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ANALYTICAL REPORT

September 26, 2019

Cascade Corporation- Fairview, OR

Sample Delivery Group:	L1140749
Samples Received:	09/18/2019
Project Number:	PNG0564519
Description:	Cascade TSA

Report To: Cindy Bartlett
2201 NE 201st Avenue
Fairview, OR 97024-9718

Entire Report Reviewed By:

Brian Ford
Project Manager

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CMW36DG-091719 L1140749-01 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 10:10 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/23/19 00:51	09/23/19 00:51	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350799	1	09/25/19 12:01	09/25/19 12:01	ACG	Mt. Juliet, TN

CMW22DG-091719 L1140749-02 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 10:30 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/23/19 01:11	09/23/19 01:11	JCP	Mt. Juliet, TN

PWB1UTS-091719 L1140749-03 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 10:20 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/23/19 01:30	09/23/19 01:30	JCP	Mt. Juliet, TN

PWB1LTS-091719 L1140749-04 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 13:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/23/19 01:50	09/23/19 01:50	JCP	Mt. Juliet, TN

EW11-091719 L1140749-05 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 12:45 | Received date/time: 09/18/19 08:45

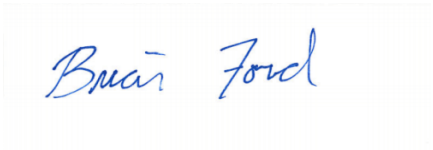
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/23/19 02:10	09/23/19 02:10	JCP	Mt. Juliet, TN

TRIP BLANK LOT 413 L1140749-06 GW

Collected by: Dietrich Tietien | Collected date/time: 09/17/19 00:00 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350278	1	09/22/19 20:18	09/22/19 20:18	JCP	Mt. Juliet, TN

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 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	64.6		25.0	1	09/23/2019 00:51	WG1350278
Acrolein	ND		50.0	1	09/23/2019 00:51	WG1350278
Acrylonitrile	ND		5.00	1	09/23/2019 00:51	WG1350278
Benzene	ND		0.500	1	09/25/2019 12:01	WG1350799
Bromobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Bromodichloromethane	ND		0.500	1	09/23/2019 00:51	WG1350278
Bromoform	ND		0.500	1	09/23/2019 00:51	WG1350278
Bromomethane	ND	J0	2.50	1	09/23/2019 00:51	WG1350278
n-Butylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
sec-Butylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
tert-Butylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Carbon disulfide	ND		0.500	1	09/23/2019 00:51	WG1350278
Carbon tetrachloride	ND		0.500	1	09/23/2019 00:51	WG1350278
Chlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Chlorodibromomethane	ND		0.500	1	09/23/2019 00:51	WG1350278
Chloroethane	ND		2.50	1	09/23/2019 00:51	WG1350278
Chloroform	ND		0.500	1	09/23/2019 00:51	WG1350278
Chloromethane	ND		1.25	1	09/23/2019 00:51	WG1350278
2-Chlorotoluene	ND		0.500	1	09/23/2019 00:51	WG1350278
4-Chlorotoluene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/23/2019 00:51	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/23/2019 00:51	WG1350278
Dibromomethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/23/2019 00:51	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/23/2019 00:51	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/23/2019 00:51	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/23/2019 00:51	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/23/2019 00:51	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/23/2019 00:51	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/23/2019 00:51	WG1350278
Di-isopropyl ether	ND		0.500	1	09/23/2019 00:51	WG1350278
Ethylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/23/2019 00:51	WG1350278
Isopropylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/23/2019 00:51	WG1350278
2-Butanone (MEK)	6.22		5.00	1	09/23/2019 00:51	WG1350278
Methylene Chloride	ND		2.50	1	09/23/2019 00:51	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/23/2019 00:51	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/23/2019 00:51	WG1350278
Naphthalene	ND		2.50	1	09/25/2019 12:01	WG1350799
n-Propylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Styrene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
Tetrachloroethene	ND		0.500	1	09/23/2019 00:51	WG1350278
Toluene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/23/2019 00:51	WG1350278
Trichloroethene	ND		0.500	1	09/23/2019 00:51	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/23/2019 00:51	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/23/2019 00:51	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/23/2019 00:51	WG1350278
Vinyl chloride	ND		0.500	1	09/23/2019 00:51	WG1350278
Xylenes, Total	ND		1.50	1	09/23/2019 00:51	WG1350278
(S) Toluene-d8	*101*		*80.0-120*		*09/23/2019 00:51*	WG1350278
(S) Toluene-d8	*100*		*80.0-120*		*09/25/2019 12:01*	WG1350799
(S) 4-Bromofluorobenzene	*99.8*		*77.0-126*		*09/23/2019 00:51*	WG1350278
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/25/2019 12:01*	WG1350799
(S) 1,2-Dichloroethane-d4	*95.1*		*70.0-130*		*09/23/2019 00:51*	WG1350278
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/25/2019 12:01*	WG1350799

