND		0.500	1	04/30/2025 16:17	WG2503466
Naphthalene	ND	C3	2.50	1	04/30/2025 16:17	WG2503466
n-Propylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Styrene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,1,1,2-Tetrachloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,1,2,2-Tetrachloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Tetrachloroethene	ND		0.500	1	04/30/2025 16:17	WG2503466
Toluene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2,3-Trichlorobenzene	ND	C3	0.500	1	04/30/2025 16:17	WG2503466
1,2,4-Trichlorobenzene	ND	C3	1.00	1	04/30/2025 16:17	WG2503466
1,1,1-Trichloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
1,1,2-Trichloroethane	ND		0.500	1	04/30/2025 16:17	WG2503466
Trichloroethene	ND		0.500	1	04/30/2025 16:17	WG2503466
Trichlorofluoromethane	ND		2.50	1	04/30/2025 16:17	WG2503466
1,2,3-Trichloropropane	ND		2.50	1	04/30/2025 16:17	WG2503466
1,2,4-Trimethylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,2,3-Trimethylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
1,3,5-Trimethylbenzene	ND		0.500	1	04/30/2025 16:17	WG2503466
Vinyl acetate	ND	C3	5.00	1	04/30/2025 16:17	WG2503466
Vinyl chloride	ND		0.500	1	04/30/2025 16:17	WG2503466
Xylenes, Total	ND		1.50	1	04/30/2025 16:17	WG2503466
(S) Toluene-d8	98.3		80.0-120		04/30/2025 16:17	WG2503466
(S) 4-Bromofluorobenzene	92.0		77.0-126		04/30/2025 16:17	WG2503466
(S) 1,2-Dichloroethane-d4	121		70.0-130		04/30/2025 16:17	WG2503466

1 Cp

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	04/30/2025 16:41	WG2503466
Acrylonitrile	ND		5.00	1	04/30/2025 16:41	WG2503466
Benzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Bromobenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Bromodichloromethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Bromochloromethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Bromoform	ND	C3	0.500	1	04/30/2025 16:41	WG2503466
Bromomethane	ND	C3	2.50	1	04/30/2025 16:41	WG2503466
n-Butylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
sec-Butylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
tert-Butylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Carbon disulfide	ND		0.500	1	04/30/2025 16:41	WG2503466
Carbon tetrachloride	ND		0.500	1	04/30/2025 16:41	WG2503466
Chlorobenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Chlorodibromomethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Chloroethane	ND		2.50	1	04/30/2025 16:41	WG2503466
Chloroform	ND		0.500	1	04/30/2025 16:41	WG2503466
Chloromethane	ND		1.25	1	04/30/2025 16:41	WG2503466
2-Chlorotoluene	ND		0.500	1	04/30/2025 16:41	WG2503466
4-Chlorotoluene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2-Dibromo-3-Chloropropane	ND		2.50	1	04/30/2025 16:41	WG2503466
1,2-Dibromoethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Dibromomethane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2-Dichlorobenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,3-Dichlorobenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,4-Dichlorobenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Dichlorodifluoromethane	ND	J4	2.50	1	04/30/2025 16:41	WG2503466
1,1-Dichloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2-Dichloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,1-Dichloroethene	ND		0.500	1	04/30/2025 16:41	WG2503466
cis-1,2-Dichloroethene	ND		0.500	1	04/30/2025 16:41	WG2503466
trans-1,2-Dichloroethene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2-Dichloropropane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,1-Dichloropropene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,3-Dichloropropane	ND		1.00	1	04/30/2025 16:41	WG2503466
cis-1,3-Dichloropropene	ND		0.500	1	04/30/2025 16:41	WG2503466
trans-1,3-Dichloropropene	ND		0.500	1	04/30/2025 16:41	WG2503466
trans-1,4-Dichloro-2-butene	ND		5.00	1	04/30/2025 16:41	WG2503466
2,2-Dichloropropane	ND	C3	0.500	1	04/30/2025 16:41	WG2503466
Di-isopropyl ether	ND		0.500	1	04/30/2025 16:41	WG2503466
Ethylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Hexachloro-1,3-butadiene	ND	C3	1.00	1	04/30/2025 16:41	WG2503466
2-Hexanone	ND		5.00	1	04/30/2025 16:41	WG2503466
n-Hexane	ND		5.00	1	04/30/2025 16:41	WG2503466
Iodomethane	ND		5.00	1	04/30/2025 16:41	WG2503466
Isopropylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
p-Isopropyltoluene	ND		0.500	1	04/30/2025 16:41	WG2503466
2-Butanone (MEK)	ND		5.00	1	04/30/2025 16:41	WG2503466
Methylene Chloride	ND		2.50	1	04/30/2025 16:41	WG2503466
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	04/30/2025 16:41	WG2503466
Methyl tert-butyl ether	ND		0.500	1	04/30/2025 16:41	WG2503466
Naphthalene	ND	C3	2.50	1	04/30/2025 16:41	WG2503466
n-Propylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Styrene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,1,1,2-Tetrachloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,1,2,2-Tetrachloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

