

GW – 028

2015 AGWMR

PART 8 OF 25

03 / 2016



Method Blank (MB)

(MB) 11/02/15 10:58

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0200		0.0197	0.100

L796143-05 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 11:08 • (DUP) 11/02/15 11:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	0.000		20

L796154-09 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 11:25 • (DUP) 11/02/15 11:26

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	0.000		20

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

(LCS) 11/02/15 11:01 • (LCSD) 11/02/15 11:02

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	4.68	4.97	94.0	99.0	90.0-110			6.00	20

L796154-04 Original Sample (OS) • Matrix Spike (MS)

(OS) 11/02/15 11:15 • (MS) 11/02/15 11:16

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	0.500	4.82	57.4	105	10	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796319-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 11/02/15 11:32 • (MS) 11/02/15 11:33 • (MSD) 11/02/15 11:34

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.878	4.25	4.27	68.0	68.0	1	90.0-110	E	E	0.000	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/29/15 10:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

L796143-19 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:50 • (DUP) 10/29/15 10:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

L795910-02 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:58 • (DUP) 10/29/15 11:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

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

(LCS) 10/29/15 10:26 • (LCSD) 10/29/15 10:27

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.110	0.103	110	103	90.0-110			6.57	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/27/15 11:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L796143-19 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 18:18 • (DUP) 10/27/15 18:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.0347	0.0330	1	0		20
Fluoride	ND	0.000	1	0		20
Sulfate	0.496	0.000	1	0.1	*	20

L796185-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:42 • (DUP) 10/27/15 23:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	114	112	20	2		20
Fluoride	ND	0.000	20	0		20
Sulfate	1300	1310	20	1		20

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

(LCS) 10/27/15 11:19 • (LCSD) 10/27/15 11:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	39.8	39.8	100	99	90-110			0	20
Fluoride	8.00	8.00	8.01	100	100	90-110			0	20
Sulfate	40.0	40.0	40.0	100	100	90-110			0	20



L796154-05 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 14:57 • (MS) 10/27/15 15:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	0.0669	51.4	103	1	80-120	
Fluoride	5.00	ND	5.10	102	1	80-120	
Sulfate	50.0	0.192	52.1	104	1	80-120	

L796185-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 11:15 • (MS) 10/28/15 11:31 • (MSD) 10/28/15 11:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	5.00	50.3	546	549	99	100	10	80-120			0	20
Fluoride	0.500	0.598	49.5	51.0	98	101	10	80-120			3	20
Sulfate	5.00	379	861	860	96	96	10	80-120			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/29/15 06:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Sulfate	U		0.0774	5.00

L796587-02 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 11:21 • (DUP) 10/29/15 11:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	1.44	1.43	1	1	J	20

L796639-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 15:27 • (DUP) 10/29/15 15:43

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	96.8	97.0	1	0		20

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

(LCS) 10/29/15 10:01 • (LCSD) 10/29/15 09:02

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfate	40.0	40.4	37.5	101	94	90-110			7	20

L796587-03 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/29/15 11:52 • (MS) 10/29/15 12:07

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Sulfate	50.0	5.91	56.7	102	1	80-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796143-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 17:00 • (MS) 10/29/15 17:15 • (MSD) 10/29/15 17:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50.0	ND	0.000	0.000	0	0	1	80-120	E	E	0	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/24/15 14:06

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000049	0.000200

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

(LCS) 10/24/15 14:08 • (LCSD) 10/24/15 14:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.00300	0.00282	0.00268	94	89	80-120			5	20

L796127-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 14:12 • (MS) 10/24/15 14:19 • (MSD) 10/24/15 14:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.00300	ND	0.00220	0.00227	73	76	1	75-125	<u>F</u>		3	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/29/15 01:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	U		0.00035	0.00200
Potassium	0.0393		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Vanadium	0.000609		0.00018	0.00500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/29/15 01:15 • (LCSD) 10/29/15 01:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0494	0.0476	99	95	80-120			4	20
Barium	0.0500	0.0498	0.0503	100	101	80-120			1	20
Calcium	5.00	4.98	5.03	100	101	80-120			1	20
Chromium	0.0500	0.0491	0.0477	98	95	80-120			3	20
Iron	5.00	4.80	4.67	96	93	80-120			3	20
Lead	0.0500	0.0498	0.0504	100	101	80-120			1	20
Manganese	0.0500	0.0478	0.0468	96	94	80-120			2	20
Nickel	0.0500	0.0496	0.0484	99	97	80-120			2	20
Potassium	5.00	4.94	5.06	99	101	80-120			2	20
Selenium	0.0500	0.0486	0.0489	97	98	80-120			1	20
Sodium	5.00	4.96	5.06	99	101	80-120			2	20
Vanadium	0.0500	0.0482	0.0472	96	94	80-120			2	20



L796154-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 01:19 • (MS) 10/29/15 01:24 • (MSD) 10/29/15 01:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00761	0.0545	0.0554	94	96	1	75-125			2	20
Barium	0.0500	0.0119	0.0623	0.0626	101	101	1	75-125			0	20
Calcium	5.00	532	526	531	0	0	1	75-125	4	4	1	20
Chromium	0.0500	0.000763	0.0466	0.0472	92	93	1	75-125			1	20
Potassium	5.00	0.578	5.38	5.36	96	96	1	75-125			0	20
Iron	5.00	0.0367	4.57	4.66	91	93	1	75-125			2	20
Lead	0.0500	0.000151	0.0485	0.0488	97	97	1	75-125			1	20
Manganese	0.0500	0.124	0.171	0.173	93	97	1	75-125			1	20
Nickel	0.0500	0.00524	0.0506	0.0507	91	91	1	75-125			0	20
Selenium	0.0500	0.000590	0.0479	0.0482	95	95	1	75-125			1	20
Sodium	5.00	320	320	325	5	117	1	75-125	4		2	20
Vanadium	0.0500	0.0243	0.0720	0.0714	95	94	1	75-125			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 06:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	91.8			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/27/15 05:43 • (LCSD) 10/27/15 06:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.81	5.98	106	109	67.0-132			2.85	20
(S) a,a,a-Trifluorotoluene(FID)				100	102	62.0-128				

L796143-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 09:05 • (MS) 10/27/15 07:59 • (MSD) 10/27/15 08:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	1.24	6.16	6.15	89.5	89.3	1	50.0-143			0.170	20
(S) a,a,a-Trifluorotoluene(FID)					99.3	99.2		62.0-128				



Method Blank (MB)

(MB) 10/29/15 14:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.0			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/29/15 13:21 • (LCSD) 10/29/15 13:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	3.81	4.04	69.2	73.5	67.0-132			5.98	20
(S) a,a,a-Trifluorotoluene(FID)				98.9	99.0	62.0-128				

L796461-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 19:15 • (MS) 10/29/15 20:35 • (MSD) 10/29/15 20:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	4.17	4.05	75.8	73.7	1	50.0-143			2.78	20
(S) a,a,a-Trifluorotoluene(FID)					99.1	98.8		62.0-128				

Method Blank (MB)

(MB) 10/28/15 09:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.8			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 06:58 • (LCSD) 10/28/15 07:20

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.15	5.55	93.7	101	67.0-132			7.38	20
(S) a,a,a-Trifluorotoluene(FID)				95.7	97.2	62.0-128				

L796154-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 12:33 • (MS) 10/28/15 07:42 • (MSD) 10/28/15 08:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	13.2	15.8	16.3	47.7	56.6	1	50.0-143	F		3.05	20
(S) a,a,a-Trifluorotoluene(FID)					101	100		62.0-128				



Method Blank (MB)

(MB) 10/28/15 22:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0319		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.9			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/28/15 21:24 • (LCSD) 10/28/15 21:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.79	4.61	87.2	83.9	67.0-132			3.88	20
(S) a,a,a-Trifluorotoluene(FID)				99.9	99.8	62.0-128				

L797051-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 23:15 • (MS) 10/29/15 04:02 • (MSD) 10/29/15 04:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	4.34	4.00	78.9	72.8	1	50.0-143			8.04	20
(S) a,a,a-Trifluorotoluene(FID)					99.3	98.5		62.0-128				



Method Blank (MB)

(MB) 10/26/15 14:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/26/15 14:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	102			90.0-115
(S) Dibromofluoromethane	97.3			79.0-121
(S) 4-Bromofluorobenzene	100			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/26/15 12:41 • (LCSD) 10/26/15 13:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.113	0.110	90.3	87.9	28.7-175			2.73	20.9
Benzene	0.0250	0.0243	0.0246	97.2	98.3	73.0-122			1.21	20
Bromodichloromethane	0.0250	0.0245	0.0244	97.9	97.4	75.5-121			0.410	20
Bromoform	0.0250	0.0255	0.0255	102	102	71.5-131			0.170	20
Bromomethane	0.0250	0.0334	0.0325	134	130	22.4-187			2.73	20
n-Butylbenzene	0.0250	0.0271	0.0274	108	110	75.9-134			1.13	20
sec-Butylbenzene	0.0250	0.0255	0.0256	102	102	80.6-126			0.270	20
Carbon disulfide	0.0250	0.0238	0.0239	95.1	95.6	53.0-134			0.500	20
Carbon tetrachloride	0.0250	0.0237	0.0238	94.9	95.2	70.9-129			0.400	20
Chlorobenzene	0.0250	0.0255	0.0260	102	104	79.7-122			2.26	20
Chlorodibromomethane	0.0250	0.0261	0.0267	104	107	78.2-124			2.36	20
Chloroethane	0.0250	0.0247	0.0249	98.7	99.5	41.2-153			0.790	20
Chloroform	0.0250	0.0248	0.0252	99.3	101	73.2-125			1.31	20
Chloromethane	0.0250	0.0228	0.0228	91.0	91.1	55.8-134			0.0500	20
1,2-Dibromoethane	0.0250	0.0254	0.0254	102	102	79.8-122			0.200	20
1,1-Dichloroethane	0.0250	0.0249	0.0253	99.5	101	71.7-127			1.61	20

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

(LCS) 10/26/15 12:41 • (LCSD) 10/26/15 13:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0242	0.0242	96.6	96.8	65.3-126			0.160	20
1,1-Dichloroethene	0.0250	0.0241	0.0243	96.3	97.4	59.9-137			1.07	20
cis-1,2-Dichloroethene	0.0250	0.0256	0.0256	103	102	77.3-122			0.200	20
trans-1,2-Dichloroethene	0.0250	0.0251	0.0258	100	103	72.6-125			2.67	20
1,2-Dichloropropane	0.0250	0.0256	0.0262	103	105	77.4-125			2.08	20
cis-1,3-Dichloropropene	0.0250	0.0264	0.0271	105	108	77.7-124			2.79	20
trans-1,3-Dichloropropene	0.0250	0.0261	0.0266	105	107	73.5-127			1.93	20
Ethylbenzene	0.0250	0.0256	0.0259	102	104	80.9-121			1.24	20
2-Hexanone	0.125	0.135	0.135	108	108	59.4-151			0.270	20
Isopropylbenzene	0.0250	0.0254	0.0261	102	105	81.6-124			2.87	20
p-Isopropyltoluene	0.0250	0.0259	0.0258	103	103	77.6-129			0.0400	20
2-Butanone (MEK)	0.125	0.127	0.125	102	100	46.4-155			1.78	20
Methylene Chloride	0.0250	0.0232	0.0233	92.6	93.2	69.5-120			0.570	20
4-Methyl-2-pentanone (MIBK)	0.125	0.126	0.123	100	98.6	63.3-138			1.94	20
Methyl tert-butyl ether	0.0250	0.0252	0.0250	101	99.9	70.1-125			0.810	20
Naphthalene	0.0250	0.0256	0.0254	102	102	69.7-134			0.720	20
n-Propylbenzene	0.0250	0.0255	0.0256	102	103	81.9-122			0.540	20
Styrene	0.0250	0.0270	0.0273	108	109	79.9-124			1.08	20
1,1,1,2-Tetrachloroethane	0.0250	0.0253	0.0256	101	102	78.5-125			1.40	20
1,1,2,2-Tetrachloroethane	0.0250	0.0244	0.0247	97.7	98.8	79.3-123			1.13	20
Tetrachloroethene	0.0250	0.0252	0.0258	101	103	73.5-130			2.52	20
Toluene	0.0250	0.0244	0.0247	97.7	98.8	77.9-116			1.13	20
1,1,1-Trichloroethane	0.0250	0.0242	0.0250	96.9	100	71.1-129			3.27	20
1,1,2-Trichloroethane	0.0250	0.0250	0.0249	100	99.4	81.6-120			0.670	20
Trichloroethene	0.0250	0.0245	0.0247	97.8	98.8	79.5-121			1.05	20
1,2,4-Trimethylbenzene	0.0250	0.0259	0.0261	104	105	79.0-122			0.750	20
1,3,5-Trimethylbenzene	0.0250	0.0252	0.0256	101	102	81.0-123			1.82	20
Vinyl chloride	0.0250	0.0249	0.0254	99.8	102	61.5-134			1.81	20
Xylenes, Total	0.0750	0.0780	0.0785	104	105	79.2-122			0.740	20
o-Xylene	0.0250	0.0257	0.0263	103	105	79.1-123			2.23	20
m&p-Xylenes	0.0500	0.0523	0.0523	105	105	78.5-122			0.000	20
(S) Toluene-d8				102	103	90.0-115				
(S) Dibromofluoromethane				100	99.1	79.0-121				
(S) 4-Bromofluorobenzene				100	101	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796154-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 15:08 • (MS) 10/26/15 15:31 • (MSD) 10/26/15 15:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00123	0.0423	0.0438	32.9	34.1	1	25.0-156			3.47	21.5
Benzene	0.0250	ND	0.0157	0.0170	63.0	68.1	1	58.6-133			7.76	20
Bromodichloromethane	0.0250	ND	0.0204	0.0224	81.5	89.4	1	69.2-127			9.31	20
Bromoform	0.0250	ND	0.0226	0.0243	90.5	97.2	1	66.3-140			7.15	20
Bromomethane	0.0250	ND	0.0129	0.0132	51.7	52.8	1	16.6-183			2.19	20.5
n-Butylbenzene	0.0250	ND	0.0224	0.0246	89.8	98.3	1	64.8-145			9.01	20
sec-Butylbenzene	0.0250	ND	0.0217	0.0230	86.8	91.9	1	66.8-139			5.75	20
Carbon disulfide	0.0250	ND	0.00407	0.00434	16.3	17.4	1	34.9-138	E	E	6.51	20
Carbon tetrachloride	0.0250	ND	0.0161	0.0171	64.3	68.4	1	60.6-139			6.19	20
Chlorobenzene	0.0250	ND	0.0201	0.0211	80.5	84.3	1	70.1-130			4.53	20
Chlorodibromomethane	0.0250	ND	0.0230	0.0237	92.1	94.9	1	71.6-132			3.01	20
Chloroethane	0.0250	ND	0.0114	0.0122	45.8	48.7	1	33.3-155			6.14	20
Chloroform	0.0250	ND	0.0196	0.0210	78.4	83.8	1	66.1-133			6.64	20
Chloromethane	0.0250	ND	0.00747	0.00792	29.9	31.7	1	40.7-139	E	E	5.82	20
1,2-Dibromoethane	0.0250	ND	0.0207	0.0215	82.9	85.8	1	73.8-131			3.54	20
1,1-Dichloroethane	0.0250	ND	0.0175	0.0193	70.0	77.1	1	64.0-134			9.63	20
1,2-Dichloroethane	0.0250	ND	0.0180	0.0190	71.9	76.0	1	60.7-132			5.64	20
1,1-Dichloroethene	0.0250	ND	0.0126	0.0136	50.5	54.6	1	48.8-144			7.78	20
cis-1,2-Dichloroethene	0.0250	ND	0.0175	0.0188	70.2	75.0	1	60.6-136			6.62	20
trans-1,2-Dichloroethene	0.0250	ND	0.0132	0.0135	52.6	54.1	1	61.0-132	E	E	2.71	20
1,2-Dichloropropane	0.0250	ND	0.0202	0.0212	80.6	84.9	1	69.7-130			5.18	20
cis-1,3-Dichloropropene	0.0250	ND	0.0197	0.0218	78.7	87.2	1	71.1-129			10.3	20
trans-1,3-Dichloropropene	0.0250	ND	0.0205	0.0223	82.1	89.1	1	66.3-136			8.17	20
Ethylbenzene	0.0250	0.000320	0.0198	0.0209	77.9	82.2	1	62.7-136			5.39	20
2-Hexanone	0.125	ND	0.0942	0.0978	75.3	78.3	1	59.4-154			3.82	20.1
Isopropylbenzene	0.0250	ND	0.0209	0.0219	83.4	87.6	1	67.4-136			4.90	20
p-Isopropyltoluene	0.0250	ND	0.0217	0.0229	86.8	91.8	1	62.8-143			5.63	20
2-Butanone (MEK)	0.125	ND	0.0739	0.0768	59.1	61.4	1	45.0-156			3.80	20.8
Methylene Chloride	0.0250	ND	0.0146	0.0160	58.5	64.1	1	61.5-125	E		9.14	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.113	0.119	90.3	94.9	1	60.7-150			4.90	20
Methyl tert-butyl ether	0.0250	ND	0.0208	0.0219	83.3	87.5	1	61.4-136			4.90	20
Naphthalene	0.0250	ND	0.0226	0.0255	90.4	102	1	61.8-143			12.1	20
n-Propylbenzene	0.0250	ND	0.0207	0.0219	82.7	87.5	1	63.2-139			5.66	20
Styrene	0.0250	ND	0.0220	0.0233	87.8	93.1	1	68.2-133			5.85	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0216	0.0233	86.3	93.3	1	70.5-132			7.78	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0235	0.0240	93.9	96.2	1	64.9-145			2.36	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796154-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 15:08 • (MS) 10/26/15 15:31 • (MSD) 10/26/15 15:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0162	0.0173	64.7	69.1	1	57.4-141			6.53	20
Toluene	0.0250	0.000440	0.0181	0.0193	70.5	75.6	1	67.8-124			6.76	20
1,1,1-Trichloroethane	0.0250	ND	0.0174	0.0191	69.6	76.3	1	58.7-134			9.24	20
1,1,2-Trichloroethane	0.0250	ND	0.0220	0.0223	87.9	89.0	1	74.1-130			1.31	20
Trichloroethene	0.0250	ND	0.0162	0.0173	64.7	69.2	1	48.9-148			6.81	20
1,2,4-Trimethylbenzene	0.0250	0.000895	0.0225	0.0240	86.5	92.4	1	60.5-137			6.38	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0209	0.0221	83.6	88.4	1	67.9-134			5.57	20
Vinyl chloride	0.0250	ND	0.00906	0.00995	36.3	39.8	1	44.3-143	E	E	9.31	20
Xylenes, Total	0.0750	0.00226	0.0620	0.0656	79.6	84.5	1	65.6-133			5.70	20
o-Xylene	0.0250	0.000692	0.0212	0.0226	82.0	87.7	1	67.1-133			6.45	20
m&p-Xylenes	0.0500	0.00157	0.0408	0.0430	78.5	82.9	1	64.1-133			5.31	20
(S) Toluene-d8					103	103		90.0-115				
(S) Dibromofluoromethane					98.2	96.4		79.0-121				
(S) 4-Bromofluorobenzene					101	98.2		80.1-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) 10/28/15 20:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 20:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	101			90.0-115
(S) Dibromofluoromethane	93.0			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/28/15 19:12 • (LCSD) 10/28/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0621	0.0616	49.7	49.3	28.7-175			0.720	20.9
Benzene	0.0250	0.0265	0.0265	106	106	73.0-122			0.0700	20
Bromodichloromethane	0.0250	0.0235	0.0233	93.8	93.2	75.5-121			0.630	20
Bromoform	0.0250	0.0311	0.0303	124	121	71.5-131			2.41	20
Bromomethane	0.0250	0.0286	0.0306	114	122	22.4-187			6.90	20
n-Butylbenzene	0.0250	0.0258	0.0248	103	99.0	75.9-134			3.95	20
sec-Butylbenzene	0.0250	0.0287	0.0282	115	113	80.6-126			1.78	20
Carbon disulfide	0.0250	0.0265	0.0262	106	105	53.0-134			1.32	20
Carbon tetrachloride	0.0250	0.0244	0.0248	97.6	99.2	70.9-129			1.67	20
Chlorobenzene	0.0250	0.0297	0.0294	119	118	79.7-122			1.02	20
Chlorodibromomethane	0.0250	0.0296	0.0292	119	117	78.2-124			1.32	20
Chloroethane	0.0250	0.0238	0.0241	95.1	96.3	41.2-153			1.24	20
Chloroform	0.0250	0.0250	0.0252	100	101	73.2-125			0.590	20
Chloromethane	0.0250	0.0212	0.0212	84.7	84.6	55.8-134			0.0900	20
1,2-Dibromoethane	0.0250	0.0290	0.0288	116	115	79.8-122			0.930	20
1,1-Dichloroethane	0.0250	0.0258	0.0259	103	104	71.7-127			0.350	20