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	112		25.0	1	09/23/2019 01:11	WG1350278
Acrolein	ND		50.0	1	09/23/2019 01:11	WG1350278
Acrylonitrile	ND		5.00	1	09/23/2019 01:11	WG1350278
Benzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Bromobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Bromodichloromethane	ND		0.500	1	09/23/2019 01:11	WG1350278
Bromoform	ND		0.500	1	09/23/2019 01:11	WG1350278
Bromomethane	ND	J0	2.50	1	09/23/2019 01:11	WG1350278
n-Butylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
sec-Butylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
tert-Butylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Carbon disulfide	ND		0.500	1	09/23/2019 01:11	WG1350278
Carbon tetrachloride	ND		0.500	1	09/23/2019 01:11	WG1350278
Chlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Chlorodibromomethane	ND		0.500	1	09/23/2019 01:11	WG1350278
Chloroethane	ND		2.50	1	09/23/2019 01:11	WG1350278
Chloroform	ND		0.500	1	09/23/2019 01:11	WG1350278
Chloromethane	ND		1.25	1	09/23/2019 01:11	WG1350278
2-Chlorotoluene	ND		0.500	1	09/23/2019 01:11	WG1350278
4-Chlorotoluene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/23/2019 01:11	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/23/2019 01:11	WG1350278
Dibromomethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/23/2019 01:11	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/23/2019 01:11	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:11	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/23/2019 01:11	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:11	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:11	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/23/2019 01:11	WG1350278
Di-isopropyl ether	ND		0.500	1	09/23/2019 01:11	WG1350278
Ethylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/23/2019 01:11	WG1350278
Isopropylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/23/2019 01:11	WG1350278
2-Butanone (MEK)	5.71		5.00	1	09/23/2019 01:11	WG1350278
Methylene Chloride	ND		2.50	1	09/23/2019 01:11	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/23/2019 01:11	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/23/2019 01:11	WG1350278
Naphthalene	ND		2.50	1	09/23/2019 01:11	WG1350278
n-Propylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Styrene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
Tetrachloroethene	ND		0.500	1	09/23/2019 01:11	WG1350278
Toluene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/23/2019 01:11	WG1350278
Trichloroethene	ND		0.500	1	09/23/2019 01:11	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/23/2019 01:11	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/23/2019 01:11	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/23/2019 01:11	WG1350278
Vinyl chloride	ND		0.500	1	09/23/2019 01:11	WG1350278
Xylenes, Total	ND		1.50	1	09/23/2019 01:11	WG1350278
(S) Toluene-d8	*104*		*80.0-120*		*09/23/2019 01:11*	WG1350278
(S) 4-Bromofluorobenzene	*99.2*		*77.0-126*		*09/23/2019 01:11*	WG1350278
(S) 1,2-Dichloroethane-d4	*97.0*		*70.0-130*		*09/23/2019 01:11*	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	09/23/2019 01:30	WG1350278
Acrolein	ND		50.0	1	09/23/2019 01:30	WG1350278
Acrylonitrile	ND		5.00	1	09/23/2019 01:30	WG1350278
Benzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Bromobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Bromodichloromethane	ND		0.500	1	09/23/2019 01:30	WG1350278
Bromoform	ND		0.500	1	09/23/2019 01:30	WG1350278
Bromomethane	ND	J0	2.50	1	09/23/2019 01:30	WG1350278
n-Butylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
sec-Butylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
tert-Butylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Carbon disulfide	ND		0.500	1	09/23/2019 01:30	WG1350278
Carbon tetrachloride	ND		0.500	1	09/23/2019 01:30	WG1350278
Chlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Chlorodibromomethane	ND		0.500	1	09/23/2019 01:30	WG1350278
Chloroethane	ND		2.50	1	09/23/2019 01:30	WG1350278
Chloroform	ND		0.500	1	09/23/2019 01:30	WG1350278
Chloromethane	ND		1.25	1	09/23/2019 01:30	WG1350278