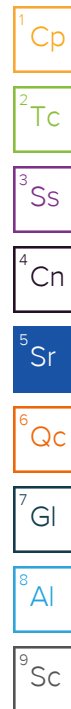
7 Gl

8 Al

9 Sc

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Tetrachloroethene	ND		0.500	1	04/30/2025 16:41	WG2503466
Toluene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2,3-Trichlorobenzene	ND	C3	0.500	1	04/30/2025 16:41	WG2503466
1,2,4-Trichlorobenzene	ND	C3	1.00	1	04/30/2025 16:41	WG2503466
1,1,1-Trichloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
1,1,2-Trichloroethane	ND		0.500	1	04/30/2025 16:41	WG2503466
Trichloroethene	ND		0.500	1	04/30/2025 16:41	WG2503466
Trichlorofluoromethane	ND		2.50	1	04/30/2025 16:41	WG2503466
1,2,3-Trichloropropane	ND		2.50	1	04/30/2025 16:41	WG2503466
1,2,4-Trimethylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,2,3-Trimethylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
1,3,5-Trimethylbenzene	ND		0.500	1	04/30/2025 16:41	WG2503466
Vinyl acetate	ND	C3	5.00	1	04/30/2025 16:41	WG2503466
Vinyl chloride	ND		0.500	1	04/30/2025 16:41	WG2503466
Xylenes, Total	ND		1.50	1	04/30/2025 16:41	WG2503466
(S) Toluene-d8	98.4		80.0-120		04/30/2025 16:41	WG2503466
(S) 4-Bromofluorobenzene	95.8		77.0-126		04/30/2025 16:41	WG2503466
(S) 1,2-Dichloroethane-d4	116		70.0-130		04/30/2025 16:41	WG2503466



Method Blank (MB)

(MB) R4208162-3 04/30/25 11:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	25.0
Acrylonitrile	U		0.671	5.00
Benzene	U		0.0941	0.500
Bromobenzene	U		0.118	0.500
Bromodichloromethane	U		0.136	0.500
Bromochloromethane	U		0.128	0.500
Bromoform	U		0.129	0.500
Bromomethane	U		0.605	2.50
n-Butylbenzene	U		0.157	0.500
sec-Butylbenzene	U		0.125	0.500
tert-Butylbenzene	U		0.127	0.500
Carbon disulfide	U		0.0962	0.500
Carbon tetrachloride	U		0.128	0.500
Chlorobenzene	U		0.117	0.500
Chlorodibromomethane	U		0.140	0.500
Chloroethane	U		0.192	2.50
Chloroform	U		0.111	0.500
Chloromethane	U		0.960	1.25
2-Chlorotoluene	U		0.106	0.500
4-Chlorotoluene	U		0.114	0.500
1,2-Dibromo-3-Chloropropane	U		0.276	2.50
1,2-Dibromoethane	U		0.126	0.500
Dibromomethane	U		0.122	0.500
1,2-Dichlorobenzene	U		0.107	0.500
1,3-Dichlorobenzene	U		0.299	0.500
1,4-Dichlorobenzene	U		0.120	0.500
Dichlorodifluoromethane	U		0.374	2.50
1,1-Dichloroethane	U		0.100	0.500
1,2-Dichloroethane	U		0.0819	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.126	0.500
trans-1,2-Dichloroethene	U		0.149	0.500
1,2-Dichloropropane	U		0.149	0.500
1,1-Dichloropropene	U		0.142	0.500
1,3-Dichloropropane	U		0.109	1.00
cis-1,3-Dichloropropene	U		0.111	0.500
trans-1,3-Dichloropropene	U		0.118	0.500
trans-1,4-Dichloro-2-butene	U		0.467	5.00
2,2-Dichloropropane	U		0.161	0.500
Di-isopropyl ether	U		0.105	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4208162-3 04/30/25 11:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.137	0.500
Hexachloro-1,3-butadiene	U		0.337	1.00
2-Hexanone	U		0.787	5.00
n-Hexane	U		0.749	5.00
Iodomethane	U		0.554	5.00
Isopropylbenzene	U		0.105	0.500
p-Isopropyltoluene	U		0.120	0.500
2-Butanone (MEK)	U		1.19	5.00
Methylene Chloride	U		0.430	2.50
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00
Methyl tert-butyl ether	U		0.101	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.0993	0.500
Styrene	U		0.118	0.500
1,1,1,2-Tetrachloroethane	U		0.147	0.500
1,1,2,2-Tetrachloroethane	U		0.133	0.500
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500
Tetrachloroethene	U		0.300	0.500
Toluene	U		0.278	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	0.500
1,1,2-Trichloroethane	U		0.158	0.500
Trichloroethene	U		0.190	0.500
Trichlorofluoromethane	U		0.160	2.50
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	0.500
1,2,3-Trimethylbenzene	U		0.104	0.500
1,3,5-Trimethylbenzene	U		0.104	0.500
Vinyl acetate	U		0.692	5.00
Vinyl chloride	U		0.234	0.500
Xylenes, Total	U		0.174	1.50
(S) Toluene-d8	98.8			80.0-120
(S) 4-Bromofluorobenzene	97.2			77.0-126
(S) 1,2-Dichloroethane-d4	118			70.0-130