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

(LCS) 10/28/15 19:12 • (LCSD) 10/28/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0223	0.0228	89.4	91.1	65.3-126			1.86	20
1,1-Dichloroethene	0.0250	0.0258	0.0258	103	103	59.9-137			0.110	20
cis-1,2-Dichloroethene	0.0250	0.0253	0.0251	101	100	77.3-122			0.920	20
trans-1,2-Dichloroethene	0.0250	0.0261	0.0259	104	103	72.6-125			0.980	20
1,2-Dichloropropane	0.0250	0.0273	0.0268	109	107	77.4-125			1.70	20
cis-1,3-Dichloropropene	0.0250	0.0255	0.0251	102	100	77.7-124			1.60	20
trans-1,3-Dichloropropene	0.0250	0.0246	0.0246	98.5	98.5	73.5-127			0.100	20
Ethylbenzene	0.0250	0.0297	0.0289	119	116	80.9-121			2.48	20
2-Hexanone	0.125	0.113	0.110	90.2	87.7	59.4-151			2.88	20
Isopropylbenzene	0.0250	0.0292	0.0284	117	114	81.6-124			2.83	20
p-Isopropyltoluene	0.0250	0.0290	0.0280	116	112	77.6-129			3.60	20
2-Butanone (MEK)	0.125	0.0831	0.0832	66.5	66.6	46.4-155			0.180	20
Methylene Chloride	0.0250	0.0245	0.0250	98.0	99.8	69.5-120			1.84	20
4-Methyl-2-pentanone (MIBK)	0.125	0.110	0.107	88.2	85.9	63.3-138			2.56	20
Methyl tert-butyl ether	0.0250	0.0259	0.0259	104	103	70.1-125			0.240	20
Naphthalene	0.0250	0.0240	0.0234	95.9	93.8	69.7-134			2.25	20
n-Propylbenzene	0.0250	0.0284	0.0278	114	111	81.9-122			1.97	20
Styrene	0.0250	0.0308	0.0299	123	120	79.9-124			2.97	20
1,1,1,2-Tetrachloroethane	0.0250	0.0284	0.0286	114	114	78.5-125			0.640	20
1,1,2,2-Tetrachloroethane	0.0250	0.0228	0.0224	91.3	89.8	79.3-123			1.75	20
Tetrachloroethene	0.0250	0.0313	0.0309	125	124	73.5-130			1.44	20
Toluene	0.0250	0.0277	0.0269	111	108	77.9-116			2.87	20
1,1,1-Trichloroethane	0.0250	0.0233	0.0235	93.1	93.9	71.1-129			0.930	20
1,1,2-Trichloroethane	0.0250	0.0267	0.0265	107	106	81.6-120			0.870	20
Trichloroethene	0.0250	0.0314	0.0314	126	126	79.5-121	*	*	0.0400	20
1,2,4-Trimethylbenzene	0.0250	0.0276	0.0268	111	107	79.0-122			2.93	20
1,3,5-Trimethylbenzene	0.0250	0.0286	0.0275	114	110	81.0-123			3.82	20
Vinyl chloride	0.0250	0.0239	0.0240	95.7	96.0	61.5-134			0.270	20
Xylenes, Total	0.0750	0.0895	0.0871	119	116	79.2-122			2.64	20
o-Xylene	0.0250	0.0297	0.0291	119	116	79.1-123			2.17	20
m&p-Xylenes	0.0500	0.0598	0.0581	120	116	78.5-122			2.87	20
(S) Toluene-d8				101	99.8	90.0-115				
(S) Dibromofluoromethane				91.2	92.6	79.0-121				
(S) 4-Bromofluorobenzene				102	101	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796154-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 22:08 • (MS) 10/28/15 20:49 • (MSD) 10/28/15 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000583	0.0456	0.0459	36.0	36.2	1	25.0-156			0.540	21.5
Benzene	0.0250	ND	0.0192	0.0189	77.0	75.5	1	58.6-133			1.87	20
Bromodichloromethane	0.0250	ND	0.0205	0.0200	82.1	80.0	1	69.2-127			2.66	20
Bromoform	0.0250	ND	0.0279	0.0287	111	115	1	66.3-140			2.98	20
Bromomethane	0.0250	ND	0.0141	0.0143	56.5	57.2	1	16.6-183			1.24	20.5
n-Butylbenzene	0.0250	ND	0.0242	0.0238	96.8	95.2	1	64.8-145			1.68	20
sec-Butylbenzene	0.0250	ND	0.0263	0.0261	105	104	1	66.8-139			0.960	20
Carbon disulfide	0.0250	ND	0.00681	0.00665	27.3	26.6	1	34.9-138	E	E	2.48	20
Carbon tetrachloride	0.0250	ND	0.0184	0.0181	73.6	72.2	1	60.6-139			1.94	20
Chlorobenzene	0.0250	ND	0.0253	0.0250	101	99.9	1	70.1-130			1.08	20
Chlorodibromomethane	0.0250	ND	0.0263	0.0264	105	106	1	71.6-132			0.500	20
Chloroethane	0.0250	ND	0.0142	0.0142	57.0	56.8	1	33.3-155			0.280	20
Chloroform	0.0250	ND	0.0216	0.0212	86.3	85.0	1	66.1-133			1.52	20
Chloromethane	0.0250	ND	0.0106	0.0104	42.4	41.5	1	40.7-139			2.26	20
1,2-Dibromoethane	0.0250	ND	0.0246	0.0239	98.2	95.7	1	73.8-131			2.62	20
1,1-Dichloroethane	0.0250	ND	0.0203	0.0201	81.2	80.5	1	64.0-134			0.950	20
1,2-Dichloroethane	0.0250	ND	0.0180	0.0180	72.1	72.1	1	60.7-132			0.0500	20
1,1-Dichloroethene	0.0250	ND	0.0156	0.0151	62.2	60.4	1	48.8-144			2.91	20
cis-1,2-Dichloroethene	0.0250	ND	0.0193	0.0191	77.3	76.6	1	60.6-136			0.980	20
trans-1,2-Dichloroethene	0.0250	ND	0.0156	0.0153	62.5	61.0	1	61.0-132			2.35	20
1,2-Dichloropropane	0.0250	ND	0.0224	0.0223	89.7	89.0	1	69.7-130			0.710	20
cis-1,3-Dichloropropene	0.0250	ND	0.0206	0.0204	82.5	81.7	1	71.1-129			1.01	20
trans-1,3-Dichloropropene	0.0250	ND	0.0210	0.0207	84.0	82.6	1	66.3-136			1.62	20
Ethylbenzene	0.0250	ND	0.0251	0.0244	100	97.8	1	62.7-136			2.61	20
2-Hexanone	0.125	ND	0.100	0.104	80.3	83.2	1	59.4-154			3.56	20.1
Isopropylbenzene	0.0250	ND	0.0256	0.0251	102	100	1	67.4-136			1.95	20
p-Isopropyltoluene	0.0250	ND	0.0267	0.0266	107	107	1	62.8-143			0.130	20
2-Butanone (MEK)	0.125	ND	0.0730	0.0747	58.4	59.7	1	45.0-156			2.28	20.8
Methylene Chloride	0.0250	ND	0.0177	0.0171	70.9	68.6	1	61.5-125			3.37	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.104	0.107	83.4	85.3	1	60.7-150			2.25	20
Methyl tert-butyl ether	0.0250	ND	0.0224	0.0220	89.7	88.2	1	61.4-136			1.77	20
Naphthalene	0.0250	ND	0.0220	0.0231	88.0	92.3	1	61.8-143			4.69	20
n-Propylbenzene	0.0250	ND	0.0255	0.0250	102	99.8	1	63.2-139			2.10	20
Styrene	0.0250	ND	0.0261	0.0261	104	104	1	68.2-133			0.110	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0262	0.0259	105	103	1	70.5-132			1.47	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0231	0.0239	92.2	95.8	1	64.9-145			3.81	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L796154-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 22:08 • (MS) 10/28/15 20:49 • (MSD) 10/28/15 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0230	0.0227	92.0	90.9	1	57.4-141			1.20	20
Toluene	0.0250	ND	0.0209	0.0204	83.8	81.7	1	67.8-124			2.46	20
1,1,1-Trichloroethane	0.0250	ND	0.0188	0.0183	75.4	73.3	1	58.7-134			2.75	20
1,1,2-Trichloroethane	0.0250	ND	0.0244	0.0242	97.5	96.9	1	74.1-130			0.690	20
Trichloroethene	0.0250	ND	0.0231	0.0228	92.3	91.3	1	48.9-148			1.10	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0248	0.0246	99.4	98.2	1	60.5-137			1.17	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0253	0.0250	101	99.9	1	67.9-134			1.35	20
Vinyl chloride	0.0250	ND	0.0132	0.0126	53.0	50.4	1	44.3-143			4.99	20
Xylenes, Total	0.0750	ND	0.0749	0.0733	99.8	97.7	1	65.6-133			2.13	20
o-Xylene	0.0250	ND	0.0251	0.0250	100	99.8	1	67.1-133			0.600	20
m&p-Xylenes	0.0500	ND	0.0498	0.0483	99.5	96.7	1	64.1-133			2.92	20
(S) Toluene-d8					101	99.8		90.0-115				
(S) Dibromofluoromethane					91.9	91.0		79.0-121				
(S) 4-Bromofluorobenzene					103	103		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/27/15 17:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	85.6			50.0-150

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/27/15 17:37 • (LCSD) 10/27/15 17:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.02	1.10	67.9	73.3	50.0-150			7.62	20
(S) o-Terphenyl				84.8	94.3	50.0-150				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
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4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
J	Estimated value.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

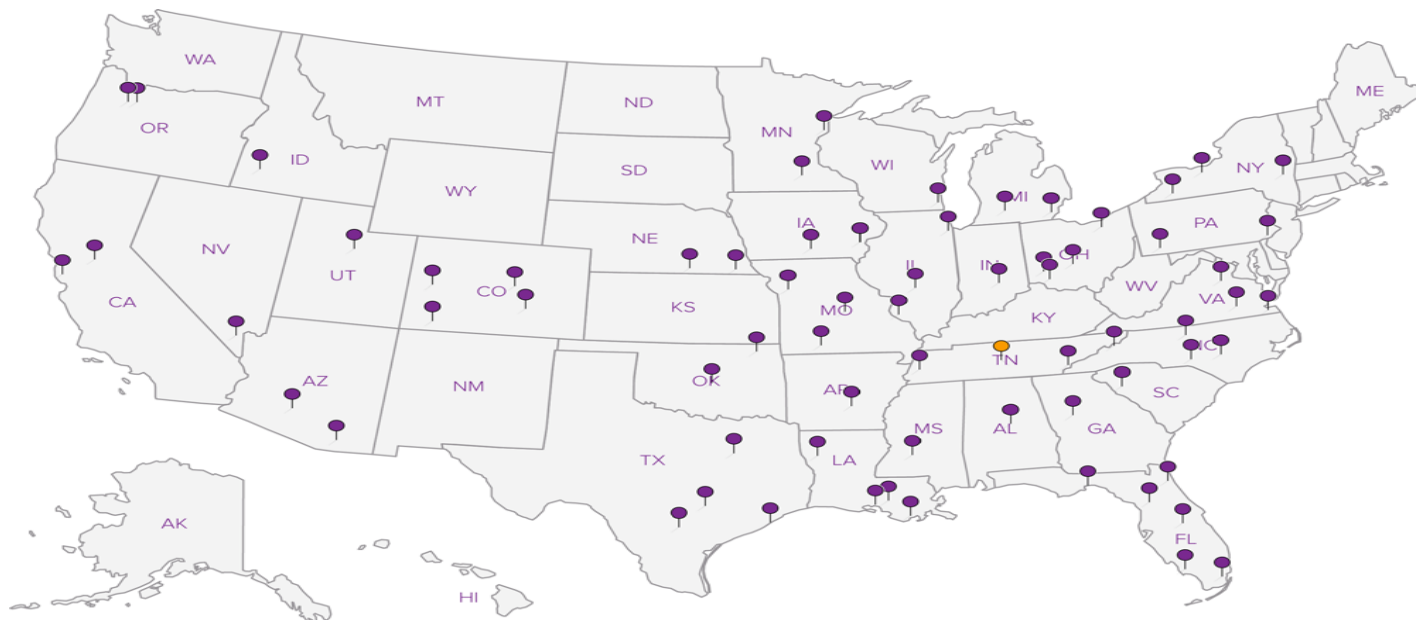
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



Shipment # 2

ARCADIS US - TX 2929 Briarpark Dr., Suite 300 Houston, TX 77042				Billing Information: Att: Accounts Payable 630 Plaza Drive, Suite 600 Highlands Ranch, CO 80129				Analysis / Container / Preservative CL, FL, SO4 125mlHDPE-NoPres CN 250mlHDPEAmb-NaOH DRO 100ml Amb-HCl GRO 40mlAmb HCl METALS 6020 500mlHDPE-HNO3 NO2NO3 250mlHDPE-H2SO4 TDS 250mlHDPE-NoPres V8260 40mlAmb-HCl V8260 40mlAmb-HCl-Bik								Chain of Custody Page 5 of 16 L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
				Report to: Pam Krueger				Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com;				Project Description: Navajo Refining Company - Artesia, NM City/State Collected: Artesia, NM							
Phone: 713-953-4800 Fax:		Client Project # TX000836.0007.15008		Lab Project # ARCADHTX-NAVAJO FULL		CL, FL, SO4 125mlHDPE-NoPres CN 250mlHDPEAmb-NaOH DRO 100ml Amb-HCl GRO 40mlAmb HCl METALS 6020 500mlHDPE-HNO3 NO2NO3 250mlHDPE-H2SO4 TDS 250mlHDPE-NoPres V8260 40mlAmb-HCl V8260 40mlAmb-HCl-Bik								L# G017					
Collected by (print): Greg Schorbenke		Site/Facility ID # REST		P.O. #										Acctnum: ARCADHTX Template: T105635 Prelogin: P524673 TSR: 633 - Pam Langford PB:					
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day200% Next Day100% Two Day50% Three Day25%		Date Results Needed										Email? ☐ No ☒ Yes FAX? ☐ No ☐ Yes		No. of Cntrs		Shipped Via: FedEX Ground	
Immediately Packed on Ice ☐ N ☒ Y																			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, SO4 125mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DRO 100ml Amb-HCl	GRO 40mlAmb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb-HCl-Bik	Metals (Hg, Ni, Va)	Rem./Contaminant	Sample # (lab only)	
MW-52	Grab	GW		10/20/15	1230	11	X	X	X	X	X	X	X	X	X	X		18	
DUP-REST-04	↓	GW		10/20/15	1500	11	X	X	X	X	X	X	X	X	X	X		11	
EB-REST-04	↓	GW		10/20/15	1230	11	X	X	X	X	X	X	X	X	X	X		20	
MW-46R		GW				6	X		X		X	X	X				Incorrect Preprint		
KWB-4		GW				8	X		X		X	X	X	X					
TRIP BLANK-REST-03	Grab	GW		10/20/15	—	1									X			-01	
MW-58	↓	GW		10/20/15	1215	9	X	X	X		X	X	X	X		X		-02	
KWB-2R	↓	GW		10/20/15	1310	8	X		X		X	X	X	X				-03	
DUP-REST-05	↓	GW		10/20/15	900	11	X	X	X	X	X	X	X	X		X		-04	
EB-REST-05	↓	GW		10/20/15	945	11	X	X	X	X	X	X	X	X		X		-05	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: (Signature) 		Date: 7/21/15		Time: 730		Received by: (Signature) 		Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____		Hold #	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: _____ °C Bottles Received: 652		Condition: (lab use only)	
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) 		Date: 10/22/15 Time: 0900		COC Seal Intact: ☐ Y ☐ N ☐ NA	
								pH Checked: 12.712		NCF:	

ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Billing Information:

Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129

Report to:
Pam Krueger

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;

Project
Description: Navajo Refining Company - Artesia, NM

City/State
Collected: Artesia, NM

Phone: 713-953-4800

Client Project #
TX000836.0007.15008

Lab Project #
ARCADHTX-NAVAJO FULL

Fax:

Collected by (print):

Greg Scherbenske

Site/Facility ID #
REST

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Date Results Needed

Email? ___ No ___ Yes

FAX? ___ No ___ Yes

No.
of
Cntrs

Immediately
Packed on Ice N ___ Y ☒

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, SO4 125mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DRO 100ml Amb-HCl	GRO 40mlAmb HCl	METALS 6020 500mlHDPE-HNO3 Ca, K, Na, L2	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb-HCl-Bik		
MW-104	Grab	GW		10/20/15	1310	10	X		X	X	(X)	X	X	X			-86
MW-64		GW				10	X		X	X	(X)	X	X	X			-603
MW-65		GW				10	X		X	X	(X)	X	X	X			-603
MW-102		GW		10/20/15	1220	10	X		X	X	(X)	X	X	X			-07
MW-99		GW		10/20/15	1425	10	X		X	X	(X)	X	X	X			-08
MW-107		GW		10/20/15	1325	10	X		X	X	(X)	X	X	X			-09
MW-128		GW		10/20/15	1525	10	X		X	X	(X)	X	X	X			-10
MW-125		GW		10/20/15	1055	10	X		X	X	(X)	X	X	X			-11
MW-116		GW		10/20/15	1555	10	X		X	X	(X)	X	X	X			-12
MW-115		GW		10/20/15	810	10	X		X	X	(X)	X	X	X			-13

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Relinquished by (Signature)

Date: 7/21/15

Time: 730

Received by: (Signature)

Samples returned via: ☐ UPS

☒ FedEx ☐ Courier ☐

Relinquished by (Signature)

Date:

Time:

Received by: (Signature)

Temp: 3.1 °C Bottles Received: 652

Relinquished by (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 10/22/15 Time: 0900

Hold #

Condition: (lab use only)

COC Seal Intact: ___ Y ___ N ___ NA

pH Checked: 12710

NCF:

Chain of Custody Page 16 of 16



YOUR LAB OF CHOICE

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



L# 1996154

Table #

Acctnum: ARCADHTX

Template: T105635

Prelogin: P524673

TSR: 633 - Pam Langford

PB:

Shipped Via: FedEX Ground

Rem./Contaminant Sample # (lab only)

ARCADIS US - TX

Sample Delivery Group: L798300
Samples Received: 10/21/2015
Project Number: TX000836.0007.150007
Description: Navajo Refining Company - Artesia, NM
Site: TMD
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-46R L798300-01 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 09:55Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:03	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 16:42	VSS
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:05	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 19:55	CLG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	1	10/26/15 14:54	10/26/15 14:54	ACG
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:05	10/29/15 17:05	ASK
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 21:59	10/24/15 21:59	DJD
Wet Chemistry by Method 9056MOD	WG824162	50	10/25/15 01:35	10/25/15 01:35	DJD

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

MW-21 L798300-02 GW

Collected by
Greg ScherbenskeCollected date/time
10/19/15 16:50Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824140	1	10/24/15 11:09	10/26/15 03:38	MF
Metals (ICPMS) by Method 6020	WG824778	1	10/27/15 13:58	10/27/15 18:36	JD
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823923	1	10/22/15 19:12	10/24/15 20:12	BEJ
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825076	1	10/28/15 11:42	10/28/15 11:42	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824210	1	10/25/15 14:18	10/25/15 14:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824566	1	10/27/15 16:47	10/27/15 16:47	ACG
Wet Chemistry by Method 353.2	WG824959	5	10/28/15 16:08	10/28/15 16:08	ASK
Wet Chemistry by Method 9056MOD	WG823865	1	10/23/15 20:45	10/23/15 20:45	DJD
Wet Chemistry by Method 9056MOD	WG823865	100	10/23/15 21:55	10/23/15 21:55	DJD

NP-1 L798300-03 GW

Collected by
Greg ScherbenskeCollected date/time
10/19/15 14:20Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824210	1	10/25/15 14:36	10/25/15 14:36	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824566	10	10/27/15 17:05	10/27/15 17:05	JAH

TRIP BLANK-TMD-01 L798300-04 GW

Collected by
Greg ScherbenskeCollected date/time
10/19/15 00:00Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824566	1	10/27/15 14:00	10/27/15 14:00	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4180000		2820	10000	1	10/27/2015 15:03	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	566	J	197	1000	10	10/29/2015 17:05	WG825446

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	274000		2600	50000	50	10/25/2015 01:35	WG824162
Fluoride	1710		9.90	100	1	10/24/2015 21:59	WG824162
Sulfate	2300000		3870	250000	50	10/25/2015 01:35	WG824162

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.68		0.250	2.00	1	10/28/2015 16:42	WG824868
Barium	13.4		0.360	5.00	1	10/28/2015 16:42	WG824868
Calcium	652000	4 O1	460	10000	10	10/28/2015 19:05	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 16:42	WG824868
Iron	19.3	J	15.0	100	1	10/28/2015 16:42	WG824868
Lead	U		0.240	2.00	1	10/28/2015 16:42	WG824868
Manganese	110		0.250	5.00	1	10/28/2015 16:42	WG824868
Potassium	1700		37.0	1000	1	10/28/2015 16:42	WG824868
Selenium	1.09	J	0.380	2.00	1	10/28/2015 16:42	WG824868
Sodium	157000	4	110	1000	1	10/28/2015 16:42	WG824868