2-Chlorotoluene	ND		0.500	1	09/23/2019 01:30	WG1350278
4-Chlorotoluene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/23/2019 01:30	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/23/2019 01:30	WG1350278
Dibromomethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/23/2019 01:30	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/23/2019 01:30	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:30	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/23/2019 01:30	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:30	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:30	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/23/2019 01:30	WG1350278
Di-isopropyl ether	ND		0.500	1	09/23/2019 01:30	WG1350278
Ethylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/23/2019 01:30	WG1350278
Isopropylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/23/2019 01:30	WG1350278
2-Butanone (MEK)	ND		5.00	1	09/23/2019 01:30	WG1350278
Methylene Chloride	ND		2.50	1	09/23/2019 01:30	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/23/2019 01:30	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/23/2019 01:30	WG1350278
Naphthalene	ND		2.50	1	09/23/2019 01:30	WG1350278
n-Propylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Styrene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
Tetrachloroethene	ND		0.500	1	09/23/2019 01:30	WG1350278
Toluene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/23/2019 01:30	WG1350278
Trichloroethene	0.703		0.500	1	09/23/2019 01:30	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/23/2019 01:30	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/23/2019 01:30	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/23/2019 01:30	WG1350278
Vinyl chloride	ND		0.500	1	09/23/2019 01:30	WG1350278
Xylenes, Total	ND		1.50	1	09/23/2019 01:30	WG1350278
(S) Toluene-d8	*104*		*80.0-120*		*09/23/2019 01:30*	WG1350278
(S) 4-Bromofluorobenzene	*97.4*		*77.0-126*		*09/23/2019 01:30*	WG1350278
(S) 1,2-Dichloroethane-d4	*92.5*		*70.0-130*		*09/23/2019 01:30*	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	09/23/2019 01:50	WG1350278
Acrolein	ND		50.0	1	09/23/2019 01:50	WG1350278
Acrylonitrile	ND		5.00	1	09/23/2019 01:50	WG1350278
Benzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Bromobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Bromodichloromethane	ND		0.500	1	09/23/2019 01:50	WG1350278
Bromoform	ND		0.500	1	09/23/2019 01:50	WG1350278
Bromomethane	ND	J0	2.50	1	09/23/2019 01:50	WG1350278
n-Butylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
sec-Butylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
tert-Butylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Carbon disulfide	ND		0.500	1	09/23/2019 01:50	WG1350278
Carbon tetrachloride	ND		0.500	1	09/23/2019 01:50	WG1350278
Chlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Chlorodibromomethane	ND		0.500	1	09/23/2019 01:50	WG1350278
Chloroethane	ND		2.50	1	09/23/2019 01:50	WG1350278
Chloroform	ND		0.500	1	09/23/2019 01:50	WG1350278
Chloromethane	ND		1.25	1	09/23/2019 01:50	WG1350278
2-Chlorotoluene	ND		0.500	1	09/23/2019 01:50	WG1350278
4-Chlorotoluene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/23/2019 01:50	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/23/2019 01:50	WG1350278
Dibromomethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/23/2019 01:50	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/23/2019 01:50	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:50	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/23/2019 01:50	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:50	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/23/2019 01:50	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/23/2019 01:50	WG1350278
Di-isopropyl ether	ND		0.500	1	09/23/2019 01:50	WG1350278
Ethylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/23/2019 01:50	WG1350278
Isopropylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/23/2019 01:50	WG1350278
2-Butanone (MEK)	ND		5.00	1	09/23/2019 01:50	WG1350278