¹Cp

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⁹Sc

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

(LCS) R4208162-1 04/30/25 10:25 • (LCSD) R4208162-2 04/30/25 10:47

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 %
Acetone	25.0	27.0	24.7	108	98.8	19.0-160			8.90	27
Acrylonitrile	25.0	29.7	31.4	119	126	55.0-149			5.56	20
Benzene	5.00	5.07	5.18	101	104	70.0-123			2.15	20
Bromobenzene	5.00	5.67	5.83	113	117	73.0-121			2.78	20
Bromodichloromethane	5.00	5.15	5.09	103	102	75.0-120			1.17	20
Bromochloromethane	5.00	4.49	4.62	89.8	92.4	76.0-122			2.85	20
Bromoform	5.00	3.83	4.00	76.6	80.0	68.0-132			4.34	20
Bromomethane	5.00	3.93	4.51	78.6	90.2	10.0-160			13.7	25
n-Butylbenzene	5.00	4.94	5.13	98.8	103	73.0-125			3.77	20
sec-Butylbenzene	5.00	4.98	4.99	99.6	99.8	75.0-125			0.201	20
tert-Butylbenzene	5.00	5.05	4.85	101	97.0	76.0-124			4.04	20
Carbon disulfide	5.00	5.99	5.94	120	119	61.0-128			0.838	20
Carbon tetrachloride	5.00	4.25	3.91	85.0	78.2	68.0-126			8.33	20
Chlorobenzene	5.00	4.43	4.44	88.6	88.8	80.0-121			0.225	20
Chlorodibromomethane	5.00	4.28	4.24	85.6	84.8	77.0-125			0.939	20
Chloroethane	5.00	5.54	4.92	111	98.4	47.0-150			11.9	20
Chloroform	5.00	5.40	5.35	108	107	73.0-120			0.930	20
Chloromethane	5.00	6.00	6.07	120	121	41.0-142			1.16	20
2-Chlorotoluene	5.00	5.45	5.63	109	113	76.0-123			3.25	20
4-Chlorotoluene	5.00	5.30	5.25	106	105	75.0-122			0.948	20
1,2-Dibromo-3-Chloropropane	5.00	4.21	4.38	84.2	87.6	58.0-134			3.96	20
1,2-Dibromoethane	5.00	4.46	4.55	89.2	91.0	80.0-122			2.00	20
Dibromomethane	5.00	5.09	5.11	102	102	80.0-120			0.392	20
1,2-Dichlorobenzene	5.00	4.66	4.73	93.2	94.6	79.0-121			1.49	20
1,3-Dichlorobenzene	5.00	4.57	4.59	91.4	91.8	79.0-120			0.437	20
1,4-Dichlorobenzene	5.00	4.65	4.84	93.0	96.8	79.0-120			4.00	20
Dichlorodifluoromethane	5.00	7.97	7.75	159	155	51.0-149	J4	J4	2.80	20
1,1-Dichloroethane	5.00	5.63	5.55	113	111	70.0-126			1.43	20
1,2-Dichloroethane	5.00	6.01	6.24	120	125	70.0-128			3.76	20
1,1-Dichloroethene	5.00	5.12	4.82	102	96.4	71.0-124			6.04	20
cis-1,2-Dichloroethene	5.00	4.68	4.90	93.6	98.0	73.0-120			4.59	20
trans-1,2-Dichloroethene	5.00	4.95	4.86	99.0	97.2	73.0-120			1.83	20
1,2-Dichloropropane	5.00	5.43	5.66	109	113	77.0-125			4.15	20
1,1-Dichloropropene	5.00	5.38	5.56	108	111	74.0-126			3.29	20
1,3-Dichloropropane	5.00	5.05	5.10	101	102	80.0-120			0.985	20
cis-1,3-Dichloropropene	5.00	5.12	5.08	102	102	80.0-123			0.784	20
trans-1,3-Dichloropropene	5.00	4.94	5.00	98.8	100	78.0-124			1.21	20
trans-1,4-Dichloro-2-butene	5.00	5.34	4.95	107	99.0	33.0-144			7.58	20
2,2-Dichloropropane	5.00	3.65	3.68	73.0	73.6	58.0-130			0.819	20
Di-isopropyl ether	5.00	6.38	6.31	128	126	58.0-138			1.10	20