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/26/2015 14:54	WG824433
Benzene	U		0.331	1.00	1	10/26/2015 14:54	WG824433
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 14:54	WG824433
Bromoform	U		0.469	1.00	1	10/26/2015 14:54	WG824433
Bromomethane	U		0.866	5.00	1	10/26/2015 14:54	WG824433
n-Butylbenzene	U		0.361	1.00	1	10/26/2015 14:54	WG824433
sec-Butylbenzene	U		0.365	1.00	1	10/26/2015 14:54	WG824433
Carbon disulfide	U		0.275	1.00	1	10/26/2015 14:54	WG824433
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 14:54	WG824433
Chlorobenzene	U		0.348	1.00	1	10/26/2015 14:54	WG824433
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 14:54	WG824433
Chloroethane	U		0.453	5.00	1	10/26/2015 14:54	WG824433
Chloroform	U		0.324	5.00	1	10/26/2015 14:54	WG824433
Chloromethane	U		0.276	2.50	1	10/26/2015 14:54	WG824433
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 14:54	WG824433
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 14:54	WG824433
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 14:54	WG824433
1,1-Dichloroethene	U		0.398	1.00	1	10/26/2015 14:54	WG824433
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 14:54	WG824433
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 14:54	WG824433
1,2-Dichloropropane	U		0.306	1.00	1	10/26/2015 14:54	WG824433
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 14:54	WG824433
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 14:54	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylbenzene	U		0.384	1.00	1	10/26/2015 14:54	WG824433
Isopropylbenzene	U		0.326	1.00	1	10/26/2015 14:54	WG824433
p-Isopropyltoluene	U		0.350	1.00	1	10/26/2015 14:54	WG824433
2-Butanone (MEK)	U	E	3.93	10.0	1	10/26/2015 14:54	WG824433
2-Hexanone	U		3.82	10.0	1	10/26/2015 14:54	WG824433
Methylene Chloride	U		1.00	5.00	1	10/26/2015 14:54	WG824433
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 14:54	WG824433
Methyl tert-butyl ether	U		0.367	1.00	1	10/26/2015 14:54	WG824433
Naphthalene	U		1.00	5.00	1	10/26/2015 14:54	WG824433
n-Propylbenzene	U		0.349	1.00	1	10/26/2015 14:54	WG824433
Styrene	U		0.307	1.00	1	10/26/2015 14:54	WG824433
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 14:54	WG824433
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 14:54	WG824433
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 14:54	WG824433
Toluene	U		0.780	5.00	1	10/26/2015 14:54	WG824433
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 14:54	WG824433
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 14:54	WG824433
Trichloroethene	U		0.398	1.00	1	10/26/2015 14:54	WG824433
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/26/2015 14:54	WG824433
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/26/2015 14:54	WG824433
Vinyl chloride	U		0.259	1.00	1	10/26/2015 14:54	WG824433
o-Xylene	U		0.341	1.00	1	10/26/2015 14:54	WG824433
m&p-Xylene	U		0.719	1.00	1	10/26/2015 14:54	WG824433
Xylenes, Total	U		1.06	3.00	1	10/26/2015 14:54	WG824433
(S) Toluene-d8	96.9			90.0-115		10/26/2015 14:54	WG824433
(S) Dibromofluoromethane	97.3			79.0-121		10/26/2015 14:54	WG824433
(S) 4-Bromofluorobenzene	96.3			80.1-120		10/26/2015 14:54	WG824433

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	43.3	J	24.7	100	1	10/28/2015 19:55	WG823977
(S) o-Terphenyl	95.3			50.0-150		10/28/2015 19:55	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5190000		2820	10000	1	10/26/2015 03:38	WG824140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	16500		98.5	500	5	10/28/2015 16:08	WG824959

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	550000		5190	100000	100	10/23/2015 21:55	WG823865
Fluoride	1750		9.90	100	1	10/23/2015 20:45	WG823865
Sulfate	3520000		7740	500000	100	10/23/2015 21:55	WG823865

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.35		0.250	2.00	1	10/27/2015 18:36	WG824778
Barium	9.39		0.360	5.00	1	10/27/2015 18:36	WG824778
Calcium	530000	<u>4</u>	46.0	1000	1	10/27/2015 18:36	WG824778
Chromium	U		0.540	2.00	1	10/27/2015 18:36	WG824778
Iron	U		15.0	100	1	10/27/2015 18:36	WG824778
Lead	U		0.240	2.00	1	10/27/2015 18:36	WG824778
Manganese	658	<u>4</u>	0.250	5.00	1	10/27/2015 18:36	WG824778
Potassium	2000		37.0	1000	1	10/27/2015 18:36	WG824778
Selenium	29.0		0.380	2.00	1	10/27/2015 18:36	WG824778
Sodium	436000	<u>4</u>	110	1000	1	10/27/2015 18:36	WG824778

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/28/2015 11:42	WG825076
(S) a,a,a-Trifluorotoluene(FID) 92.3				62.0-128		10/28/2015 11:42	WG825076

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/25/2015 14:18	WG824210
Benzene	0.613	<u>J</u>	0.331	1.00	1	10/25/2015 14:18	WG824210
Bromodichloromethane	U		0.380	1.00	1	10/25/2015 14:18	WG824210
Bromoform	U		0.469	1.00	1	10/25/2015 14:18	WG824210
Bromomethane	U		0.866	5.00	1	10/25/2015 14:18	WG824210
n-Butylbenzene	U		0.361	1.00	1	10/25/2015 14:18	WG824210
sec-Butylbenzene	U		0.365	1.00	1	10/25/2015 14:18	WG824210
Carbon disulfide	U		0.275	1.00	1	10/27/2015 16:47	WG824566
Carbon tetrachloride	U		0.379	1.00	1	10/25/2015 14:18	WG824210
Chlorobenzene	U		0.348	1.00	1	10/25/2015 14:18	WG824210
Chlorodibromomethane	U		0.327	1.00	1	10/25/2015 14:18	WG824210
Chloroethane	U		0.453	5.00	1	10/25/2015 14:18	WG824210
Chloroform	U		0.324	5.00	1	10/25/2015 14:18	WG824210
Chloromethane	U		0.276	2.50	1	10/25/2015 14:18	WG824210
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2015 14:18	WG824210
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2015 14:18	WG824210



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2015 14:18	WG824210
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2015 14:18	WG824210
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2015 14:18	WG824210
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2015 14:18	WG824210
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2015 14:18	WG824210
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2015 14:18	WG824210
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2015 14:18	WG824210
Ethylbenzene	U		0.384	1.00	1	10/25/2015 14:18	WG824210
Isopropylbenzene	U		0.326	1.00	1	10/25/2015 14:18	WG824210
p-Isopropyltoluene	U		0.350	1.00	1	10/25/2015 14:18	WG824210
2-Butanone (MEK)	U		3.93	10.0	1	10/25/2015 14:18	WG824210
2-Hexanone	U		3.82	10.0	1	10/25/2015 14:18	WG824210
Methylene Chloride	U		1.00	5.00	1	10/25/2015 14:18	WG824210
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/25/2015 14:18	WG824210
Methyl tert-butyl ether	6.36		0.367	1.00	1	10/27/2015 16:47	WG824566
Naphthalene	U		1.00	5.00	1	10/25/2015 14:18	WG824210
n-Propylbenzene	U		0.349	1.00	1	10/25/2015 14:18	WG824210
Styrene	U		0.307	1.00	1	10/25/2015 14:18	WG824210
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/25/2015 14:18	WG824210
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2015 14:18	WG824210
Tetrachloroethene	U		0.372	1.00	1	10/25/2015 14:18	WG824210
Toluene	U		0.780	5.00	1	10/25/2015 14:18	WG824210
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2015 14:18	WG824210
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2015 14:18	WG824210
Trichloroethene	U		0.398	1.00	1	10/25/2015 14:18	WG824210
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/25/2015 14:18	WG824210
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/25/2015 14:18	WG824210
Vinyl chloride	U		0.259	1.00	1	10/25/2015 14:18	WG824210
o-Xylene	U		0.341	1.00	1	10/25/2015 14:18	WG824210
m&p-Xylene	U		0.719	1.00	1	10/25/2015 14:18	WG824210
Xylenes, Total	U		1.06	3.00	1	10/25/2015 14:18	WG824210
(S) Toluene-d8	99.2			90.0-115		10/25/2015 14:18	WG824210
(S) Dibromofluoromethane	97.3			79.0-121		10/25/2015 14:18	WG824210
(S) 4-Bromofluorobenzene	92.3			80.1-120		10/25/2015 14:18	WG824210

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	194		24.7	100	1	10/24/2015 20:12	WG823923
(S) o-Terphenyl	89.9			50.0-150		10/24/2015 20:12	WG823923



Collected date/time: 10/19/15 14:20

L798300

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/25/2015 14:36	WG824210
Benzene	U		0.331	1.00	1	10/25/2015 14:36	WG824210
Bromodichloromethane	U		0.380	1.00	1	10/25/2015 14:36	WG824210
Bromoform	U		0.469	1.00	1	10/25/2015 14:36	WG824210
Bromomethane	U		0.866	5.00	1	10/25/2015 14:36	WG824210
n-Butylbenzene	U		0.361	1.00	1	10/25/2015 14:36	WG824210
sec-Butylbenzene	U		0.365	1.00	1	10/25/2015 14:36	WG824210
Carbon disulfide	U		2.75	10.0	10	10/27/2015 17:05	WG824566
Carbon tetrachloride	U		0.379	1.00	1	10/25/2015 14:36	WG824210
Chlorobenzene	U		0.348	1.00	1	10/25/2015 14:36	WG824210
Chlorodibromomethane	U		0.327	1.00	1	10/25/2015 14:36	WG824210
Chloroethane	U		0.453	5.00	1	10/25/2015 14:36	WG824210
Chloroform	U		0.324	5.00	1	10/25/2015 14:36	WG824210
Chloromethane	U		0.276	2.50	1	10/25/2015 14:36	WG824210
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2015 14:36	WG824210
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2015 14:36	WG824210
1,2-Dichloroethane	0.431	J	0.361	1.00	1	10/25/2015 14:36	WG824210
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2015 14:36	WG824210
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2015 14:36	WG824210
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2015 14:36	WG824210
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2015 14:36	WG824210
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2015 14:36	WG824210
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2015 14:36	WG824210
Ethylbenzene	U		0.384	1.00	1	10/25/2015 14:36	WG824210
Isopropylbenzene	U		0.326	1.00	1	10/25/2015 14:36	WG824210
p-Isopropyltoluene	U		0.350	1.00	1	10/25/2015 14:36	WG824210
2-Butanone (MEK)	U		3.93	10.0	1	10/25/2015 14:36	WG824210
2-Hexanone	U		3.82	10.0	1	10/25/2015 14:36	WG824210
Methylene Chloride	U		1.00	5.00	1	10/25/2015 14:36	WG824210
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/25/2015 14:36	WG824210
Methyl tert-butyl ether	291		3.67	10.0	10	10/27/2015 17:05	WG824566
Naphthalene	U		1.00	5.00	1	10/25/2015 14:36	WG824210
n-Propylbenzene	U		0.349	1.00	1	10/25/2015 14:36	WG824210
Styrene	U		0.307	1.00	1	10/25/2015 14:36	WG824210
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/25/2015 14:36	WG824210
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2015 14:36	WG824210
Tetrachloroethene	U		0.372	1.00	1	10/25/2015 14:36	WG824210
Toluene	U		0.780	5.00	1	10/25/2015 14:36	WG824210
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2015 14:36	WG824210
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2015 14:36	WG824210
Trichloroethene	U		0.398	1.00	1	10/25/2015 14:36	WG824210
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/25/2015 14:36	WG824210
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/25/2015 14:36	WG824210
Vinyl chloride	U		0.259	1.00	1	10/25/2015 14:36	WG824210
o-Xylene	U		0.341	1.00	1	10/25/2015 14:36	WG824210
m&p-Xylene	U		0.719	1.00	1	10/25/2015 14:36	WG824210
Xylenes, Total	U		1.06	3.00	1	10/25/2015 14:36	WG824210
(S) Toluene-d8	98.8			90.0-115		10/25/2015 14:36	WG824210
(S) Dibromofluoromethane	97.2			79.0-121		10/25/2015 14:36	WG824210
(S) 4-Bromofluorobenzene	93.8			80.1-120		10/25/2015 14:36	WG824210

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 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/27/2015 14:00	WG824566
Benzene	U		0.331	1.00	1	10/27/2015 14:00	WG824566
Bromodichloromethane	U		0.380	1.00	1	10/27/2015 14:00	WG824566
Bromoform	U		0.469	1.00	1	10/27/2015 14:00	WG824566
Bromomethane	U		0.866	5.00	1	10/27/2015 14:00	WG824566
n-Butylbenzene	U		0.361	1.00	1	10/27/2015 14:00	WG824566
sec-Butylbenzene	U		0.365	1.00	1	10/27/2015 14:00	WG824566
Carbon disulfide	U		0.275	1.00	1	10/27/2015 14:00	WG824566
Carbon tetrachloride	U		0.379	1.00	1	10/27/2015 14:00	WG824566
Chlorobenzene	U		0.348	1.00	1	10/27/2015 14:00	WG824566
Chlorodibromomethane	U		0.327	1.00	1	10/27/2015 14:00	WG824566
Chloroethane	U		0.453	5.00	1	10/27/2015 14:00	WG824566
Chloroform	U		0.324	5.00	1	10/27/2015 14:00	WG824566
Chloromethane	U		0.276	2.50	1	10/27/2015 14:00	WG824566
1,2-Dibromoethane	U		0.381	1.00	1	10/27/2015 14:00	WG824566
1,1-Dichloroethane	U		0.259	1.00	1	10/27/2015 14:00	WG824566
1,2-Dichloroethane	U		0.361	1.00	1	10/27/2015 14:00	WG824566
1,1-Dichloroethene	U		0.398	1.00	1	10/27/2015 14:00	WG824566
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/27/2015 14:00	WG824566
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/27/2015 14:00	WG824566
1,2-Dichloropropane	U		0.306	1.00	1	10/27/2015 14:00	WG824566
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/27/2015 14:00	WG824566
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/27/2015 14:00	WG824566
Ethylbenzene	U		0.384	1.00	1	10/27/2015 14:00	WG824566
Isopropylbenzene	U		0.326	1.00	1	10/27/2015 14:00	WG824566
p-Isopropyltoluene	U		0.350	1.00	1	10/27/2015 14:00	WG824566
2-Butanone (MEK)	U		3.93	10.0	1	10/27/2015 14:00	WG824566
2-Hexanone	U		3.82	10.0	1	10/27/2015 14:00	WG824566
Methylene Chloride	U		1.00	5.00	1	10/27/2015 14:00	WG824566
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/27/2015 14:00	WG824566
Methyl tert-butyl ether	U		0.367	1.00	1	10/27/2015 14:00	WG824566
Naphthalene	U		1.00	5.00	1	10/27/2015 14:00	WG824566
n-Propylbenzene	U		0.349	1.00	1	10/27/2015 14:00	WG824566
Styrene	U		0.307	1.00	1	10/27/2015 14:00	WG824566
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/27/2015 14:00	WG824566
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/27/2015 14:00	WG824566
Tetrachloroethene	U		0.372	1.00	1	10/27/2015 14:00	WG824566
Toluene	U		0.780	5.00	1	10/27/2015 14:00	WG824566
1,1,1-Trichloroethane	U		0.319	1.00	1	10/27/2015 14:00	WG824566
1,1,2-Trichloroethane	U		0.383	1.00	1	10/27/2015 14:00	WG824566
Trichloroethene	U		0.398	1.00	1	10/27/2015 14:00	WG824566
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/27/2015 14:00	WG824566
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/27/2015 14:00	WG824566
Vinyl chloride	U		0.259	1.00	1	10/27/2015 14:00	WG824566
o-Xylene	U		0.341	1.00	1	10/27/2015 14:00	WG824566
m&p-Xylene	U		0.719	1.00	1	10/27/2015 14:00	WG824566
Xylenes, Total	U		1.06	3.00	1	10/27/2015 14:00	WG824566
(S) Toluene-d8	98.3			90.0-115		10/27/2015 14:00	WG824566
(S) Dibromofluoromethane	94.1			79.0-121		10/27/2015 14:00	WG824566
(S) 4-Bromofluorobenzene	95.1			80.1-120		10/27/2015 14:00	WG824566

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) 10/26/15 03:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L795831-16 Original Sample (OS) • Duplicate (DUP)

(OS) 10/26/15 03:37 • (DUP) 10/26/15 03:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1900	1920	1	1.05		5

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

(LCS) 10/26/15 03:37 • (LCSD) 10/26/15 03:36

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8120	8190	92.3	93.1	85.0-115			0.858	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/27/15 15:03

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798475-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 15:04 • (DUP) 10/27/15 15:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3000	2980	1	0.669		5

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

(LCS) 10/27/15 15:03 • (LCSD) 10/27/15 15:04

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8550	8600	97.2	97.7	85.0-115			0.583	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/28/15 15:38

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0210		0.0197	0.100

L795810-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 15:49 • (DUP) 10/28/15 15:50

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.147	0.138	1	6.00		20

L795810-20 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 16:06 • (DUP) 10/28/15 16:07

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	9.00		20

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

(LCS) 10/28/15 15:41 • (LCSD) 10/28/15 15:42

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.11	5.25	102	105	90.0-110			3.00	20

L795810-10 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/28/15 15:55 • (MS) 10/28/15 15:56

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	5.00	0.144	4.14	80.0	1	90.0-110	F

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L795875-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:12 • (MS) 10/28/15 16:13 • (MSD) 10/28/15 16:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.125	4.45	4.43	86.0	86.0	1	90.0-110	E	E	0.000	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/29/15 16:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0200		0.0197	0.100

L796127-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:07 • (DUP) 10/29/15 17:08

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	9.00		20

L796127-16 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:24 • (DUP) 10/29/15 17:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	51.0	*	20

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

(LCS) 10/29/15 17:00 • (LCSD) 10/29/15 17:01

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.16	5.33	103	107	90.0-110			3.00	20

L796127-10 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/29/15 17:13 • (MS) 10/29/15 17:14

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	0.500	0.0900	50.8	101	10	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796252-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 17:30 • (MS) 10/29/15 17:31 • (MSD) 10/29/15 17:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	0.500	19.3	65.6	65.7	93.0	93.0	10	90.0-110			0.000	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/23/15 19:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.0531		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795844-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 00:42 • (DUP) 10/24/15 00:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.32	2.31	1	0		20
Fluoride	0.0305	0.0293	1	0		20
Sulfate	2.08	2.04	1	0		20

L795847-07 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 09:33 • (DUP) 10/24/15 09:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.63	7.61	1	0		20
Fluoride	0.0576	0.0546	1	0		20
Sulfate	5.70	5.64	1	1		20

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

(LCS) 10/23/15 19:36 • (LCSD) 10/23/15 19:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.6	40.7	101	102	90-110			0	20
Fluoride	8.00	8.07	8.13	101	102	90-110			1	20
Sulfate	40.0	38.5	38.7	96	97	90-110			0	20



L795844-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 01:10 • (MS) 10/24/15 01:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	8.82	60.7	104	1	80-120	
Fluoride	5.00	0.00760	5.19	104	1	80-120	
Sulfate	50.0	0.724	52.0	103	1	80-120	

L795847-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 08:51 • (MS) 10/24/15 09:05 • (MSD) 10/24/15 09:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	1.50	54.2	53.6	105	104	1	80-120			1	20
Fluoride	5.00	0.445	5.68	5.63	105	104	1	80-120			1	20
Sulfate	50.0	29.6	80.3	79.7	101	100	1	80-120			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/24/15 16:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L796122-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 18:23 • (DUP) 10/24/15 18:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9.62	9.63	1	0		20
Fluoride	0.0521	0.0520	1	0	J	20
Sulfate	49.0	49.1	1	0		20

L796122-10 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 23:16 • (DUP) 10/24/15 23:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	10.7	10.7	1	1		20
Fluoride	0.130	0.132	1	1		20
Sulfate	77.2	77.5	1	0		20

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

(LCS) 10/24/15 16:51 • (LCSD) 10/24/15 17:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	39.5	39.3	99	98	90-110			1	20
Fluoride	8.00	7.93	7.89	99	99	90-110			1	20
Sulfate	40.0	40.2	39.9	100	100	90-110			1	20



L796122-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 18:54 • (MS) 10/24/15 19:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	8.56	59.0	101	1	80-120	
Fluoride	5.00	0.135	5.06	99	1	80-120	
Sulfate	50.0	25.4	74.8	99	1	80-120	

L796122-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 23:47 • (MS) 10/25/15 00:03 • (MSD) 10/25/15 00:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	20.2	68.8	68.7	97	97	1	80-120			0	20
Fluoride	5.00	0.261	5.05	5.18	96	98	1	80-120			2	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 18:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/27/15 18:32 • (LCSD) 10/27/15 18:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0489	0.0482	98	96	80-120			1	20
Barium	0.0500	0.0508	0.0509	102	102	80-120			0	20
Calcium	5.00	5.07	5.03	101	101	80-120			1	20
Chromium	0.0500	0.0510	0.0505	102	101	80-120			1	20
Iron	5.00	4.99	4.91	100	98	80-120			2	20
Lead	0.0500	0.0514	0.0512	103	102	80-120			0	20
Manganese	0.0500	0.0494	0.0491	99	98	80-120			1	20
Potassium	5.00	4.96	5.01	99	100	80-120			1	20
Selenium	0.0500	0.0479	0.0471	96	94	80-120			2	20
Sodium	5.00	5.25	5.26	105	105	80-120			0	20