Methylene Chloride	ND		2.50	1	09/23/2019 01:50	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/23/2019 01:50	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/23/2019 01:50	WG1350278
Naphthalene	ND		2.50	1	09/23/2019 01:50	WG1350278
n-Propylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Styrene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
Tetrachloroethene	ND		0.500	1	09/23/2019 01:50	WG1350278
Toluene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/23/2019 01:50	WG1350278
Trichloroethene	1.45		0.500	1	09/23/2019 01:50	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/23/2019 01:50	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/23/2019 01:50	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/23/2019 01:50	WG1350278
Vinyl chloride	ND		0.500	1	09/23/2019 01:50	WG1350278
Xylenes, Total	ND		1.50	1	09/23/2019 01:50	WG1350278
(S) Toluene-d8	*102*		*80.0-120*		*09/23/2019 01:50*	WG1350278
(S) 4-Bromofluorobenzene	*96.0*		*77.0-126*		*09/23/2019 01:50*	WG1350278
(S) 1,2-Dichloroethane-d4	*93.2*		*70.0-130*		*09/23/2019 01:50*	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	09/23/2019 02:10	WG1350278
Acrolein	ND		50.0	1	09/23/2019 02:10	WG1350278
Acrylonitrile	ND		5.00	1	09/23/2019 02:10	WG1350278
Benzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Bromobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Bromodichloromethane	ND		0.500	1	09/23/2019 02:10	WG1350278
Bromoform	ND		0.500	1	09/23/2019 02:10	WG1350278
Bromomethane	ND	J0	2.50	1	09/23/2019 02:10	WG1350278
n-Butylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
sec-Butylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
tert-Butylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Carbon disulfide	ND		0.500	1	09/23/2019 02:10	WG1350278
Carbon tetrachloride	ND		0.500	1	09/23/2019 02:10	WG1350278
Chlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Chlorodibromomethane	ND		0.500	1	09/23/2019 02:10	WG1350278
Chloroethane	ND		2.50	1	09/23/2019 02:10	WG1350278
Chloroform	ND		0.500	1	09/23/2019 02:10	WG1350278
Chloromethane	ND		1.25	1	09/23/2019 02:10	WG1350278
2-Chlorotoluene	ND		0.500	1	09/23/2019 02:10	WG1350278
4-Chlorotoluene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/23/2019 02:10	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/23/2019 02:10	WG1350278
Dibromomethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/23/2019 02:10	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/23/2019 02:10	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/23/2019 02:10	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/23/2019 02:10	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/23/2019 02:10	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/23/2019 02:10	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/23/2019 02:10	WG1350278
Di-isopropyl ether	ND		0.500	1	09/23/2019 02:10	WG1350278
Ethylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/23/2019 02:10	WG1350278
Isopropylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/23/2019 02:10	WG1350278
2-Butanone (MEK)	ND		5.00	1	09/23/2019 02:10	WG1350278
Methylene Chloride	ND		2.50	1	09/23/2019 02:10	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/23/2019 02:10	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/23/2019 02:10	WG1350278
Naphthalene	ND		2.50	1	09/23/2019 02:10	WG1350278
n-Propylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Styrene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
Tetrachloroethene	ND		0.500	1	09/23/2019 02:10	WG1350278
Toluene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/23/2019 02:10	WG1350278
Trichloroethene	1.11		0.500	1	09/23/2019 02:10	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/23/2019 02:10	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/23/2019 02:10	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/23/2019 02:10	WG1350278
Vinyl chloride	ND		0.500	1	09/23/2019 02:10	WG1350278
Xylenes, Total	ND		1.50	1	09/23/2019 02:10	WG1350278
(S) Toluene-d8	*103*		*80.0-120*		*09/23/2019 02:10*	WG1350278
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/23/2019 02:10*	WG1350278
(S) 1,2-Dichloroethane-d4	*94.9*		*70.0-130*		*09/23/2019 02:10*	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	09/22/2019 20:18	WG1350278