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Gl

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Al

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Sc

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

(LCS) R4208162-1 04/30/25 10:25 • (LCSD) R4208162-2 04/30/25 10:47

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 %
Ethylbenzene	5.00	4.40	4.56	88.0	91.2	79.0-123			3.57	20
Hexachloro-1,3-butadiene	5.00	3.68	4.07	73.6	81.4	54.0-138			10.1	20
2-Hexanone	25.0	25.1	26.4	100	106	67.0-149			5.05	20
n-Hexane	5.00	5.94	5.64	119	113	57.0-133			5.18	20
Iodomethane	25.0	21.3	20.5	85.2	82.0	33.0-147			3.83	26
Isopropylbenzene	5.00	4.56	4.61	91.2	92.2	76.0-127			1.09	20
p-Isopropyltoluene	5.00	4.75	4.78	95.0	95.6	76.0-125			0.630	20
2-Butanone (MEK)	25.0	25.7	25.4	103	102	44.0-160			1.17	20
Methylene Chloride	5.00	4.59	4.75	91.8	95.0	67.0-120			3.43	20
4-Methyl-2-pentanone (MIBK)	25.0	29.3	30.0	117	120	68.0-142			2.36	20
Methyl tert-butyl ether	5.00	5.37	5.56	107	111	68.0-125			3.48	20
Naphthalene	5.00	3.54	3.68	70.8	73.6	54.0-135			3.88	20
n-Propylbenzene	5.00	5.48	5.36	110	107	77.0-124			2.21	20
Styrene	5.00	4.49	4.41	89.8	88.2	73.0-130			1.80	20
1,1,1,2-Tetrachloroethane	5.00	4.25	4.30	85.0	86.0	75.0-125			1.17	20
1,1,2,2-Tetrachloroethane	5.00	4.46	4.66	89.2	93.2	65.0-130			4.39	20
1,1,2-Trichlorotrifluoroethane	5.00	5.10	5.06	102	101	69.0-132			0.787	20
Tetrachloroethene	5.00	4.36	4.60	87.2	92.0	72.0-132			5.36	20
Toluene	5.00	4.71	4.68	94.2	93.6	79.0-120			0.639	20
1,2,3-Trichlorobenzene	5.00	3.05	3.30	61.0	66.0	50.0-138			7.87	20
1,2,4-Trichlorobenzene	5.00	3.38	3.53	67.6	70.6	57.0-137			4.34	20
1,1,1-Trichloroethane	5.00	4.89	4.67	97.8	93.4	73.0-124			4.60	20
1,1,2-Trichloroethane	5.00	4.50	4.62	90.0	92.4	80.0-120			2.63	20
Trichloroethene	5.00	4.85	5.12	97.0	102	78.0-124			5.42	20
Trichlorofluoromethane	5.00	5.68	5.71	114	114	59.0-147			0.527	20
1,2,3-Trichloropropane	5.00	5.57	5.92	111	118	73.0-130			6.09	20
1,2,4-Trimethylbenzene	5.00	5.03	5.18	101	104	76.0-121			2.94	20
1,2,3-Trimethylbenzene	5.00	5.00	5.21	100	104	77.0-120			4.11	20
1,3,5-Trimethylbenzene	5.00	5.04	4.98	101	99.6	76.0-122			1.20	20
Vinyl acetate	25.0	14.8	15.2	59.2	60.8	11.0-160			2.67	20
Vinyl chloride	5.00	6.18	6.07	124	121	67.0-131			1.80	20
Xylenes, Total	15.0	14.0	13.5	93.3	90.0	79.0-123			3.64	20
(S) Toluene-d8				96.8	95.1	80.0-120				
(S) 4-Bromofluorobenzene				92.6	92.3	77.0-126				
(S) 1,2-Dichloroethane-d4				120	118	70.0-130				

1Cp

2Tc

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GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

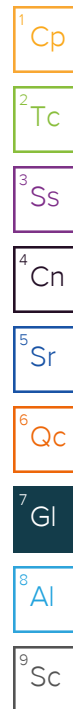
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.



ACCREDITATIONS & LOCATIONS

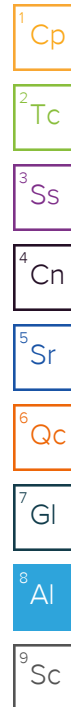
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



[illegible]