L798300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:36 • (MS) 10/27/15 18:41 • (MSD) 10/27/15 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00635	0.0566	0.0582	101	104	1	75-125			3	20
Barium	0.0500	0.00939	0.0606	0.0616	102	104	1	75-125			2	20
Calcium	5.00	530	525	526	0	0	1	75-125	<u>4</u>	<u>4</u>	0	20



L798300-02

L798300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:36 • (MS) 10/27/15 18:41 • (MSD) 10/27/15 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium	0.0500	0.000124	0.0467	0.0468	93	93	1	75-125			0	20
Potassium	5.00	2.00	6.87	6.86	97	97	1	75-125			0	20
Iron	5.00	0.00328	4.57	4.56	91	91	1	75-125			0	20
Lead	0.0500	0.000127	0.0499	0.0500	100	100	1	75-125			0	20
Manganese	0.0500	0.658	0.688	0.689	59	62	1	75-125	4	4	0	20
Selenium	0.0500	0.0290	0.0776	0.0771	97	96	1	75-125			1	20
Sodium	5.00	436	436	436	1	0	1	75-125	4	4	0	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) 10/28/15 16:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/28/15 16:37 • (LCSD) 10/28/15 16:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0495	0.0495	99	99	80-120			0	20
Barium	0.0500	0.0506	0.0498	101	100	80-120			2	20
Calcium	5.00	5.05	5.03	101	101	80-120			0	20
Chromium	0.0500	0.0497	0.0492	99	98	80-120			1	20
Iron	5.00	4.86	4.82	97	96	80-120			1	20
Lead	0.0500	0.0499	0.0499	100	100	80-120			0	20
Manganese	0.0500	0.0499	0.0484	100	97	80-120			3	20
Potassium	5.00	4.99	5.10	100	102	80-120			2	20
Selenium	0.0500	0.0489	0.0488	98	98	80-120			0	20
Sodium	5.00	4.99	5.11	100	102	80-120			2	20

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:42 • (MS) 10/28/15 16:46 • (MSD) 10/28/15 16:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00368	0.0565	0.0552	106	103	1	75-125			2	20
Barium	0.0500	0.0134	0.0640	0.0636	101	101	1	75-125			1	20
Chromium	0.0500	0.000393	0.0469	0.0470	93	93	1	75-125			0	20



L798300-01

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:42 • (MS) 10/28/15 16:46 • (MSD) 10/28/15 16:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Potassium	5.00	1.70	6.48	6.56	96	97	1	75-125			1	20
Iron	5.00	0.0193	4.58	4.58	91	91	1	75-125			0	20
Lead	0.0500	0.000120	0.0494	0.0497	98	99	1	75-125			1	20
Manganese	0.0500	0.110	0.155	0.153	90	87	1	75-125			1	20
Selenium	0.0500	0.00109	0.0529	0.0516	104	101	1	75-125			2	20
Sodium	5.00	157	160	161	57	88	1	75-125	4		1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 08:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.5			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/28/15 07:26 • (LCSD) 10/28/15 07:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.88	4.90	88.7	89.2	67.0-132			0.570	20
(S) a,a,a-Trifluorotoluene(FID)				100	100	62.0-128				

L796056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 12:27 • (MS) 10/28/15 09:07 • (MSD) 10/28/15 09:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.727	5.15	5.54	80.4	87.5	1	50.0-143			7.35	20
(S) a,a,a-Trifluorotoluene(FID)					99.4	101		62.0-128				



Method Blank (MB)

(MB) 10/25/15 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Naphthalene	U		0.00100	0.00500
Tetrachloroethene	U		0.000372	0.00100
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
Toluene	U		0.000780	0.00500
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) 10/25/15 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,1-Trichloroethane	U		0.000319	0.00100
Trichloroethene	U		0.000398	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	99.5			90.0-115
(S) Dibromofluoromethane	96.7			79.0-121
(S) 4-Bromofluorobenzene	87.6			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/25/15 09:52 • (LCSD) 10/25/15 10:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.101	0.100	81.1	80.3	28.7-175			1.02	20.9
Benzene	0.0250	0.0244	0.0244	97.5	97.8	73.0-122			0.240	20
Bromodichloromethane	0.0250	0.0239	0.0240	95.7	95.9	75.5-121			0.260	20
Bromoform	0.0250	0.0276	0.0281	110	112	71.5-131			1.85	20
Bromomethane	0.0250	0.0250	0.0251	99.9	101	22.4-187			0.630	20
n-Butylbenzene	0.0250	0.0243	0.0257	97.1	103	75.9-134			5.58	20
sec-Butylbenzene	0.0250	0.0238	0.0250	95.1	100	80.6-126			5.14	20
Carbon tetrachloride	0.0250	0.0256	0.0256	103	102	70.9-129			0.280	20
Chlorobenzene	0.0250	0.0254	0.0259	102	103	79.7-122			1.84	20
Chlorodibromomethane	0.0250	0.0253	0.0255	101	102	78.2-124			0.790	20
Chloroethane	0.0250	0.0241	0.0231	96.5	92.3	41.2-153			4.44	20
Chloroform	0.0250	0.0234	0.0238	93.8	95.0	73.2-125			1.32	20
Chloromethane	0.0250	0.0243	0.0242	97.4	96.7	55.8-134			0.690	20
1,2-Dibromoethane	0.0250	0.0240	0.0244	95.9	97.7	79.8-122			1.90	20
1,1-Dichloroethane	0.0250	0.0245	0.0246	98.0	98.2	71.7-127			0.260	20
1,2-Dichloroethane	0.0250	0.0211	0.0208	84.6	83.1	65.3-126			1.71	20
1,1-Dichloroethene	0.0250	0.0225	0.0225	89.8	89.9	59.9-137			0.100	20
cis-1,2-Dichloroethene	0.0250	0.0248	0.0244	99.2	97.7	77.3-122			1.54	20

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

(LCS) 10/25/15 09:52 • (LCSD) 10/25/15 10:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,2-Dichloroethene	0.0250	0.0248	0.0244	99.2	97.8	72.6-125			1.47	20
1,2-Dichloropropane	0.0250	0.0258	0.0264	103	106	77.4-125			2.19	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0266	104	106	77.7-124			2.03	20
trans-1,3-Dichloropropene	0.0250	0.0244	0.0245	97.8	98.0	73.5-127			0.170	20
Ethylbenzene	0.0250	0.0249	0.0259	99.8	104	80.9-121			3.70	20
2-Hexanone	0.125	0.119	0.121	95.3	96.6	59.4-151			1.40	20
Isopropylbenzene	0.0250	0.0246	0.0254	98.4	101	81.6-124			3.06	20
p-Isopropyltoluene	0.0250	0.0244	0.0257	97.7	103	77.6-129			5.20	20
2-Butanone (MEK)	0.125	0.115	0.114	91.8	91.2	46.4-155			0.620	20
Methylene Chloride	0.0250	0.0209	0.0205	83.6	82.2	69.5-120			1.69	20
4-Methyl-2-pentanone (MIBK)	0.125	0.103	0.104	82.8	83.2	63.3-138			0.500	20
Naphthalene	0.0250	0.0213	0.0217	85.0	86.8	69.7-134			2.11	20
n-Propylbenzene	0.0250	0.0241	0.0250	96.2	99.8	81.9-122			3.66	20
Styrene	0.0250	0.0238	0.0244	95.2	97.5	79.9-124			2.39	20
1,1,1,2-Tetrachloroethane	0.0250	0.0259	0.0261	104	104	78.5-125			0.730	20
1,1,2,2-Tetrachloroethane	0.0250	0.0229	0.0237	91.7	95.0	79.3-123			3.57	20
Tetrachloroethene	0.0250	0.0278	0.0286	111	115	73.5-130			3.13	20
Toluene	0.0250	0.0243	0.0248	97.3	99.1	77.9-116			1.82	20
1,1,1-Trichloroethane	0.0250	0.0237	0.0237	94.7	94.7	71.1-129			0.0600	20
1,1,2-Trichloroethane	0.0250	0.0243	0.0241	97.3	96.3	81.6-120			1.05	20
Trichloroethene	0.0250	0.0277	0.0278	111	111	79.5-121			0.470	20
1,2,4-Trimethylbenzene	0.0250	0.0239	0.0248	95.5	99.4	79.0-122			3.93	20
1,3,5-Trimethylbenzene	0.0250	0.0244	0.0250	97.4	100	81.0-123			2.74	20
Vinyl chloride	0.0250	0.0230	0.0235	92.1	94.1	61.5-134			2.09	20
Xylenes, Total	0.0750	0.0762	0.0777	102	104	79.2-122			1.87	20
o-Xylene	0.0250	0.0251	0.0256	100	102	79.1-123			2.03	20
m&p-Xylenes	0.0500	0.0511	0.0521	102	104	78.5-122			1.79	20
(S) Toluene-d8				101	101	90.0-115				
(S) Dibromofluoromethane				93.2	93.3	79.0-121				
(S) 4-Bromofluorobenzene				91.9	92.3	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
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L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.111	0.164	0.143	43.0	26.0	1	25.0-156			13.8	21.5
Benzene	0.0250	0.000765	0.0239	0.0228	92.4	88.1	1	58.6-133			4.62	20
Bromodichloromethane	0.0250	0.000770	0.0240	0.0231	93.1	89.3	1	69.2-127			4.00	20
Bromoform	0.0250	ND	0.0300	0.0272	120	109	1	66.3-140			9.62	20
Bromomethane	0.0250	ND	0.0216	0.0198	86.6	79.4	1	16.6-183			8.71	20.5
n-Butylbenzene	0.0250	ND	0.0251	0.0239	100	95.7	1	64.8-145			4.67	20
sec-Butylbenzene	0.0250	ND	0.0234	0.0222	93.5	88.9	1	66.8-139			5.02	20
Carbon tetrachloride	0.0250	ND	0.0253	0.0238	101	95.4	1	60.6-139			6.01	20
Chlorobenzene	0.0250	ND	0.0246	0.0229	98.5	91.4	1	70.1-130			7.42	20
Chlorodibromomethane	0.0250	ND	0.0254	0.0236	102	94.5	1	71.6-132			7.38	20
Chloroethane	0.0250	ND	0.0213	0.0209	85.3	83.5	1	33.3-155			2.14	20
Chloroform	0.0250	0.00564	0.0284	0.0269	91.2	85.2	1	66.1-133			5.49	20
Chloromethane	0.0250	ND	0.0209	0.0198	83.7	79.3	1	40.7-139			5.46	20
1,2-Dibromoethane	0.0250	ND	0.0251	0.0234	100	93.6	1	73.8-131			6.95	20
1,1-Dichloroethane	0.0250	ND	0.0239	0.0225	95.5	90.0	1	64.0-134			5.88	20
1,2-Dichloroethane	0.0250	ND	0.0204	0.0194	81.8	77.7	1	60.7-132			5.11	20
1,1-Dichloroethene	0.0250	ND	0.0206	0.0197	82.3	78.9	1	48.8-144			4.23	20
trans-1,2-Dichloroethene	0.0250	ND	0.0224	0.0212	89.5	84.7	1	61.0-132			5.49	20
cis-1,2-Dichloroethene	0.0250	ND	0.0236	0.0226	94.4	90.5	1	60.6-136			4.12	20
1,2-Dichloropropane	0.0250	0.00142	0.0247	0.0241	93.0	90.9	1	69.7-130			2.18	20
cis-1,3-Dichloropropene	0.0250	ND	0.0245	0.0230	97.9	92.1	1	71.1-129			6.13	20
trans-1,3-Dichloropropene	0.0250	0.000656	0.0242	0.0229	94.2	89.0	1	66.3-136			5.53	20
Ethylbenzene	0.0250	ND	0.0244	0.0231	97.4	92.3	1	62.7-136			5.42	20
2-Hexanone	0.125	ND	0.122	0.114	97.4	91.3	1	59.4-154			6.48	20.1
Isopropylbenzene	0.0250	ND	0.0240	0.0227	96.2	90.9	1	67.4-136			5.71	20
p-Isopropyltoluene	0.0250	ND	0.0237	0.0226	94.8	90.4	1	62.8-143			4.71	20
Methylene Chloride	0.0250	0.000546	0.0198	0.0184	76.9	71.3	1	61.5-125			7.22	20
2-Butanone (MEK)	0.125	0.00478	0.114	0.109	87.0	83.2	1	45.0-156			4.30	20.8
4-Methyl-2-pentanone (MIBK)	0.125	0.000534	0.127	0.122	101	97.4	1	60.7-150			3.97	20
Naphthalene	0.0250	0.00125	0.0255	0.0257	96.9	97.8	1	61.8-143			0.850	20
n-Propylbenzene	0.0250	ND	0.0235	0.0223	94.0	89.1	1	63.2-139			5.34	20
Styrene	0.0250	ND	0.0213	0.0205	85.3	81.8	1	68.2-133			4.13	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0255	0.0235	102	94.1	1	70.5-132			7.95	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0262	0.0251	105	100	1	64.9-145			4.56	20
Tetrachloroethene	0.0250	ND	0.0261	0.0246	104	98.5	1	57.4-141			5.65	20
Toluene	0.0250	ND	0.0231	0.0224	92.5	89.5	1	67.8-124			3.28	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	0.0250	ND	0.0234	0.0223	93.5	89.3	1	58.7-134			4.50	20
Trichloroethene	0.0250	0.000956	0.0265	0.0255	102	98.3	1	48.9-148			3.59	20
1,1,2-Trichloroethane	0.0250	ND	0.0245	0.0235	98.0	93.9	1	74.1-130			4.26	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0230	0.0220	91.9	87.9	1	60.5-137			4.40	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0235	0.0225	94.1	89.9	1	67.9-134			4.55	20
Vinyl chloride	0.0250	ND	0.0211	0.0202	84.5	80.8	1	44.3-143			4.43	20
Xylenes, Total	0.0750	ND	0.0736	0.0685	98.1	91.4	1	65.6-133			7.16	20
o-Xylene	0.0250	ND	0.0240	0.0223	95.9	89.4	1	67.1-133			7.08	20
m&p-Xylenes	0.0500	ND	0.0496	0.0462	99.2	92.3	1	64.1-133			7.19	20
(S) Toluene-d8					99.4	101		90.0-115				
(S) Dibromofluoromethane					94.5	96.0		79.0-121				
(S) 4-Bromofluorobenzene					90.8	91.5		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/26/15 09:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/26/15 09:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	96.7			90.0-115
(S) Dibromofluoromethane	95.5			79.0-121
(S) 4-Bromofluorobenzene	96.8			80.1-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/26/15 07:59 • (LCSD) 10/26/15 08:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0992	0.0970	79.3	77.6	28.7-175			2.24	20.9
Benzene	0.0250	0.0247	0.0249	98.7	99.5	73.0-122			0.770	20
Bromodichloromethane	0.0250	0.0223	0.0230	89.3	92.0	75.5-121			2.92	20
Bromoform	0.0250	0.0266	0.0274	107	110	71.5-131			2.80	20
Bromomethane	0.0250	0.0223	0.0231	89.3	92.3	22.4-187			3.36	20
n-Butylbenzene	0.0250	0.0244	0.0246	97.4	98.4	75.9-134			1.04	20
sec-Butylbenzene	0.0250	0.0262	0.0275	105	110	80.6-126			4.87	20
Carbon disulfide	0.0250	0.0219	0.0224	87.7	89.5	53.0-134			2.09	20
Carbon tetrachloride	0.0250	0.0244	0.0246	97.7	98.5	70.9-129			0.780	20
Chlorobenzene	0.0250	0.0270	0.0282	108	113	79.7-122			4.36	20
Chlorodibromomethane	0.0250	0.0267	0.0279	107	112	78.2-124			4.41	20
Chloroethane	0.0250	0.0186	0.0191	74.4	76.5	41.2-153			2.80	20
Chloroform	0.0250	0.0230	0.0238	92.2	95.3	73.2-125			3.27	20
Chloromethane	0.0250	0.0191	0.0194	76.4	77.6	55.8-134			1.57	20
1,2-Dibromoethane	0.0250	0.0270	0.0274	108	109	79.8-122			1.33	20
1,1-Dichloroethane	0.0250	0.0225	0.0229	89.9	91.7	71.7-127			1.96	20

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

(LCS) 10/26/15 07:59 • (LCSD) 10/26/15 08:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0203	0.0205	81.0	82.0	65.3-126			1.22	20
1,1-Dichloroethene	0.0250	0.0198	0.0202	79.4	80.9	59.9-137			1.91	20
cis-1,2-Dichloroethene	0.0250	0.0257	0.0262	103	105	77.3-122			1.77	20
trans-1,2-Dichloroethene	0.0250	0.0258	0.0261	103	104	72.6-125			1.32	20
1,2-Dichloropropane	0.0250	0.0225	0.0232	90.1	92.6	77.4-125			2.71	20
cis-1,3-Dichloropropene	0.0250	0.0235	0.0242	94.2	96.8	77.7-124			2.75	20
trans-1,3-Dichloropropene	0.0250	0.0232	0.0236	93.0	94.4	73.5-127			1.52	20
Ethylbenzene	0.0250	0.0271	0.0284	108	114	80.9-121			4.74	20
2-Hexanone	0.125	0.109	0.110	87.4	88.2	59.4-151			0.850	20
Isopropylbenzene	0.0250	0.0260	0.0274	104	109	81.6-124			4.98	20
p-Isopropyltoluene	0.0250	0.0262	0.0274	105	110	77.6-129			4.68	20
2-Butanone (MEK)	0.125	0.0785	0.0775	62.8	62.0	46.4-155			1.28	20
Methylene Chloride	0.0250	0.0232	0.0236	92.9	94.4	69.5-120			1.57	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0822	0.0842	65.7	67.3	63.3-138			2.40	20
Methyl tert-butyl ether	0.0250	0.0220	0.0226	87.9	90.6	70.1-125			3.02	20
Naphthalene	0.0250	0.0250	0.0252	100	101	69.7-134			0.790	20
n-Propylbenzene	0.0250	0.0254	0.0264	102	106	81.9-122			3.77	20
Styrene	0.0250	0.0268	0.0280	107	112	79.9-124			4.55	20
1,1,1,2-Tetrachloroethane	0.0250	0.0265	0.0279	106	111	78.5-125			4.99	20
1,1,2,2-Tetrachloroethane	0.0250	0.0248	0.0261	99.2	104	79.3-123			5.03	20
Tetrachloroethene	0.0250	0.0279	0.0287	112	115	73.5-130			2.86	20
Toluene	0.0250	0.0244	0.0250	97.4	100	77.9-116			2.56	20
1,1,1-Trichloroethane	0.0250	0.0232	0.0239	92.8	95.5	71.1-129			2.88	20
1,1,2-Trichloroethane	0.0250	0.0268	0.0273	107	109	81.6-120			1.90	20
Trichloroethene	0.0250	0.0260	0.0262	104	105	79.5-121			0.640	20
1,2,4-Trimethylbenzene	0.0250	0.0255	0.0268	102	107	79.0-122			5.04	20
1,3,5-Trimethylbenzene	0.0250	0.0252	0.0267	101	107	81.0-123			5.58	20
Vinyl chloride	0.0250	0.0191	0.0195	76.2	77.8	61.5-134			2.10	20
Xylenes, Total	0.0750	0.0803	0.0836	107	111	79.2-122			4.03	20
o-Xylene	0.0250	0.0270	0.0283	108	113	79.1-123			4.54	20
m&p-Xylenes	0.0500	0.0532	0.0553	106	111	78.5-122			3.77	20
(S) Toluene-d8				96.1	97.5	90.0-115				
(S) Dibromofluoromethane				94.7	95.2	79.0-121				
(S) 4-Bromofluorobenzene				96.7	98.9	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 14:54 • (MS) 10/26/15 15:15 • (MSD) 10/26/15 15:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00105	0.0444	0.0459	34.7	35.9	1	25.0-156			3.34	21.5
Benzene	0.0250	ND	0.0236	0.0217	94.4	86.7	1	58.6-133			8.51	20
Bromodichloromethane	0.0250	ND	0.0234	0.0218	93.6	87.1	1	69.2-127			7.17	20
Bromoform	0.0250	ND	0.0274	0.0246	110	98.4	1	66.3-140			10.8	20
Bromomethane	0.0250	ND	0.0176	0.0162	70.5	65.0	1	16.6-183			8.17	20.5
n-Butylbenzene	0.0250	ND	0.0248	0.0236	99.0	94.2	1	64.8-145			4.98	20
sec-Butylbenzene	0.0250	ND	0.0272	0.0253	109	101	1	66.8-139			7.11	20
Carbon disulfide	0.0250	ND	0.0132	0.0121	52.9	48.5	1	34.9-138			8.60	20
Carbon tetrachloride	0.0250	ND	0.0241	0.0223	96.6	89.3	1	60.6-139			7.79	20
Chlorobenzene	0.0250	ND	0.0274	0.0256	110	103	1	70.1-130			6.83	20
Chlorodibromomethane	0.0250	ND	0.0281	0.0255	112	102	1	71.6-132			9.54	20
Chloroethane	0.0250	ND	0.0163	0.0149	65.2	59.7	1	33.3-155			8.82	20
Chloroform	0.0250	ND	0.0242	0.0225	96.8	90.1	1	66.1-133			7.17	20
Chloromethane	0.0250	ND	0.0139	0.0129	55.5	51.5	1	40.7-139			7.54	20
1,2-Dibromoethane	0.0250	ND	0.0276	0.0252	110	101	1	73.8-131			8.92	20
1,1-Dichloroethane	0.0250	ND	0.0230	0.0211	92.1	84.3	1	64.0-134			8.88	20
1,2-Dichloroethane	0.0250	ND	0.0207	0.0187	82.9	74.9	1	60.7-132			10.2	20
1,1-Dichloroethene	0.0250	ND	0.0183	0.0168	73.3	67.3	1	48.8-144			8.56	20
cis-1,2-Dichloroethene	0.0250	ND	0.0259	0.0241	104	96.3	1	60.6-136			7.26	20
trans-1,2-Dichloroethene	0.0250	ND	0.0230	0.0214	92.1	85.7	1	61.0-132			7.23	20
1,2-Dichloropropane	0.0250	ND	0.0233	0.0217	93.2	86.7	1	69.7-130			7.30	20
cis-1,3-Dichloropropene	0.0250	ND	0.0235	0.0218	94.0	87.1	1	71.1-129			7.64	20
trans-1,3-Dichloropropene	0.0250	ND	0.0238	0.0218	95.3	87.3	1	66.3-136			8.68	20
Ethylbenzene	0.0250	ND	0.0274	0.0252	109	101	1	62.7-136			8.13	20
2-Hexanone	0.125	ND	0.116	0.103	92.8	82.6	1	59.4-154			11.6	20.1
Isopropylbenzene	0.0250	ND	0.0269	0.0250	108	99.8	1	67.4-136			7.64	20
p-Isopropyltoluene	0.0250	ND	0.0269	0.0252	107	101	1	62.8-143			6.20	20
2-Butanone (MEK)	0.125	ND	0.0618	0.0549	49.5	43.9	1	45.0-156		E	11.8	20.8
Methylene Chloride	0.0250	ND	0.0222	0.0203	88.9	81.4	1	61.5-125			8.77	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0896	0.0807	71.7	64.6	1	60.7-150			10.5	20
Methyl tert-butyl ether	0.0250	ND	0.0231	0.0211	92.5	84.6	1	61.4-136			8.90	20
Naphthalene	0.0250	ND	0.0251	0.0252	100	101	1	61.8-143			0.360	20
n-Propylbenzene	0.0250	ND	0.0260	0.0240	104	96.1	1	63.2-139			7.68	20
Styrene	0.0250	ND	0.0272	0.0252	109	101	1	68.2-133			7.48	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0277	0.0258	111	103	1	70.5-132			7.14	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0271	0.0248	108	99.3	1	64.9-145			8.73	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 14:54 • (MS) 10/26/15 15:15 • (MSD) 10/26/15 15:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0262	0.0242	105	96.8	1	57.4-141			8.04	20
Toluene	0.0250	ND	0.0239	0.0224	95.8	89.6	1	67.8-124			6.69	20
1,1,1-Trichloroethane	0.0250	ND	0.0239	0.0219	95.7	87.6	1	58.7-134			8.80	20
1,1,2-Trichloroethane	0.0250	ND	0.0281	0.0254	112	102	1	74.1-130			10.0	20
Trichloroethene	0.0250	ND	0.0250	0.0232	99.9	92.7	1	48.9-148			7.39	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0258	0.0243	103	97.2	1	60.5-137			6.06	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0261	0.0244	104	97.5	1	67.9-134			6.65	20
Vinyl chloride	0.0250	ND	0.0154	0.0140	61.5	56.2	1	44.3-143			9.11	20
Xylenes, Total	0.0750	ND	0.0805	0.0745	107	99.3	1	65.6-133			7.81	20
o-Xylene	0.0250	ND	0.0274	0.0253	109	101	1	67.1-133			7.73	20
m&p-Xylenes	0.0500	ND	0.0531	0.0491	106	98.3	1	64.1-133			7.85	20
(S) Toluene-d8					97.4	97.4		90.0-115				
(S) Dibromofluoromethane					96.7	94.6		79.0-121				
(S) 4-Bromofluorobenzene					98.3	96.3		80.1-120				