Acrolein	ND		50.0	1	09/22/2019 20:18	WG1350278
Acrylonitrile	ND		5.00	1	09/22/2019 20:18	WG1350278
Benzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Bromobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Bromodichloromethane	ND		0.500	1	09/22/2019 20:18	WG1350278
Bromoform	ND		0.500	1	09/22/2019 20:18	WG1350278
Bromomethane	ND	J0	2.50	1	09/22/2019 20:18	WG1350278
n-Butylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
sec-Butylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
tert-Butylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Carbon disulfide	ND		0.500	1	09/22/2019 20:18	WG1350278
Carbon tetrachloride	ND		0.500	1	09/22/2019 20:18	WG1350278
Chlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Chlorodibromomethane	ND		0.500	1	09/22/2019 20:18	WG1350278
Chloroethane	ND		2.50	1	09/22/2019 20:18	WG1350278
Chloroform	ND		0.500	1	09/22/2019 20:18	WG1350278
Chloromethane	ND		1.25	1	09/22/2019 20:18	WG1350278
2-Chlorotoluene	ND		0.500	1	09/22/2019 20:18	WG1350278
4-Chlorotoluene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2-Dibromo-3-Chloropropane	ND		2.50	1	09/22/2019 20:18	WG1350278
1,2-Dibromoethane	ND		0.500	1	09/22/2019 20:18	WG1350278
Dibromomethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2-Dichlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,3-Dichlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,4-Dichlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Dichlorodifluoromethane	ND		2.50	1	09/22/2019 20:18	WG1350278
1,1-Dichloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2-Dichloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1-Dichloroethene	ND		0.500	1	09/22/2019 20:18	WG1350278
cis-1,2-Dichloroethene	ND		0.500	1	09/22/2019 20:18	WG1350278
trans-1,2-Dichloroethene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2-Dichloropropane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1-Dichloropropene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,3-Dichloropropane	ND		1.00	1	09/22/2019 20:18	WG1350278
cis-1,3-Dichloropropene	ND		0.500	1	09/22/2019 20:18	WG1350278
trans-1,3-Dichloropropene	ND		0.500	1	09/22/2019 20:18	WG1350278
2,2-Dichloropropane	ND		0.500	1	09/22/2019 20:18	WG1350278
Di-isopropyl ether	ND		0.500	1	09/22/2019 20:18	WG1350278
Ethylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Hexachloro-1,3-butadiene	ND		1.00	1	09/22/2019 20:18	WG1350278
Isopropylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
p-Isopropyltoluene	ND		0.500	1	09/22/2019 20:18	WG1350278
2-Butanone (MEK)	ND		5.00	1	09/22/2019 20:18	WG1350278
Methylene Chloride	ND		2.50	1	09/22/2019 20:18	WG1350278
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	09/22/2019 20:18	WG1350278
Methyl tert-butyl ether	ND		0.500	1	09/22/2019 20:18	WG1350278
Naphthalene	ND		2.50	1	09/22/2019 20:18	WG1350278
n-Propylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Styrene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1,1,2-Tetrachloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1,2,2-Tetrachloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
Tetrachloroethene	ND		0.500	1	09/22/2019 20:18	WG1350278
Toluene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2,3-Trichlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1,1-Trichloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
1,1,2-Trichloroethane	ND		0.500	1	09/22/2019 20:18	WG1350278
Trichloroethene	ND		0.500	1	09/22/2019 20:18	WG1350278
Trichlorofluoromethane	ND		2.50	1	09/22/2019 20:18	WG1350278
1,2,3-Trichloropropane	ND		2.50	1	09/22/2019 20:18	WG1350278
1,2,4-Trimethylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,2,3-Trimethylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
1,3,5-Trimethylbenzene	ND		0.500	1	09/22/2019 20:18	WG1350278
Vinyl chloride	ND		0.500	1	09/22/2019 20:18	WG1350278
Xylenes, Total	ND		1.50	1	09/22/2019 20:18	WG1350278
(S) Toluene-d8	*103*		*80.0-120*		*09/22/2019 20:18*	WG1350278
(S) 4-Bromofluorobenzene	*99.9*		*77.0-126*		*09/22/2019 20:18*	WG1350278
(S) 1,2-Dichloroethane-d4	*97.8*		*70.0-130*		*09/22/2019 20:18*	WG1350278

Method Blank (MB)

(MB) R3453725-2 09/22/19 17:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	1.83	J	1.05	25.0
Acrolein	U		3.97	50.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500

Method Blank (MB)

(MB) R3453725-2 09/22/19 17:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3453725-1 09/22/19 16:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	119	94.9	19.0-160	
Acrolein	125	140	112	10.0-160	
Acrylonitrile	125	125	100	55.0-149	

Laboratory Control Sample (LCS)

(LCS) R3453725-1 09/22/19 16:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	25.6	102	70.0-123	
Bromobenzene	25.0	25.7	103	73.0-121	
Bromodichloromethane	25.0	25.3	101	75.0-120	
Bromoform	25.0	23.0	92.1	68.0-132	
Bromomethane	25.0	13.0	51.8	10.0-160	
n-Butylbenzene	25.0	26.9	107	73.0-125	
sec-Butylbenzene	25.0	26.6	106	75.0-125	
tert-Butylbenzene	25.0	26.5	106	76.0-124	
Carbon disulfide	25.0	23.9	95.7	61.0-128	
Carbon tetrachloride	25.0	24.0	95.9	68.0-126	
Chlorobenzene	25.0	25.3	101	80.0-121	
Chlorodibromomethane	25.0	26.1	104	77.0-125	
Chloroethane	25.0	26.6	106	47.0-150	
Chloroform	25.0	24.0	96.1	73.0-120	
Chloromethane	25.0	24.8	99.1	41.0-142	
2-Chlorotoluene	25.0	25.7	103	76.0-123	
4-Chlorotoluene	25.0	25.4	102	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	27.7	111	58.0-134	
1,2-Dibromoethane	25.0	26.8	107	80.0-122	
Dibromomethane	25.0	25.7	103	80.0-120	
1,2-Dichlorobenzene	25.0	27.5	110	79.0-121	
1,3-Dichlorobenzene	25.0	27.0	108	79.0-120	
1,4-Dichlorobenzene	25.0	25.9	104	79.0-120	
Dichlorodifluoromethane	25.0	30.0	120	51.0-149	
1,1-Dichloroethane	25.0	25.0	100	70.0-126	
1,2-Dichloroethane	25.0	23.8	95.2	70.0-128	
1,1-Dichloroethene	25.0	24.7	98.8	71.0-124	
cis-1,2-Dichloroethene	25.0	25.0	99.9	73.0-120	
trans-1,2-Dichloroethene	25.0	24.1	96.2	73.0-120	
1,2-Dichloropropane	25.0	26.4	106	77.0-125	
1,1-Dichloropropene	25.0	26.1	104	74.0-126	
1,3-Dichloropropane	25.0	26.6	106	80.0-120	
cis-1,3-Dichloropropene	25.0	25.5	102	80.0-123	
trans-1,3-Dichloropropene	25.0	25.8	103	78.0-124	
2,2-Dichloropropane	25.0	24.5	97.9	58.0-130	
Di-isopropyl ether	25.0	24.4	97.4	58.0-138	
Ethylbenzene	25.0	25.1	100	79.0-123	
Hexachloro-1,3-butadiene	25.0	28.4	114	54.0-138	
Isopropylbenzene	25.0	25.9	104	76.0-127	
p-Isopropyltoluene	25.0	26.7	107	76.0-125	

Laboratory Control Sample (LCS)

(LCS) R3453725-1 09/22/19 16:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Butanone (MEK)	125	125	99.8	44.0-160	
Methylene Chloride	25.0	22.9	91.5	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	131	105	68.0-142	
Methyl tert-butyl ether	25.0	24.8	99.2	68.0-125	
Naphthalene	25.0	28.7	115	54.0-135	
n-Propylbenzene	25.0	26.7	107	77.0-124	
Styrene	25.0	26.5	106	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	25.3	101	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	23.5	94.0	69.0-132	
Tetrachloroethene	25.0	26.5	106	72.0-132	
Toluene	25.0	25.7	103	79.0-120	
1,2,3-Trichlorobenzene	25.0	29.3	117	50.0-138	
1,2,4-Trichlorobenzene	25.0	28.8	115	57.0-137	
1,1,1-Trichloroethane	25.0	25.6	102	73.0-124	
1,1,2-Trichloroethane	25.0	26.6	106	80.0-120	
Trichloroethene	25.0	26.7	107	78.0-124	
Trichlorofluoromethane	25.0	27.2	109	59.0-147	
1,2,3-Trichloropropane	25.0	26.8	107	73.0-130	
1,2,4-Trimethylbenzene	25.0	26.7	107	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.9	107	77.0-120	
1,3,5-Trimethylbenzene	25.0	26.7	107	76.0-122	
Vinyl chloride	25.0	29.0	116	67.0-131	
Xylenes, Total	75.0	77.0	103	79.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.4*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*94.8*	*70.0-130*	

Method Blank (MB)

(MB) R3454506-2 09/25/19 08:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0896	0.500
Naphthalene	U		0.174	2.50
(S) Toluene-d8	*97.7*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

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

(LCS) R3454506-1 09/25/19 07:52 • (LCSD) R3454506-3 09/25/19 12:21

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	25.0	25.3	23.9	101	95.8	70.0-123			5.61	20
Naphthalene	25.0	25.6	25.9	102	104	54.0-135			1.22	20
(S) Toluene-d8				*102*	*100*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*102*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*107*	*112*	*70.0-130*				

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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
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	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