L795279-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 16:37 • (MS) 10/26/15 15:56 • (MSD) 10/26/15 16:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.373	17.5	17.5	68.6	68.6	200	25.0-156			0.0600	21.5
Benzene	0.0250	0.0267	3.45	3.42	68.5	67.9	200	58.6-133			0.930	20
Bromodichloromethane	0.0250	ND	3.94	3.89	78.8	77.9	200	69.2-127			1.12	20
Bromoform	0.0250	ND	4.92	4.86	98.4	97.1	200	66.3-140			1.28	20
Bromomethane	0.0250	ND	1.98	1.91	39.5	38.1	200	16.6-183			3.63	20.5
n-Butylbenzene	0.0250	0.0645	4.52	4.52	89.1	89.1	200	64.8-145			0.0600	20
sec-Butylbenzene	0.0250	0.0290	4.83	4.79	96.0	95.2	200	66.8-139			0.750	20
Carbon disulfide	0.0250	ND	0.803	0.795	16.1	15.9	200	34.9-138	F	F	0.990	20
Carbon tetrachloride	0.0250	ND	3.57	3.55	71.3	71.0	200	60.6-139			0.530	20
Chlorobenzene	0.0250	0.0125	4.64	4.57	92.5	91.2	200	70.1-130			1.47	20
Chlorodibromomethane	0.0250	ND	4.99	4.98	99.8	99.7	200	71.6-132			0.110	20
Chloroethane	0.0250	ND	1.95	1.92	39.1	38.4	200	33.3-155			1.83	20
Chloroform	0.0250	ND	4.02	3.99	80.4	79.8	200	66.1-133			0.640	20
Chloromethane	0.0250	ND	1.39	1.39	27.9	27.9	200	40.7-139	F	F	0.0200	20
1,2-Dibromoethane	0.0250	ND	4.47	4.46	89.4	89.3	200	73.8-131			0.210	20
1,1-Dichloroethane	0.0250	ND	3.60	3.52	72.1	70.4	200	64.0-134			2.35	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L795279-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 16:37 • (MS) 10/26/15 15:56 • (MSD) 10/26/15 16:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	ND	3.26	3.22	65.3	64.5	200	60.7-132			1.28	20
1,1-Dichloroethene	0.0250	ND	2.28	2.25	45.6	45.0	200	48.8-144	F	F	1.27	20
cis-1,2-Dichloroethene	0.0250	0.245	4.12	4.19	77.6	79.0	200	60.6-136			1.68	20
trans-1,2-Dichloroethene	0.0250	ND	2.87	2.84	57.4	56.9	200	61.0-132	F	F	0.870	20
1,2-Dichloropropane	0.0250	0.226	3.85	3.77	72.5	70.8	200	69.7-130			2.24	20
cis-1,3-Dichloropropene	0.0250	ND	3.82	3.79	76.4	75.8	200	71.1-129			0.770	20
trans-1,3-Dichloropropene	0.0250	0.103	4.00	3.77	77.9	73.4	200	66.3-136			5.83	20
Ethylbenzene	0.0250	0.0321	4.46	4.47	88.6	88.7	200	62.7-136			0.110	20
2-Hexanone	0.125	0.394	19.9	19.7	77.9	77.4	200	59.4-154			0.590	20.1
Isopropylbenzene	0.0250	0.0128	4.58	4.57	91.4	91.1	200	67.4-136			0.350	20
p-Isopropyltoluene	0.0250	0.0347	4.78	4.81	95.0	95.5	200	62.8-143			0.520	20
2-Butanone (MEK)	0.125	0.123	13.8	14.0	54.7	55.3	200	45.0-156			1.07	20.8
Methylene Chloride	0.0250	0.0199	3.21	3.17	63.8	63.0	200	61.5-125			1.22	20
4-Methyl-2-pentanone (MIBK)	0.125	0.215	14.9	15.0	58.6	59.2	200	60.7-150	F	F	0.910	20
Methyl tert-butyl ether	0.0250	0.0259	3.87	3.90	76.8	77.5	200	61.4-136			0.820	20
Naphthalene	0.0250	0.386	4.76	4.82	87.4	88.7	200	61.8-143			1.38	20
n-Propylbenzene	0.0250	0.0203	4.46	4.42	88.8	87.9	200	63.2-139			1.04	20
Styrene	0.0250	0.0160	4.72	4.67	94.2	93.0	200	68.2-133			1.25	20
1,1,1,2-Tetrachloroethane	0.0250	ND	5.02	4.90	100	98.1	200	70.5-132			2.27	20
1,1,2,2-Tetrachloroethane	0.0250	0.0293	4.79	4.78	95.1	95.0	200	64.9-145			0.170	20
Tetrachloroethene	0.0250	0.0777	3.91	3.86	76.7	75.6	200	57.4-141			1.49	20
Toluene	0.0250	0.0338	3.66	3.62	72.5	71.6	200	67.8-124			1.16	20
1,1,1-Trichloroethane	0.0250	ND	3.69	3.63	73.7	72.6	200	58.7-134			1.52	20
1,1,2-Trichloroethane	0.0250	ND	4.88	4.88	97.6	97.6	200	74.1-130			0.0700	20
Trichloroethene	0.0250	9.42	12.9	13.2	70.4	75.1	200	48.9-148			1.77	20
1,2,4-Trimethylbenzene	0.0250	0.0575	4.65	4.63	91.8	91.4	200	60.5-137			0.490	20
1,3,5-Trimethylbenzene	0.0250	0.0437	4.56	4.51	90.4	89.3	200	67.9-134			1.21	20
Vinyl chloride	0.0250	ND	1.68	1.62	33.6	32.4	200	44.3-143	F	F	3.72	20
Xylenes, Total	0.0750	ND	13.3	13.2	88.7	87.8	200	65.6-133			0.970	20
o-Xylene	0.0250	0.0346	4.60	4.59	91.3	91.1	200	67.1-133			0.290	20
m&p-Xylenes	0.0500	0.0759	8.70	8.59	86.3	85.1	200	64.1-133			1.33	20
(S) Toluene-d8					95.8	95.6		90.0-115				
(S) Dibromofluoromethane					95.8	95.4		79.0-121				
(S) 4-Bromofluorobenzene					98.1	99.7		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 12:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/27/15 12:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	98.1			90.0-115
(S) Dibromofluoromethane	93.9			79.0-121
(S) 4-Bromofluorobenzene	93.7			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/27/15 10:18 • (LCSD) 10/27/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.112	0.104	89.9	82.9	28.7-175			8.12	20.9
Benzene	0.0250	0.0233	0.0231	93.2	92.5	73.0-122			0.750	20
Bromodichloromethane	0.0250	0.0234	0.0230	93.7	92.0	75.5-121			1.87	20
Bromoform	0.0250	0.0296	0.0293	119	117	71.5-131			1.16	20
Bromomethane	0.0250	0.0243	0.0242	97.0	96.9	22.4-187			0.0900	20
n-Butylbenzene	0.0250	0.0225	0.0224	90.0	89.4	75.9-134			0.600	20
sec-Butylbenzene	0.0250	0.0228	0.0234	91.4	93.7	80.6-126			2.48	20
Carbon disulfide	0.0250	0.0226	0.0223	90.5	89.4	53.0-134			1.26	20
Carbon tetrachloride	0.0250	0.0238	0.0240	95.1	95.8	70.9-129			0.800	20
Chlorobenzene	0.0250	0.0257	0.0260	103	104	79.7-122			1.24	20
Chlorodibromomethane	0.0250	0.0263	0.0268	105	107	78.2-124			1.83	20
Chloroethane	0.0250	0.0227	0.0221	90.8	88.5	41.2-153			2.46	20
Chloroform	0.0250	0.0225	0.0225	89.9	90.2	73.2-125			0.340	20
Chloromethane	0.0250	0.0232	0.0229	92.8	91.6	55.8-134			1.25	20
1,2-Dibromoethane	0.0250	0.0260	0.0265	104	106	79.8-122			1.79	20
1,1-Dichloroethane	0.0250	0.0232	0.0232	92.6	92.9	71.7-127			0.250	20

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

(LCS) 10/27/15 10:18 • (LCSD) 10/27/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0209	0.0204	83.7	81.5	65.3-126			2.63	20
1,1-Dichloroethene	0.0250	0.0206	0.0205	82.4	81.9	59.9-137			0.600	20
cis-1,2-Dichloroethene	0.0250	0.0241	0.0239	96.5	95.7	77.3-122			0.810	20
trans-1,2-Dichloroethene	0.0250	0.0234	0.0230	93.8	92.1	72.6-125			1.74	20
1,2-Dichloropropane	0.0250	0.0255	0.0252	102	101	77.4-125			1.05	20
cis-1,3-Dichloropropene	0.0250	0.0263	0.0254	105	102	77.7-124			3.50	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0240	98.0	95.9	73.5-127			2.15	20
Ethylbenzene	0.0250	0.0248	0.0255	99.3	102	80.9-121			2.67	20
2-Hexanone	0.125	0.140	0.133	112	106	59.4-151			5.19	20
Isopropylbenzene	0.0250	0.0242	0.0247	96.9	98.9	81.6-124			2.00	20
p-Isopropyltoluene	0.0250	0.0234	0.0241	93.4	96.2	77.6-129			2.93	20
2-Butanone (MEK)	0.125	0.126	0.117	101	93.4	46.4-155			7.61	20
Methylene Chloride	0.0250	0.0202	0.0197	80.9	78.9	69.5-120			2.46	20
4-Methyl-2-pentanone (MIBK)	0.125	0.110	0.104	88.2	83.1	63.3-138			5.92	20
Methyl tert-butyl ether	0.0250	0.0229	0.0220	91.5	87.8	70.1-125			4.05	20
Naphthalene	0.0250	0.0246	0.0238	98.4	95.2	69.7-134			3.29	20
n-Propylbenzene	0.0250	0.0231	0.0235	92.5	94.0	81.9-122			1.56	20
Styrene	0.0250	0.0244	0.0245	97.7	98.0	79.9-124			0.340	20
1,1,1,2-Tetrachloroethane	0.0250	0.0264	0.0270	106	108	78.5-125			2.06	20
1,1,2,2-Tetrachloroethane	0.0250	0.0245	0.0238	98.1	95.2	79.3-123			3.03	20
Tetrachloroethene	0.0250	0.0267	0.0266	107	106	73.5-130			0.520	20
Toluene	0.0250	0.0235	0.0234	93.8	93.7	77.9-116			0.0800	20
1,1,1-Trichloroethane	0.0250	0.0221	0.0220	88.4	87.9	71.1-129			0.520	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0249	102	99.7	81.6-120			2.38	20
Trichloroethene	0.0250	0.0261	0.0258	104	103	79.5-121			0.950	20
1,2,4-Trimethylbenzene	0.0250	0.0234	0.0240	93.5	96.0	79.0-122			2.56	20
1,3,5-Trimethylbenzene	0.0250	0.0237	0.0242	94.7	96.8	81.0-123			2.19	20
Vinyl chloride	0.0250	0.0220	0.0218	88.1	87.2	61.5-134			1.02	20
Xylenes, Total	0.0750	0.0753	0.0766	100	102	79.2-122			1.66	20
o-Xylene	0.0250	0.0252	0.0259	101	103	79.1-123			2.69	20
m&p-Xylenes	0.0500	0.0501	0.0507	100	101	78.5-122			1.14	20
(S) Toluene-d8				98.2	98.3	90.0-115				
(S) Dibromofluoromethane				92.0	90.3	79.0-121				
(S) 4-Bromofluorobenzene				93.4	96.7	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796395-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:36 • (MS) 10/27/15 13:06 • (MSD) 10/27/15 13:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000483	0.0448	0.0438	35.4	34.7	1	25.0-156			2.17	21.5
Benzene	0.0250	ND	0.0218	0.0223	87.4	89.3	1	58.6-133			2.16	20
Bromodichloromethane	0.0250	ND	0.0220	0.0227	87.9	91.0	1	69.2-127			3.40	20
Bromoform	0.0250	ND	0.0275	0.0280	110	112	1	66.3-140			1.75	20
Bromomethane	0.0250	ND	0.0228	0.0224	91.1	89.8	1	16.6-183			1.46	20.5
n-Butylbenzene	0.0250	ND	0.0219	0.0236	87.6	94.5	1	64.8-145			7.57	20
sec-Butylbenzene	0.0250	ND	0.0227	0.0238	90.7	95.4	1	66.8-139			5.05	20
Carbon disulfide	0.0250	ND	0.0209	0.0214	83.8	85.5	1	34.9-138			2.02	20
Carbon tetrachloride	0.0250	ND	0.0230	0.0237	92.1	94.7	1	60.6-139			2.70	20
Chlorobenzene	0.0250	ND	0.0243	0.0252	97.2	101	1	70.1-130			3.59	20
Chlorodibromomethane	0.0250	ND	0.0244	0.0246	97.5	98.3	1	71.6-132			0.760	20
Chloroethane	0.0250	ND	0.0215	0.0216	85.9	86.3	1	33.3-155			0.510	20
Chloroform	0.0250	ND	0.0216	0.0217	86.2	87.0	1	66.1-133			0.830	20
Chloromethane	0.0250	ND	0.0204	0.0207	81.6	82.7	1	40.7-139			1.36	20
1,2-Dibromoethane	0.0250	ND	0.0243	0.0246	97.2	98.4	1	73.8-131			1.26	20
1,1-Dichloroethane	0.0250	ND	0.0220	0.0222	88.1	89.0	1	64.0-134			0.990	20
1,2-Dichloroethane	0.0250	ND	0.0198	0.0196	79.1	78.4	1	60.7-132			0.840	20
1,1-Dichloroethene	0.0250	ND	0.0198	0.0199	79.3	79.8	1	48.8-144			0.670	20
cis-1,2-Dichloroethene	0.0250	ND	0.0226	0.0229	90.5	91.8	1	60.6-136			1.36	20
trans-1,2-Dichloroethene	0.0250	ND	0.0220	0.0226	87.9	90.3	1	61.0-132			2.75	20
1,2-Dichloropropane	0.0250	ND	0.0238	0.0246	95.1	98.2	1	69.7-130			3.18	20
cis-1,3-Dichloropropene	0.0250	ND	0.0236	0.0245	94.2	97.8	1	71.1-129			3.78	20
trans-1,3-Dichloropropene	0.0250	ND	0.0243	0.0248	97.0	99.3	1	66.3-136			2.30	20
Ethylbenzene	0.0250	ND	0.0240	0.0249	96.1	99.5	1	62.7-136			3.51	20
2-Hexanone	0.125	ND	0.101	0.0986	80.5	78.8	1	59.4-154			2.12	20.1
Isopropylbenzene	0.0250	ND	0.0234	0.0246	93.8	98.5	1	67.4-136			4.92	20
p-Isopropyltoluene	0.0250	ND	0.0232	0.0246	93.0	98.2	1	62.8-143			5.48	20
2-Butanone (MEK)	0.125	ND	0.0795	0.0766	63.6	61.3	1	45.0-156			3.78	20.8
Methylene Chloride	0.0250	ND	0.0188	0.0191	75.1	76.5	1	61.5-125			1.88	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.101	0.100	81.2	80.1	1	60.7-150			1.32	20
Methyl tert-butyl ether	0.0250	ND	0.0218	0.0210	87.0	83.9	1	61.4-136			3.62	20
Naphthalene	0.0250	ND	0.0209	0.0225	83.7	89.9	1	61.8-143			7.12	20
n-Propylbenzene	0.0250	ND	0.0227	0.0238	90.9	95.2	1	63.2-139			4.63	20
Styrene	0.0250	ND	0.0231	0.0238	92.5	95.4	1	68.2-133			3.09	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0248	0.0258	99.2	103	1	70.5-132			3.77	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0236	0.0231	94.4	92.4	1	64.9-145			2.16	20

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

7

Gl

8

Al

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Sc



L796395-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:36 • (MS) 10/27/15 13:06 • (MSD) 10/27/15 13:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0254	0.0262	102	105	1	57.4-141			2.91	20
Toluene	0.0250	ND	0.0221	0.0230	88.4	92.1	1	67.8-124			4.03	20
1,1,1-Trichloroethane	0.0250	ND	0.0212	0.0218	84.6	87.3	1	58.7-134			3.10	20
1,1,2-Trichloroethane	0.0250	ND	0.0239	0.0244	95.8	97.7	1	74.1-130			2.01	20
Trichloroethene	0.0250	ND	0.0236	0.0250	94.3	100	1	48.9-148			5.85	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0231	0.0239	92.5	95.6	1	60.5-137			3.27	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0232	0.0242	92.7	96.8	1	67.9-134			4.29	20
Vinyl chloride	0.0250	ND	0.0203	0.0208	81.2	83.0	1	44.3-143			2.29	20
Xylenes, Total	0.0750	ND	0.0711	0.0750	94.8	100	1	65.6-133			5.36	20
o-Xylene	0.0250	ND	0.0239	0.0252	95.7	101	1	67.1-133			5.06	20
m&p-Xylenes	0.0500	ND	0.0472	0.0499	94.4	99.8	1	64.1-133			5.52	20
(S) Toluene-d8					97.8	99.3		90.0-115				
(S) Dibromofluoromethane					92.3	92.0		79.0-121				
(S) 4-Bromofluorobenzene					94.2	95.4		80.1-120				