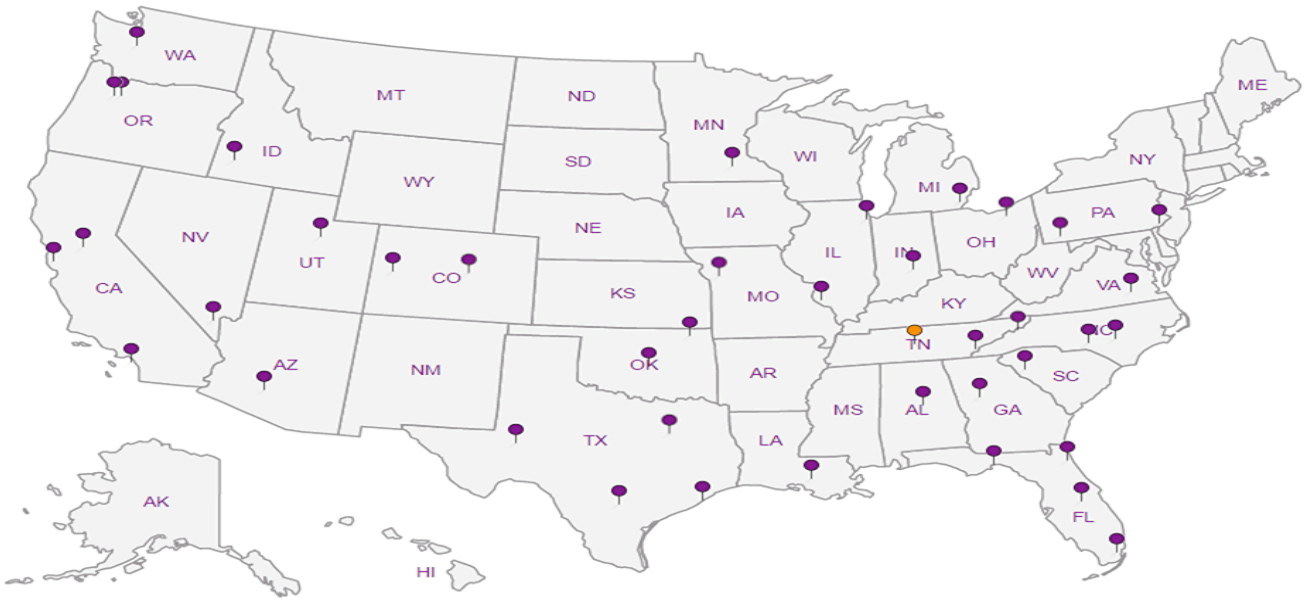
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



GeoSyntec, Inc. - OR
920 SW Sixth Avenue
Suite 600
Portland, OR 97204

Billing Information:
Accounts Payable
920 SW Sixth Avenue
Suite 600
Portland, OR 97204

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Brian Webb

Email To: bwebb@Geosyntec.com

Project Description: Cascade - TSA

City/State Collected: Fairview / OR

Please Circle: PT MT CT ET

Phone: 503-222-9518
Fax:

Client Project #: PNG0564S19

Lab Project #: GEOSYNPOR-WEBB

SDG # 1146749
B094

Collected by (print): Dietrich Tietjen

Site/Facility ID #

P.O. #

Acctnum: GEOSYNPOR
Template: T155643
Prelogin: P729557
PM: 110 - Brian Ford
PB:
Shipped Via:

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Std

Immediately Packed on Ice N___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260C 40mlAmb-HCl	Remarks	Sample # (lab only)
CMW36dg-091719	Grab	GW	N/A	9-17-19	10:10	3	X		-01
CMW22dg-091719	Grab	GW	N/A	9-17-19	10:30	3	X		-02
PWB1uts-091719	Grab	GW	N/A	9-17-19	11:20	3	X		-03
PWB1lts-091719	Grab	GW	N/A	9-17-19	13:50	3	X		-04
EW11-091719	Grab	GW	N/A	9-17-19	12:45	3	X		-05
TRIP BLANK LOT 413	—	H2O	NA	9-17-19	NA	1	X		-06

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: __ UPS X FedEx __ Courier ________

Tracking # 1145 2231 8784

Sample Receipt Checklist
COC Seal Present/Intact: NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: ✓Y _N
If Applicable
VOA Zero Headspace: ✓Y _N
Preservation Correct/Checked: _Y _N
RAD Screen <0.5 mR/hr: _Y _N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Patrick E Yoder	9-17-19	14:40	FED EX	1

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C	Bottles Received:	If preservation required by Login: Date/Time
				4.1+.3=4.4	15	

Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:	Hold:	Condition: NCF / OK
			Tenyka Satchen	9/18/19	8:45		OK