1
Cp

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Tc

3
Ss

4
Cn

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Sr

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Qc

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Gl

8
Al

9
Sc



Method Blank (MB)

(MB) 10/24/15 15:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	86.4			50.0-150

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

(LCS) 10/24/15 15:49 • (LCSD) 10/24/15 16:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.31	1.35	87.0	90.3	50.0-150			3.74	20
(S) o-Terphenyl				89.1	90.4	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 18:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	89.7			50.0-150

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

(LCS) 10/27/15 18:30 • (LCSD) 10/27/15 18:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.26	1.20	84.3	79.8	50.0-150			5.51	20
(S) o-Terphenyl				96.5	94.0	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
J	Estimated value.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

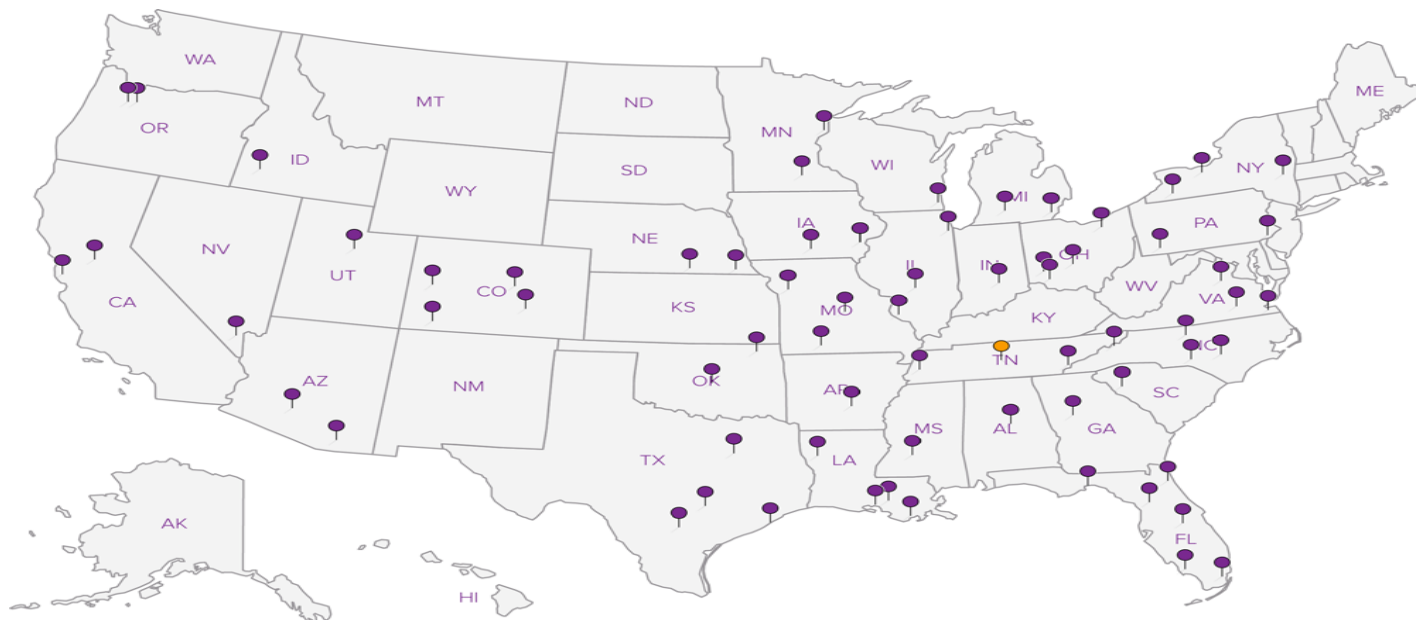
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Report to:
Pam Krueger

Project
Description: Navajo Refining Company - Artesia, NM

Phone: 713-953-4800
Fax:

Collected by (print):
Greg Scherbenske

Collected by (signature):

Immediately
Packed on Ice N ☐ Y ☒

Billing Information:

Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;

City/State
Collected: Artesia, NM

Lab Project #
ARCADHTX-NAVAJO FULL

P.O. #

Date Results Needed

Email? ☐ No ☒ Yes
FAX? ☐ No ☐ Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, S04 125mlHDPE-NoPres	DRO 100ml Amb-HCl	GRO 40ml Amb HCl	METALS 6020 500mlHDPE-HNO3 O = with Ca, K, Na, La	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40ml Amb-HCl	V8260 40ml Amb-HCl-Bik
MW-21		GW				10	X	X	X	(X)	X	X	X	WPS
NP-1		GW				2							X	WPS
TRIP-BLANK-TMD-01		GW				1							X	WPS
MW-46R	Grab	GW		10/20/15	955	8	X	X		(X)	X	X	X	

* Matrix: SS- Soil GW- Groundwater WW- WasteWater DW- Drinking Water OT- Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Relinquished by: (Signature)

Date:

7/21/15

Time:

730

Received by: (Signature)

Samples returned via: ☐ UPS

☒ FedEx ☐ Courier ☐ _____

Hold #

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

3.1 65 21

COC Seal Intact: ☐ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 10/22/15 Time: 0900

pH Checked: 22.712

NCF:

Shipment #2

Analysis / Container / Preservative

Chain of Custody Page 5 of 16



YOUR LAB OF CHOICE

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



L # 122177

Table # 129035

Acctnum: ARCADHTX

Template: T105616

Prelogin: P524670

TSR: 633 - Pam Langford

PB: 9-15-15

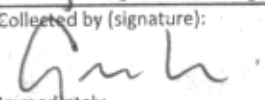
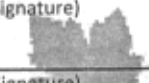
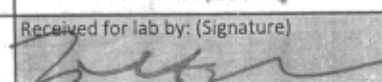
Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

L798300-01 03

(30)

(shipment # 1)

ARCADIS US - TX 2929 Briarpark Dr., Suite 300 Houston, TX 77042				Billing Information: Att: Accounts Payable 630 Plaza Drive, Suite 600 Highlands Ranch, CO 80129				Analysis / Container / Preservative								Chain of Custody Page 7 of 15	
Report to: Pam Krueger				Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com;				CL, FL, S04 125mlHDPE-NoPres DRO 100ml Amb-HCl GRO 40ml Amb HCl METALS 6020 500mlHDPE-HNO3 NO2NO3 250mlHDPE-H2SO4 TDS 250mlHDPE-NoPres V8260 40ml Amb-HCl V8260 40ml Amb-HCl-Bik Ca, K, Na 0 = with								 L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859	
Project Description: Navajo Refining Company - Artesia, NM				City/State Collected: Artesia, NM												L # L795810	
Phone: 713-953-4800 Fax:		Client Project # TX000836.0007.150007		Lab Project # ARCADHTX-NAVAJO FULL		Table # L795810											
Collected by (print): Greg Scherbenske		Site/Facility ID # TMD		P.O. #		Acctnum: ARCADHTX											
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day200% Next Day100% Two Day50% Three Day25%		Date Results Needed		Template: T105616 L798300											
Immediately Packed on Ice N ☐ Y ☒		Email? ☐ No ☒ Yes FAX? ☐ No ☐ Yes		No. of Cntrs		Prelogin: P524670											
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	CL, FL, S04 125mlHDPE-NoPres		DRO 100ml Amb-HCl	GRO 40ml Amb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40ml Amb-HCl	V8260 40ml Amb-HCl-Bik	TSR: 633 - Pam Langford	
MW-21	Grab	GW		10/19/15	1650	10	X	X	X	(X)	X	X	X			-02 04 =65	
NP-1	↓	GW		10/19/15	1420	2								X		-03 05 =66	
TRIP BLANK-TMD-01		GW		10/19/15	-	1									X	-04 06 =67	
MW 46R		GW				8	X	X		(X)	X	X	X		aps		
																(30)	
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____							pH _____ Temp _____		Flow _____ Other _____		Hold #						
Remarks:							Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____		Condition: (lab use only)								
Relinquished by: (Signature) 		Date: 10/20/15	Time: 700	Received by: (Signature) 		Temp: °C Bottles Received: 2.7 385 21		COC Seal Intact: ☐ Y ☐ N ☐ NA									
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Date: 10/21/15 Time: 0420		pH Checked: <2, >12									
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 				NCF:									

ARCADIS US - TX

Sample Delivery Group: L798413
Samples Received: 10/21/2015
Project Number: TX000836.0007.15004
Description: Navajo Refining Company - Artesia, NM
Site: NCL
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
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⁵Sr: Sample Results	5
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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-56 L798413-01 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 09:30

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824453	1	10/26/15 12:30	10/27/15 14:54	MF
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 11:53	VSS
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 13:49	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/26/15 21:42	CLG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824438	1	10/27/15 17:53	10/27/15 17:53	JAH
Wet Chemistry by Method 353.2	WG825537	10	11/02/15 11:11	11/02/15 11:11	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 21:29	10/27/15 21:29	DJD
Wet Chemistry by Method 9056MOD	WG824303	50	10/27/15 20:17	10/27/15 20:17	DJD

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

MW-45 L798413-02 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 09:30

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG823732	1	10/23/15 15:11	10/24/15 14:53	MF
Mercury by Method 7470A	WG823720	1	10/22/15 15:10	10/22/15 17:44	TRB
Metals (ICPMS) by Method 6020	WG824777	1	10/27/15 12:14	10/28/15 11:25	VSS
Metals (ICPMS) by Method 6020	WG824777	2	10/27/15 12:14	10/28/15 12:19	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823914	1	10/23/15 11:31	10/25/15 02:59	BEJ
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824206	1	10/26/15 03:38	10/26/15 03:38	JAH
Wet Chemistry by Method 353.2	WG824554	1	10/28/15 13:43	10/28/15 13:43	ASK
Wet Chemistry by Method 9012B	WG824888	1	10/27/15 17:55	10/28/15 07:04	DR
Wet Chemistry by Method 9056MOD	WG823862	1	10/24/15 06:15	10/24/15 06:15	DJD
Wet Chemistry by Method 9056MOD	WG823862	50	10/24/15 10:20	10/24/15 10:20	DJD

⁶Qc

⁷Gl

⁸Al

⁹Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4080000		2820	10000	1	10/27/2015 14:54	WG824453

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	4340		197	1000	10	11/02/2015 11:11	WG825537

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	399000		2600	50000	50	10/27/2015 20:17	WG824303
Fluoride	1120		9.90	100	1	10/27/2015 21:29	WG824303
Sulfate	2490000		3870	250000	50	10/27/2015 20:17	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	7.31		0.250	2.00	1	10/29/2015 11:53	WG824869
Barium	16.6		0.360	5.00	1	10/29/2015 11:53	WG824869
Calcium	514000		46.0	1000	1	10/29/2015 11:53	WG824869
Chromium	U		0.540	2.00	1	10/29/2015 11:53	WG824869
Iron	U		15.0	100	1	10/29/2015 11:53	WG824869
Lead	0.392	J	0.240	2.00	1	10/29/2015 11:53	WG824869
Manganese	321		0.250	5.00	1	10/29/2015 11:53	WG824869
Potassium	2050		37.0	1000	1	10/29/2015 11:53	WG824869
Selenium	4.91		0.380	2.00	1	10/29/2015 11:53	WG824869
Sodium	342000		110	1000	1	10/29/2015 13:49	WG824869

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/27/2015 17:53	WG824438
Benzene	U		0.331	1.00	1	10/27/2015 17:53	WG824438
Bromodichloromethane	U		0.380	1.00	1	10/27/2015 17:53	WG824438
Bromoform	U		0.469	1.00	1	10/27/2015 17:53	WG824438
Bromomethane	U		0.866	5.00	1	10/27/2015 17:53	WG824438
n-Butylbenzene	U		0.361	1.00	1	10/27/2015 17:53	WG824438
sec-Butylbenzene	U		0.365	1.00	1	10/27/2015 17:53	WG824438
Carbon disulfide	U		0.275	1.00	1	10/27/2015 17:53	WG824438
Carbon tetrachloride	U		0.379	1.00	1	10/27/2015 17:53	WG824438
Chlorobenzene	U		0.348	1.00	1	10/27/2015 17:53	WG824438
Chlorodibromomethane	U		0.327	1.00	1	10/27/2015 17:53	WG824438
Chloroethane	U		0.453	5.00	1	10/27/2015 17:53	WG824438
Chloroform	U		0.324	5.00	1	10/27/2015 17:53	WG824438
Chloromethane	U		0.276	2.50	1	10/27/2015 17:53	WG824438
1,2-Dibromoethane	U		0.381	1.00	1	10/27/2015 17:53	WG824438
1,1-Dichloroethane	U		0.259	1.00	1	10/27/2015 17:53	WG824438
1,2-Dichloroethane	U		0.361	1.00	1	10/27/2015 17:53	WG824438
1,1-Dichloroethene	U		0.398	1.00	1	10/27/2015 17:53	WG824438
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/27/2015 17:53	WG824438
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/27/2015 17:53	WG824438
1,2-Dichloropropane	U		0.306	1.00	1	10/27/2015 17:53	WG824438
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/27/2015 17:53	WG824438
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/27/2015 17:53	WG824438



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	¹ Cp
Ethylbenzene	U		0.384	1.00	1	10/27/2015 17:53	WG824438	² Tc
Isopropylbenzene	U		0.326	1.00	1	10/27/2015 17:53	WG824438	³ Ss
p-Isopropyltoluene	U		0.350	1.00	1	10/27/2015 17:53	WG824438	⁴ Cn
2-Butanone (MEK)	U		3.93	10.0	1	10/27/2015 17:53	WG824438	⁵ Sr
2-Hexanone	U		3.82	10.0	1	10/27/2015 17:53	WG824438	⁶ Qc
Methylene Chloride	U		1.00	5.00	1	10/27/2015 17:53	WG824438	⁷ Gl
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/27/2015 17:53	WG824438	⁸ Al
Methyl tert-butyl ether	9.75		0.367	1.00	1	10/27/2015 17:53	WG824438	⁹ Sc
Naphthalene	U		1.00	5.00	1	10/27/2015 17:53	WG824438	
n-Propylbenzene	U		0.349	1.00	1	10/27/2015 17:53	WG824438	
Styrene	U		0.307	1.00	1	10/27/2015 17:53	WG824438	
1,1,1,2-Tetrachloroethane	U	*	0.385	1.00	1	10/27/2015 17:53	WG824438	
1,1,2,2-Tetrachloroethane	U	-	0.130	1.00	1	10/27/2015 17:53	WG824438	
Tetrachloroethene	U		0.372	1.00	1	10/27/2015 17:53	WG824438	
Toluene	U		0.780	5.00	1	10/27/2015 17:53	WG824438	
1,1,1-Trichloroethane	U		0.319	1.00	1	10/27/2015 17:53	WG824438	
1,1,2-Trichloroethane	U		0.383	1.00	1	10/27/2015 17:53	WG824438	
Trichloroethene	U		0.398	1.00	1	10/27/2015 17:53	WG824438	
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/27/2015 17:53	WG824438	
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/27/2015 17:53	WG824438	
Vinyl chloride	U		0.259	1.00	1	10/27/2015 17:53	WG824438	
o-Xylene	U		0.341	1.00	1	10/27/2015 17:53	WG824438	
m&p-Xylene	U		0.719	1.00	1	10/27/2015 17:53	WG824438	
Xylenes, Total	U		1.06	3.00	1	10/27/2015 17:53	WG824438	
(S) Toluene-d8	111			90.0-115		10/27/2015 17:53	WG824438	
(S) Dibromofluoromethane	104			79.0-121		10/27/2015 17:53	WG824438	
(S) 4-Bromofluorobenzene	102			80.1-120		10/27/2015 17:53	WG824438	

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	680		24.7	100	1	10/26/2015 21:42	WG824380
(S) o-Terphenyl	72.5			50.0-150		10/26/2015 21:42	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4660000		2820	10000	1	10/24/2015 14:53	WG823732

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	29.0	J	19.7	100	1	10/28/2015 13:43	WG824554

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	10/28/2015 07:04	WG824888

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	454000		2600	50000	50	10/24/2015 10:20	WG823862
Fluoride	1370		9.90	100	1	10/24/2015 06:15	WG823862
Sulfate	2910000		3870	250000	50	10/24/2015 10:20	WG823862

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/22/2015 17:44	WG823720

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.73		0.250	2.00	1	10/28/2015 11:25	WG824777
Barium	21.6		0.360	5.00	1	10/28/2015 11:25	WG824777
Calcium	610000		92.0	2000	2	10/28/2015 12:19	WG824777
Chromium	0.591	J	0.540	2.00	1	10/28/2015 11:25	WG824777
Iron	600		15.0	100	1	10/28/2015 11:25	WG824777
Lead	6.67		0.240	2.00	1	10/28/2015 11:25	WG824777
Manganese	551		0.250	5.00	1	10/28/2015 11:25	WG824777
Nickel	4.72		0.350	2.00	1	10/28/2015 11:25	WG824777
Potassium	5020		37.0	1000	1	10/28/2015 11:25	WG824777
Selenium	U		0.380	2.00	1	10/28/2015 11:25	WG824777
Sodium	376000		110	1000	1	10/28/2015 11:25	WG824777
Vanadium	1.18	J	0.180	5.00	1	10/28/2015 11:25	WG824777

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/26/2015 03:38	WG824206
Benzene	U		0.331	1.00	1	10/26/2015 03:38	WG824206
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 03:38	WG824206
Bromoform	U		0.469	1.00	1	10/26/2015 03:38	WG824206
Bromomethane	U		0.866	5.00	1	10/26/2015 03:38	WG824206
n-Butylbenzene	U		0.361	1.00	1	10/26/2015 03:38	WG824206
sec-Butylbenzene	U		0.365	1.00	1	10/26/2015 03:38	WG824206
Carbon disulfide	U		0.275	1.00	1	10/26/2015 03:38	WG824206
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 03:38	WG824206
Chlorobenzene	U		0.348	1.00	1	10/26/2015 03:38	WG824206



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 03:38	WG824206
Chloroethane	U		0.453	5.00	1	10/26/2015 03:38	WG824206
Chloroform	U		0.324	5.00	1	10/26/2015 03:38	WG824206
Chloromethane	U		0.276	2.50	1	10/26/2015 03:38	WG824206
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 03:38	WG824206
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 03:38	WG824206
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 03:38	WG824206
1,1-Dichloroethene	U		0.398	1.00	1	10/26/2015 03:38	WG824206
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 03:38	WG824206
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 03:38	WG824206
1,2-Dichloropropane	U		0.306	1.00	1	10/26/2015 03:38	WG824206
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 03:38	WG824206
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 03:38	WG824206
Ethylbenzene	U		0.384	1.00	1	10/26/2015 03:38	WG824206
Isopropylbenzene	U		0.326	1.00	1	10/26/2015 03:38	WG824206
p-Isopropyltoluene	U		0.350	1.00	1	10/26/2015 03:38	WG824206
2-Butanone (MEK)	U		3.93	10.0	1	10/26/2015 03:38	WG824206
2-Hexanone	U		3.82	10.0	1	10/26/2015 03:38	WG824206
Methylene Chloride	U		1.00	5.00	1	10/26/2015 03:38	WG824206
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 03:38	WG824206
Methyl tert-butyl ether	2.68		0.367	1.00	1	10/26/2015 03:38	WG824206
Naphthalene	U		1.00	5.00	1	10/26/2015 03:38	WG824206
n-Propylbenzene	U		0.349	1.00	1	10/26/2015 03:38	WG824206
Styrene	U		0.307	1.00	1	10/26/2015 03:38	WG824206
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 03:38	WG824206
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 03:38	WG824206
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 03:38	WG824206
Toluene	U		0.780	5.00	1	10/26/2015 03:38	WG824206
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 03:38	WG824206
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 03:38	WG824206
Trichloroethene	U		0.398	1.00	1	10/26/2015 03:38	WG824206
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/26/2015 03:38	WG824206
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/26/2015 03:38	WG824206
Vinyl chloride	U		0.259	1.00	1	10/26/2015 03:38	WG824206
o-Xylene	U		0.341	1.00	1	10/26/2015 03:38	WG824206
m&p-Xylene	U		0.719	1.00	1	10/26/2015 03:38	WG824206
Xylenes, Total	U		1.06	3.00	1	10/26/2015 03:38	WG824206
(S) Toluene-d8	106			90.0-115		10/26/2015 03:38	WG824206
(S) Dibromofluoromethane	103			79.0-121		10/26/2015 03:38	WG824206
(S) 4-Bromofluorobenzene	97.5			80.1-120		10/26/2015 03:38	WG824206

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	874		24.7	100	1	10/25/2015 02:59	WG823914
(S) o-Terphenyl	82.4			50.0-150		10/25/2015 02:59	WG823914



Method Blank (MB)

(MB) 10/24/15 14:52

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798587-12 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 14:55 • (DUP) 10/24/15 14:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	ND	1.00	1	0.000		5

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

(LCS) 10/24/15 14:58 • (LCSD) 10/24/15 14:58

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8630	8720	98.1	99.1	85.0-115			1.04	5

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) 10/27/15 14:28

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798576-02 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 14:29 • (DUP) 10/27/15 14:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	2140	2080	1	3.08		5

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

(LCS) 10/27/15 14:28 • (LCSD) 10/27/15 14:28

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8640	8660	98.2	98.4	85.0-115			0.231	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/28/15 13:16

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L795822-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 13:27 • (DUP) 10/28/15 13:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.000		20

L795822-14 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 13:39 • (DUP) 10/28/15 13:41

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	5.79	5.78	1	0.000		20

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

(LCS) 10/28/15 13:19 • (LCSD) 10/28/15 13:21

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	4.97	5.05	99.0	101	90.0-110			2.00	20

L795822-13 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/28/15 13:33 • (MS) 10/28/15 13:34

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	5.00	4.32	7.86	71.0	1	90.0-110	F



L795836-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 13:50 • (MS) 10/28/15 13:51 • (MSD) 10/28/15 13:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.0220	3.51	3.61	70.0	72.0	1	90.0-110	E	E	3.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 11/02/15 10:58

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0200		0.0197	0.100

L796143-05 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 11:08 • (DUP) 11/02/15 11:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	0.000		20

L796154-09 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 11:25 • (DUP) 11/02/15 11:26

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	0.000		20

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

(LCS) 11/02/15 11:01 • (LCSD) 11/02/15 11:02

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	4.68	4.97	94.0	99.0	90.0-110			6.00	20

L796154-04 Original Sample (OS) • Matrix Spike (MS)

(OS) 11/02/15 11:15 • (MS) 11/02/15 11:16

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	0.500	4.82	57.4	105	10	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



[L798413-01](#)

L796319-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 11/02/15 11:32 • (MS) 11/02/15 11:33 • (MSD) 11/02/15 11:34

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.878	4.25	4.27	68.0	68.0	1	90.0-110	E	E	0.000	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/28/15 06:51

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

L795847-10 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 07:19 • (DUP) 10/28/15 07:20

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

L795822-03 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 07:00 • (DUP) 10/28/15 07:01

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

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

(LCS) 10/28/15 06:54 • (LCSD) 10/28/15 06:55

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.106	0.107	106	107	90.0-110			0.939	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/23/15 22:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795822-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 00:32 • (DUP) 10/24/15 00:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.122	0.0126	1	163	*	20
Fluoride	ND	0.000	1	0		20
Sulfate	1.97	-0.371	1	293	*	20

L795823-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 09:08 • (DUP) 10/24/15 09:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	99.7	99.2	1	1		20
Fluoride	0.0243	0.0229	1	6		20
Sulfate	4.23	4.24	1	0		20

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

(LCS) 10/23/15 22:51 • (LCSD) 10/23/15 23:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.6	40.5	101	101	90-110			0	20
Fluoride	8.00	8.11	8.08	101	101	90-110			0	20
Sulfate	40.0	40.7	40.6	102	101	90-110			0	20



L795822-07 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 01:01 • (MS) 10/24/15 01:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	ND	51.4	103	1	80-120	
Fluoride	5.00	ND	5.18	104	1	80-120	
Sulfate	50.0	ND	51.3	103	1	80-120	

L795823-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 09:37 • (MS) 10/24/15 09:51 • (MSD) 10/24/15 10:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	8.62	59.0	58.1	101	99	1	80-120			2	20
Fluoride	5.00	ND	5.03	5.01	101	100	1	80-120			0	20
Sulfate	50.0	ND	49.8	49.1	100	98	1	80-120			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/27/15 09:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L796127-13 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 11:50 • (DUP) 10/27/15 12:06

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13.4	13.4	1	0		20
Fluoride	0.330	0.332	1	0		20

L796143-15 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 22:26 • (DUP) 10/27/15 22:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	5.13	5.27	1	3		20

L796143-15 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:10 • (DUP) 10/27/15 23:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	86.6	85.9	50	1		20
Sulfate	2690	2720	50	1		20

L796127-13 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:38 • (DUP) 10/27/15 23:53

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	297	309	10	4		20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

(LCS) 10/27/15 09:14 • (LCSD) 10/27/15 09:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Chloride	40.0	40.3	40.3	101	101	90-110			0	20
Fluoride	8.00	8.04	8.05	100	101	90-110			0	20
Sulfate	40.0	40.6	40.9	102	102	90-110			1	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L796143-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 16:40 • (MS) 10/27/15 16:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	1.00	182	2730	102	50	80-120	
Sulfate	1.00	633	3150	101	50	80-120	

L796143-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 17:53 • (MS) 10/27/15 18:07

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Fluoride	5.00	1.69	6.10	88	1	80-120	

L796143-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 19:05 • (MS) 10/27/15 19:19 • (MSD) 10/27/15 19:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	50.0	0.0427	53.3	53.1	106	106	1	80-120			0	20
Fluoride	5.00	ND	5.29	5.27	106	105	1	80-120			0	20
Sulfate	50.0	1.30	53.7	53.5	105	104	1	80-120			0	20



Method Blank (MB)

(MB) 10/22/15 17:16

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/22/15 17:18 • (LCSD) 10/22/15 17:21

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Mercury	0.00300	0.00287	0.00299	96	100	80-120			4	20

L798587-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/22/15 17:24 • (MS) 10/22/15 17:26 • (MSD) 10/22/15 17:34

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	0.00000366	0.00175	0.00190	58	63	1	75-125	F	F	8	20



Method Blank (MB)

(MB) 10/28/15 10:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	0.000431		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	U		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Vanadium	0.000195		0.00018	0.00500

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 10:40 • (LCSD) 10/28/15 10:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0479	0.0482	96	96	80-120			1	20
Barium	0.0500	0.0506	0.0480	101	96	80-120			5	20
Calcium	5.00	5.44	4.74	109	95	80-120			14	20
Chromium	0.0500	0.0495	0.0493	99	99	80-120			0	20
Iron	5.00	4.84	4.81	97	96	80-120			1	20
Lead	0.0500	0.0495	0.0487	99	97	80-120			2	20
Manganese	0.0500	0.0516	0.0483	103	97	80-120			7	20
Nickel	0.0500	0.0508	0.0499	102	100	80-120			2	20
Potassium	5.00	4.80	4.76	96	95	80-120			1	20
Selenium	0.0500	0.0464	0.0477	93	95	80-120			3	20
Sodium	5.00	5.20	4.96	104	99	80-120			5	20
Vanadium	0.0500	0.0488	0.0481	98	96	80-120			1	20



L798413-02

L798587-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 10:45 • (MS) 10/28/15 10:50 • (MSD) 10/28/15 10:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.000621	0.0480	0.0496	95	98	1	75-125			3	20
Barium	0.0500	0.00137	0.0498	0.0524	97	102	1	75-125			5	20
Calcium	5.00	0.447	4.77	4.98	86	91	1	75-125			4	20
Chromium	0.0500	0.000206	0.0487	0.0493	97	98	1	75-125			1	20
Potassium	5.00	ND	4.72	4.88	94	98	1	75-125			3	20
Iron	5.00	ND	4.74	4.85	95	97	1	75-125			2	20
Lead	0.0500	0.000108	0.0491	0.0510	98	102	1	75-125			4	20
Manganese	0.0500	0.000759	0.0481	0.0493	95	97	1	75-125			3	20
Nickel	0.0500	0.000101	0.0493	0.0506	98	101	1	75-125			2	20
Selenium	0.0500	ND	0.0476	0.0487	95	97	1	75-125			2	20
Sodium	5.00	0.489	5.35	5.50	97	100	1	75-125			3	20
Vanadium	0.0500	0.000313	0.0480	0.0487	95	97	1	75-125			1	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 10/29/15 11:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/29/15 11:03 • (LCSD) 10/29/15 11:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0501	0.0483	100	97	80-120			4	20
Barium	0.0500	0.0518	0.0523	104	105	80-120			1	20
Calcium	5.00	5.29	5.15	106	103	80-120			3	20
Chromium	0.0500	0.0516	0.0502	103	100	80-120			3	20
Iron	5.00	5.08	4.99	102	100	80-120			2	20
Lead	0.0500	0.0505	0.0497	101	99	80-120			2	20
Manganese	0.0500	0.0503	0.0494	101	99	80-120			2	20
Potassium	5.00	5.18	5.06	104	101	80-120			2	20
Selenium	0.0500	0.0495	0.0488	99	98	80-120			1	20
Sodium	5.00	5.35	5.34	107	107	80-120			0	20

L798466-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 11:07 • (MS) 10/29/15 11:12 • (MSD) 10/29/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00880	0.0573	0.0597	97	102	1	75-125			4	20
Barium	0.0500	0.0179	0.0691	0.0709	102	106	1	75-125			3	20
Calcium	5.00	416	421	416	96	0	1	75-125		<u>4</u>	1	20



L798413-01

L798466-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 11:07 • (MS) 10/29/15 11:12 • (MSD) 10/29/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium	0.0500	0.000372	0.0466	0.0486	92	96	1	75-125			4	20
Potassium	5.00	0.569	5.37	5.46	96	98	1	75-125			2	20
Iron	5.00	0.291	4.89	5.00	92	94	1	75-125			2	20
Lead	0.0500	0.000328	0.0483	0.0491	96	98	1	75-125			2	20
Manganese	0.0500	0.342	0.382	0.382	79	81	1	75-125			0	20
Selenium	0.0500	0.000195	0.0445	0.0457	89	91	1	75-125			3	20
Sodium	5.00	191	199	199	154	163	1	75-125	4	4	0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/25/15 20:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/25/15 20:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	106			90.0-115
(S) Dibromofluoromethane	103			79.0-121
(S) 4-Bromofluorobenzene	96.9			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/25/15 19:10 • (LCSD) 10/25/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.140	0.144	112	115	28.7-175			2.54	20.9
Benzene	0.0250	0.0280	0.0279	112	112	73.0-122			0.340	20
Bromodichloromethane	0.0250	0.0250	0.0249	100	99.7	75.5-121			0.450	20
Bromoform	0.0250	0.0221	0.0226	88.4	90.5	71.5-131			2.34	20
Bromomethane	0.0250	0.0225	0.0226	89.9	90.3	22.4-187			0.410	20
n-Butylbenzene	0.0250	0.0244	0.0242	97.8	96.6	75.9-134			1.18	20
sec-Butylbenzene	0.0250	0.0236	0.0234	94.4	93.5	80.6-126			0.950	20
Carbon disulfide	0.0250	0.0230	0.0227	91.9	90.7	53.0-134			1.35	20
Carbon tetrachloride	0.0250	0.0240	0.0237	96.0	94.7	70.9-129			1.41	20
Chlorobenzene	0.0250	0.0243	0.0242	97.0	96.8	79.7-122			0.240	20
Chlorodibromomethane	0.0250	0.0232	0.0236	92.9	94.2	78.2-124			1.39	20
Chloroethane	0.0250	0.0230	0.0228	91.9	91.3	41.2-153			0.660	20
Chloroform	0.0250	0.0270	0.0273	108	109	73.2-125			1.20	20
Chloromethane	0.0250	0.0258	0.0256	103	102	55.8-134			0.780	20
1,2-Dibromoethane	0.0250	0.0245	0.0252	98.0	101	79.8-122			2.85	20
1,1-Dichloroethane	0.0250	0.0273	0.0272	109	109	71.7-127			0.450	20

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

(LCS) 10/25/15 19:10 • (LCSD) 10/25/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0256	0.0262	102	105	65.3-126			2.50	20
1,1-Dichloroethene	0.0250	0.0223	0.0222	89.1	88.6	59.9-137			0.510	20
cis-1,2-Dichloroethene	0.0250	0.0275	0.0275	110	110	77.3-122			0.0600	20
trans-1,2-Dichloroethene	0.0250	0.0266	0.0260	106	104	72.6-125			2.02	20
1,2-Dichloropropane	0.0250	0.0275	0.0274	110	109	77.4-125			0.420	20
cis-1,3-Dichloropropene	0.0250	0.0267	0.0268	107	107	77.7-124			0.580	20
trans-1,3-Dichloropropene	0.0250	0.0258	0.0261	103	104	73.5-127			1.10	20
Ethylbenzene	0.0250	0.0238	0.0238	95.2	95.0	80.9-121			0.240	20
2-Hexanone	0.125	0.119	0.126	95.2	101	59.4-151			5.56	20
Isopropylbenzene	0.0250	0.0238	0.0237	95.3	94.7	81.6-124			0.630	20
p-Isopropyltoluene	0.0250	0.0226	0.0224	90.5	89.5	77.6-129			1.10	20
2-Butanone (MEK)	0.125	0.139	0.146	111	117	46.4-155			4.53	20
Methylene Chloride	0.0250	0.0268	0.0268	107	107	69.5-120			0.0900	20
4-Methyl-2-pentanone (MIBK)	0.125	0.123	0.129	98.7	103	63.3-138			4.30	20
Methyl tert-butyl ether	0.0250	0.0265	0.0272	106	109	70.1-125			2.34	20
Naphthalene	0.0250	0.0250	0.0260	99.9	104	69.7-134			4.12	20
n-Propylbenzene	0.0250	0.0238	0.0236	95.1	94.6	81.9-122			0.510	20
Styrene	0.0250	0.0247	0.0247	98.8	98.7	79.9-124			0.100	20
1,1,1,2-Tetrachloroethane	0.0250	0.0221	0.0222	88.4	88.8	78.5-125			0.490	20
1,1,2,2-Tetrachloroethane	0.0250	0.0249	0.0256	99.4	103	79.3-123			3.12	20
Tetrachloroethene	0.0250	0.0225	0.0225	90.0	89.9	73.5-130			0.0800	20
Toluene	0.0250	0.0261	0.0259	104	104	77.9-116			0.710	20
1,1,1-Trichloroethane	0.0250	0.0254	0.0251	101	100	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0256	0.0259	102	104	81.6-120			1.41	20
Trichloroethene	0.0250	0.0247	0.0246	98.8	98.3	79.5-121			0.510	20
1,2,4-Trimethylbenzene	0.0250	0.0233	0.0233	93.1	93.1	79.0-122			0.0400	20
1,3,5-Trimethylbenzene	0.0250	0.0234	0.0229	93.4	91.7	81.0-123			1.86	20
Vinyl chloride	0.0250	0.0251	0.0254	100	102	61.5-134			1.18	20
Xylenes, Total	0.0750	0.0717	0.0710	95.6	94.6	79.2-122			0.990	20
o-Xylene	0.0250	0.0236	0.0236	94.4	94.3	79.1-123			0.0800	20
m&p-Xylenes	0.0500	0.0481	0.0474	96.2	94.8	78.5-122			1.44	20
(S) Toluene-d8				107	107	90.0-115				
(S) Dibromofluoromethane				105	103	79.0-121				
(S) 4-Bromofluorobenzene				95.9	94.8	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798587-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 22:24 • (MS) 10/25/15 21:20 • (MSD) 10/25/15 21:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00309	0.139	0.143	109	112	1	25.0-156			2.73	21.5
Benzene	0.0250	ND	0.0277	0.0274	111	110	1	58.6-133			1.09	20
Bromodichloromethane	0.0250	ND	0.0237	0.0236	94.8	94.2	1	69.2-127			0.570	20
Bromoform	0.0250	ND	0.0217	0.0222	86.8	88.7	1	66.3-140			2.20	20
Bromomethane	0.0250	ND	0.0224	0.0221	89.6	88.6	1	16.6-183			1.15	20.5
n-Butylbenzene	0.0250	ND	0.0272	0.0267	109	107	1	64.8-145			2.07	20
sec-Butylbenzene	0.0250	ND	0.0265	0.0255	106	102	1	66.8-139			3.93	20
Carbon disulfide	0.0250	ND	0.0251	0.0242	101	96.9	1	34.9-138			3.77	20
Carbon tetrachloride	0.0250	ND	0.0264	0.0256	106	102	1	60.6-139			3.15	20
Chlorobenzene	0.0250	ND	0.0242	0.0237	96.8	94.7	1	70.1-130			2.16	20
Chlorodibromomethane	0.0250	ND	0.0225	0.0225	89.8	90.1	1	71.6-132			0.300	20
Chloroethane	0.0250	ND	0.0241	0.0238	96.3	95.3	1	33.3-155			1.12	20
Chloroform	0.0250	ND	0.0266	0.0263	106	105	1	66.1-133			1.01	20
Chloromethane	0.0250	ND	0.0260	0.0255	104	102	1	40.7-139			1.97	20
1,2-Dibromoethane	0.0250	ND	0.0238	0.0237	95.1	94.7	1	73.8-131			0.420	20
1,1-Dichloroethane	0.0250	ND	0.0273	0.0268	109	107	1	64.0-134			1.78	20
1,2-Dichloroethane	0.0250	ND	0.0238	0.0240	95.1	95.9	1	60.7-132			0.860	20
1,1-Dichloroethene	0.0250	ND	0.0251	0.0240	100	96.0	1	48.8-144			4.41	20
cis-1,2-Dichloroethene	0.0250	ND	0.0270	0.0266	108	106	1	60.6-136			1.50	20
trans-1,2-Dichloroethene	0.0250	ND	0.0269	0.0266	108	106	1	61.0-132			1.15	20
1,2-Dichloropropane	0.0250	ND	0.0263	0.0259	105	104	1	69.7-130			1.37	20
cis-1,3-Dichloropropene	0.0250	ND	0.0250	0.0250	100	100	1	71.1-129			0.0300	20
trans-1,3-Dichloropropene	0.0250	ND	0.0255	0.0253	102	101	1	66.3-136			0.910	20
Ethylbenzene	0.0250	ND	0.0248	0.0244	99.3	97.5	1	62.7-136			1.86	20
2-Hexanone	0.125	ND	0.119	0.120	95.3	95.9	1	59.4-154			0.590	20.1
Isopropylbenzene	0.0250	ND	0.0258	0.0250	103	100	1	67.4-136			3.17	20
p-Isopropyltoluene	0.0250	ND	0.0251	0.0239	100	95.8	1	62.8-143			4.74	20
2-Butanone (MEK)	0.125	0.000859	0.142	0.145	113	116	1	45.0-156			2.47	20.8
Methylene Chloride	0.0250	ND	0.0255	0.0254	102	102	1	61.5-125			0.470	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.125	0.124	99.7	99.5	1	60.7-150			0.160	20
Methyl tert-butyl ether	0.0250	0.00175	0.0268	0.0272	100	102	1	61.4-136			1.49	20
Naphthalene	0.0250	ND	0.0259	0.0268	104	107	1	61.8-143			3.38	20
n-Propylbenzene	0.0250	ND	0.0262	0.0252	105	101	1	63.2-139			3.58	20
Styrene	0.0250	ND	0.0244	0.0239	97.4	95.5	1	68.2-133			1.99	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0219	0.0218	87.8	87.2	1	70.5-132			0.670	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0256	0.0255	103	102	1	64.9-145			0.570	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L798587-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 22:24 • (MS) 10/25/15 21:20 • (MSD) 10/25/15 21:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0248	0.0242	99.1	97.0	1	57.4-141			2.18	20
Toluene	0.0250	ND	0.0264	0.0255	106	102	1	67.8-124			3.53	20
1,1,1-Trichloroethane	0.0250	ND	0.0276	0.0266	110	106	1	58.7-134			3.79	20
1,1,2-Trichloroethane	0.0250	ND	0.0249	0.0249	99.5	99.6	1	74.1-130			0.0800	20
Trichloroethene	0.0250	ND	0.0251	0.0246	100	98.3	1	48.9-148			2.04	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0246	0.0238	98.2	95.1	1	60.5-137			3.26	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0250	0.0239	100	95.5	1	67.9-134			4.61	20
Vinyl chloride	0.0250	ND	0.0272	0.0265	109	106	1	44.3-143			2.60	20
Xylenes, Total	0.0750	ND	0.0748	0.0721	99.7	96.2	1	65.6-133			3.62	20
o-Xylene	0.0250	ND	0.0243	0.0237	97.2	94.9	1	67.1-133			2.40	20
m&p-Xylenes	0.0500	ND	0.0505	0.0484	101	96.8	1	64.1-133			4.21	20
(S) Toluene-d8					106	105		90.0-115				
(S) Dibromofluoromethane					103	103		79.0-121				
(S) 4-Bromofluorobenzene					97.9	96.8		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/27/15 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 10/27/15 12:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	111			90.0-115
(S) Dibromofluoromethane	102			79.0-121
(S) 4-Bromofluorobenzene	104			80.1-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/27/15 09:40 • (LCSD) 10/27/15 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.137	0.141	109	112	28.7-175			2.78	20.9
Benzene	0.0250	0.0283	0.0289	113	116	73.0-122			2.34	20
Bromodichloromethane	0.0250	0.0221	0.0223	88.4	89.4	75.5-121			1.12	20
Bromoform	0.0250	0.0185	0.0198	74.1	79.1	71.5-131			6.48	20
Bromomethane	0.0250	0.0314	0.0331	126	132	22.4-187			5.13	20
n-Butylbenzene	0.0250	0.0229	0.0234	91.7	93.7	75.9-134			2.13	20
sec-Butylbenzene	0.0250	0.0224	0.0232	89.6	92.9	80.6-126			3.63	20
Carbon disulfide	0.0250	0.0239	0.0251	95.8	100	53.0-134			4.55	20
Carbon tetrachloride	0.0250	0.0209	0.0215	83.5	85.8	70.9-129			2.70	20
Chlorobenzene	0.0250	0.0229	0.0242	91.6	96.6	79.7-122			5.36	20
Chlorodibromomethane	0.0250	0.0196	0.0210	78.3	83.9	78.2-124			6.93	20
Chloroethane	0.0250	0.0278	0.0293	111	117	41.2-153			5.40	20
Chloroform	0.0250	0.0244	0.0249	97.7	99.5	73.2-125			1.83	20
Chloromethane	0.0250	0.0260	0.0268	104	107	55.8-134			3.28	20
1,2-Dibromoethane	0.0250	0.0229	0.0240	91.5	96.0	79.8-122			4.85	20
1,1-Dichloroethane	0.0250	0.0257	0.0259	103	103	71.7-127			0.620	20

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

(LCS) 10/27/15 09:40 • (LCSD) 10/27/15 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0254	0.0260	102	104	65.3-126			2.01	20
1,1-Dichloroethene	0.0250	0.0239	0.0245	95.7	97.9	59.9-137			2.25	20
cis-1,2-Dichloroethene	0.0250	0.0243	0.0243	97.3	97.2	77.3-122			0.140	20
trans-1,2-Dichloroethene	0.0250	0.0240	0.0241	95.9	96.5	72.6-125			0.630	20
1,2-Dichloropropane	0.0250	0.0267	0.0265	107	106	77.4-125			0.680	20
cis-1,3-Dichloropropene	0.0250	0.0254	0.0264	102	105	77.7-124			3.52	20
trans-1,3-Dichloropropene	0.0250	0.0268	0.0277	107	111	73.5-127			3.20	20
Ethylbenzene	0.0250	0.0221	0.0231	88.6	92.4	80.9-121			4.20	20
2-Hexanone	0.125	0.132	0.140	106	112	59.4-151			5.60	20
Isopropylbenzene	0.0250	0.0216	0.0224	86.5	89.5	81.6-124			3.40	20
p-Isopropyltoluene	0.0250	0.0216	0.0224	86.2	89.4	77.6-129			3.62	20
2-Butanone (MEK)	0.125	0.146	0.150	117	120	46.4-155			2.48	20
Methylene Chloride	0.0250	0.0251	0.0255	100	102	69.5-120			1.52	20
4-Methyl-2-pentanone (MIBK)	0.125	0.128	0.131	102	105	63.3-138			2.57	20
Methyl tert-butyl ether	0.0250	0.0255	0.0255	102	102	70.1-125			0.240	20
Naphthalene	0.0250	0.0202	0.0210	81.0	83.8	69.7-134			3.50	20
n-Propylbenzene	0.0250	0.0229	0.0236	91.6	94.2	81.9-122			2.84	20
Styrene	0.0250	0.0259	0.0269	103	107	79.9-124			3.82	20
1,1,1,2-Tetrachloroethane	0.0250	0.0178	0.0184	71.0	73.8	78.5-125	*	*	3.81	20
1,1,2,2-Tetrachloroethane	0.0250	0.0215	0.0220	86.0	87.8	79.3-123	-	-	2.13	20
Tetrachloroethene	0.0250	0.0200	0.0207	79.9	82.8	73.5-130			3.65	20
Toluene	0.0250	0.0251	0.0257	101	103	77.9-116			2.16	20
1,1,1-Trichloroethane	0.0250	0.0232	0.0238	93.0	95.4	71.1-129			2.56	20
1,1,2-Trichloroethane	0.0250	0.0217	0.0229	86.9	91.8	81.6-120			5.51	20
Trichloroethene	0.0250	0.0230	0.0231	91.9	92.2	79.5-121			0.370	20
1,2,4-Trimethylbenzene	0.0250	0.0222	0.0224	88.7	89.5	79.0-122			0.930	20
1,3,5-Trimethylbenzene	0.0250	0.0222	0.0229	88.7	91.4	81.0-123			2.99	20
Vinyl chloride	0.0250	0.0254	0.0264	102	106	61.5-134			3.88	20
Xylenes, Total	0.0750	0.0669	0.0690	89.2	92.0	79.2-122			3.07	20
o-Xylene	0.0250	0.0220	0.0227	88.2	90.6	79.1-123			2.70	20
m&p-Xylenes	0.0500	0.0449	0.0463	89.7	92.7	78.5-122			3.25	20
(S) Toluene-d8				113	112	90.0-115				
(S) Dibromofluoromethane				106	104	79.0-121				
(S) 4-Bromofluorobenzene				106	108	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798576-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:42 • (MS) 10/27/15 15:03 • (MSD) 10/27/15 15:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00212	0.0529	0.0547	40.7	42.0	1	25.0-156			3.19	21.5
Benzene	0.0250	ND	0.0172	0.0174	68.8	69.5	1	58.6-133			0.970	20
Bromodichloromethane	0.0250	ND	0.0176	0.0178	70.2	71.3	1	69.2-127			1.48	20
Bromoform	0.0250	ND	0.0159	0.0166	63.4	66.3	1	66.3-140	F		4.35	20
Bromomethane	0.0250	ND	0.0109	0.0114	43.5	45.8	1	16.6-183			5.21	20.5
n-Butylbenzene	0.0250	ND	0.0206	0.0205	82.2	81.9	1	64.8-145			0.380	20
sec-Butylbenzene	0.0250	ND	0.0191	0.0191	76.3	76.3	1	66.8-139			0.0500	20
Carbon disulfide	0.0250	ND	0.00325	0.00334	13.0	13.4	1	34.9-138	F	F	2.67	20
Carbon tetrachloride	0.0250	ND	0.0135	0.0140	54.0	56.1	1	60.6-139	F	F	3.80	20
Chlorobenzene	0.0250	ND	0.0175	0.0181	70.0	72.5	1	70.1-130	F		3.53	20
Chlorodibromomethane	0.0250	ND	0.0163	0.0174	65.3	69.4	1	71.6-132	F	F	6.04	20
Chloroethane	0.0250	ND	0.0120	0.0123	48.2	49.1	1	33.3-155			1.96	20
Chloroform	0.0250	ND	0.0183	0.0188	73.4	75.1	1	66.1-133			2.42	20
Chloromethane	0.0250	ND	0.00804	0.00809	32.1	32.4	1	40.7-139	F	F	0.680	20
1,2-Dibromoethane	0.0250	ND	0.0174	0.0181	69.8	72.3	1	73.8-131	F	F	3.53	20
1,1-Dichloroethane	0.0250	ND	0.0178	0.0180	71.1	72.1	1	64.0-134			1.45	20
1,2-Dichloroethane	0.0250	ND	0.0183	0.0183	73.2	73.4	1	60.7-132			0.170	20
1,1-Dichloroethene	0.0250	ND	0.0119	0.0119	47.5	47.7	1	48.8-144	F	F	0.450	20
cis-1,2-Dichloroethene	0.0250	ND	0.0160	0.0159	63.8	63.7	1	60.6-136			0.280	20
trans-1,2-Dichloroethene	0.0250	ND	0.0110	0.0111	44.1	44.2	1	61.0-132	F	F	0.330	20
1,2-Dichloropropane	0.0250	ND	0.0196	0.0201	78.4	80.5	1	69.7-130			2.62	20
cis-1,3-Dichloropropene	0.0250	ND	0.0190	0.0191	75.8	76.5	1	71.1-129			0.910	20
trans-1,3-Dichloropropene	0.0250	ND	0.0210	0.0210	83.9	84.0	1	66.3-136			0.200	20
Ethylbenzene	0.0250	ND	0.0163	0.0167	65.1	66.7	1	62.7-136			2.41	20
2-Hexanone	0.125	ND	0.0943	0.0975	75.4	78.0	1	59.4-154			3.39	20.1
Isopropylbenzene	0.0250	ND	0.0172	0.0177	68.7	70.8	1	67.4-136			2.94	20
p-Isopropyltoluene	0.0250	ND	0.0185	0.0187	74.2	74.7	1	62.8-143			0.740	20
2-Butanone (MEK)	0.125	ND	0.0853	0.0864	68.2	69.1	1	45.0-156			1.32	20.8
Methylene Chloride	0.0250	ND	0.0150	0.0154	60.1	61.8	1	61.5-125	F		2.74	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.111	0.113	88.7	90.0	1	60.7-150			1.44	20
Methyl tert-butyl ether	0.0250	0.000324	0.0205	0.0214	80.9	84.3	1	61.4-136			4.07	20
Naphthalene	0.0250	ND	0.0175	0.0182	70.0	72.8	1	61.8-143			3.95	20
n-Propylbenzene	0.0250	ND	0.0186	0.0189	74.4	75.7	1	63.2-139			1.76	20
Styrene	0.0250	ND	0.0205	0.0210	82.0	83.9	1	68.2-133			2.36	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0148	0.0152	59.2	60.9	1	70.5-132	F	F	2.93	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0197	0.0206	78.8	82.3	1	64.9-145			4.35	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L798576-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:42 • (MS) 10/27/15 15:03 • (MSD) 10/27/15 15:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0124	0.0125	49.8	49.9	1	57.4-141	F	F	0.320	20
Toluene	0.0250	ND	0.0166	0.0169	66.5	67.8	1	67.8-124	F		1.86	20
1,1,1-Trichloroethane	0.0250	ND	0.0166	0.0170	66.3	67.9	1	58.7-134			2.42	20
1,1,2-Trichloroethane	0.0250	ND	0.0188	0.0196	75.2	78.3	1	74.1-130			4.11	20
Trichloroethene	0.0250	ND	0.0138	0.0143	55.2	57.2	1	48.9-148			3.59	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0180	0.0185	72.1	73.8	1	60.5-137			2.36	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0180	0.0182	71.9	72.6	1	67.9-134			1.01	20
Vinyl chloride	0.0250	ND	0.00934	0.00924	37.4	36.9	1	44.3-143	F	F	1.09	20
Xylenes, Total	0.0750	ND	0.0495	0.0510	66.0	67.9	1	65.6-133			2.92	20
o-Xylene	0.0250	ND	0.0168	0.0170	67.1	68.1	1	67.1-133			1.51	20
m&p-Xylenes	0.0500	ND	0.0327	0.0339	65.4	67.8	1	64.1-133			3.64	20
(S) Toluene-d8					112	113		90.0-115				
(S) Dibromofluoromethane					104	104		79.0-121				
(S) 4-Bromofluorobenzene					106	107		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/24/15 16:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	77.1			50.0-150

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

(LCS) 10/24/15 16:50 • (LCSD) 10/24/15 17:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.07	1.18	71.4	78.7	50.0-150			9.72	20
(S) o-Terphenyl				74.4	82.4	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/26/15 20:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	69.2			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/26/15 20:21 • (LCSD) 10/26/15 20:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	0.841	0.980	56.0	65.3	50.0-150			15.3	20
(S) o-Terphenyl				74.6	80.7	50.0-150				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier Description

4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
J	Estimated value.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

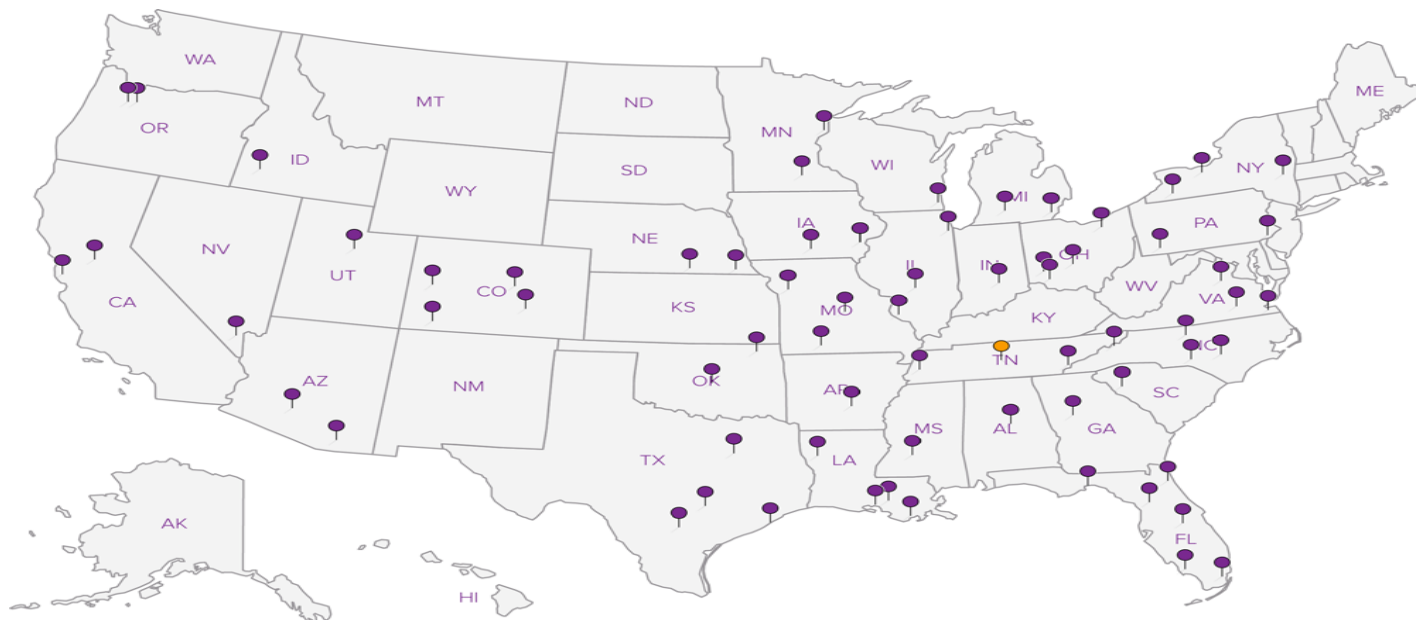
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042Report to:
Pam Krueger

Billing Information:

Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;

Project

Description: Navajo Refining Company - Artesia, NM

City/State

Collected: Artesia, NM

Phone: 713-953-4800

Client Project

TX000836.0007.150068

Lab Project

ARCADHTX-NAVAJO FULL

Fax:

Collected by (print):

Greg Scherbenske

Site/Facility ID

NCL

P.O.

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Date Results Needed

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.
of
Cntrs

Immediately

Packed on Ice - N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

MW-45

GW

MW-56

Grab

GW

10/20/15

930

8

X

X

X

X

X

X

X

X

X

X

X

X

40g

-01

-08

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold

Relinquished by: (Signature)

Date:

7/21/15

Time:

730

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

30 17

COC Seal Intact: ☐ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

10/22/15 0900

pH Checked:

L2712

NCF:

10/22/15 0900

L2712

Shipment #2

Analysis / Container / Preservative

Chain of Custody Page 10 of 16



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5855



L #

Table #

L798413

Acctnum: ARCADHTX

Template: T105671

Prelogin: P524746

TSR: 633 - Pam Langford

PB:

Shipped Via: FedEx Ground

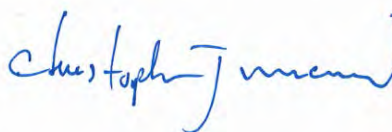
Rem./Contaminant

Sample # (lab only)

ARCADIS US - TX

Sample Delivery Group: L798466
Samples Received: 10/21/2015
Project Number: TX000836.0007.15004
Description: Navajo Refining Company - Artesia, NM
Site: REST
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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⁹Sc: Chain of Custody

140

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

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-101 L798466-11 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 14:05

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:23	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:35	JDG
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:51	JDG
Metals (ICPMS) by Method 6020	WG824868	5	10/28/15 10:42	10/28/15 19:17	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 21:05	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 05:26	10/28/15 05:26	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	5	10/28/15 23:45	10/28/15 23:45	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:20	10/29/15 17:20	ASK
Wet Chemistry by Method 9056MOD	WG824156	1	10/24/15 21:17	10/24/15 21:17	DJD
Wet Chemistry by Method 9056MOD	WG824156	20	10/24/15 22:03	10/24/15 22:03	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

MW-105 L798466-12 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 14:25

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:22	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:01	JDG
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:54	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 21:22	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	2	10/28/15 05:48	10/28/15 05:48	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	10	10/29/15 00:04	10/29/15 00:04	ACG
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:21	10/29/15 17:21	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 11:50	10/27/15 11:50	DJD
Wet Chemistry by Method 9056MOD	WG824303	10	10/27/15 23:38	10/27/15 23:38	DJD

⁷ Gl

⁸ Al

⁹ Sc

MW-61 L798466-13 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 11:35

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:23	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:03	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 21:39	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	5	10/28/15 06:10	10/28/15 06:10	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	10	10/29/15 00:24	10/29/15 00:24	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:22	10/29/15 17:22	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 12:20	10/27/15 12:20	DJD
Wet Chemistry by Method 9056MOD	WG824303	20	10/27/15 13:03	10/27/15 13:03	DJD
Wet Chemistry by Method 9056MOD	WG824303	50	10/28/15 00:07	10/28/15 00:07	DJD

MW-62 L798466-14 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 10:25

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:22	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:05	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 22:14	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	50	10/28/15 06:33	10/28/15 06:33	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	20	10/29/15 00:43	10/29/15 00:43	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:23	10/29/15 17:23	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 12:34	10/27/15 12:34	DJD
Wet Chemistry by Method 9056MOD	WG824303	20	10/27/15 13:17	10/27/15 13:17	DJD



MW-39 L798466-15 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 08:35Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:23	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:08	JDG
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:56	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 21:57	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 06:55	10/28/15 06:55	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824847	1	10/27/15 23:17	10/27/15 23:17	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825127	1	10/29/15 02:59	10/29/15 02:59	ACG
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:24	10/29/15 17:24	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 12:49	10/27/15 12:49	DJD
Wet Chemistry by Method 9056MOD	WG824303	20	10/27/15 13:32	10/27/15 13:32	DJD

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc

MW-98 L798466-16 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 07:55Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:23	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:10	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 22:32	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	10	10/28/15 07:17	10/28/15 07:17	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824847	25	10/27/15 23:40	10/27/15 23:40	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:26	10/29/15 17:26	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 14:45	10/27/15 14:45	DJD
Wet Chemistry by Method 9056MOD	WG824303	20	10/27/15 13:46	10/27/15 13:46	DJD

⁷ Gl⁸ Al⁹ Sc

MW-29 L798466-17 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 08:40Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:23	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:12	JDG
Metals (ICPMS) by Method 6020	WG824868	5	10/28/15 10:42	10/28/15 19:24	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 22:50	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825222	1	10/29/15 03:28	10/29/15 03:28	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825316	1	10/29/15 13:32	10/29/15 13:32	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:27	10/29/15 17:27	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 14:59	10/27/15 14:59	DJD
Wet Chemistry by Method 9056MOD	WG824303	20	10/27/15 14:01	10/27/15 14:01	DJD
Wet Chemistry by Method 9056MOD	WG824303	50	10/28/15 00:07	10/28/15 00:07	DJD

MW-106 L798466-18 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 12:25Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824448	1	10/26/15 15:32	10/27/15 15:22	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 18:15	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	20	10/26/15 09:27	10/29/15 02:44	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825222	10	10/29/15 03:53	10/29/15 03:53	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824847	100	10/28/15 00:03	10/28/15 00:03	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:28	10/29/15 17:28	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 15:13	10/27/15 15:13	DJD
Wet Chemistry by Method 9056MOD	WG824303	50	10/27/15 15:56	10/27/15 15:56	DJD



TRIP BLANK-REST-04 L798466-19 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 00:00Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824438	1	10/27/15 14:21	10/27/15 14:21	JAH

¹ Cp² Tc³ Ss

MW-118 L798466-20 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 14:15Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:17	MF
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 12:07	JDG
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 14:13	JDG
Metals (ICPMS) by Method 6020	WG824869	2	10/28/15 11:03	10/29/15 14:09	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/26/15 23:44	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 12:25	10/27/15 12:25	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825269	1	10/29/15 03:52	10/29/15 03:52	JAH
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:47	11/02/15 22:47	ASK
Wet Chemistry by Method 9056MOD	WG824303	1	10/27/15 22:26	10/27/15 22:26	DJD
Wet Chemistry by Method 9056MOD	WG824303	50	10/27/15 23:10	10/27/15 23:10	DJD

⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

MW-119 L798466-21 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 15:10Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:17	MF
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 12:14	JDG
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 14:16	JDG
Metals (ICPMS) by Method 6020	WG824869	2	10/28/15 11:03	10/29/15 14:11	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/27/15 00:04	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 12:47	10/27/15 12:47	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825269	1	10/29/15 04:10	10/29/15 04:10	JAH
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:53	11/02/15 22:53	ASK
Wet Chemistry by Method 9056MOD	WG824304	1	10/27/15 13:06	10/27/15 13:06	DJD
Wet Chemistry by Method 9056MOD	WG824304	50	10/27/15 14:08	10/27/15 14:08	DJD

MW-117 L798466-22 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 13:25Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:17	MF
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 12:16	JDG
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 14:18	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/27/15 01:44	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 13:09	10/27/15 13:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825269	1	10/29/15 04:28	10/29/15 04:28	JAH
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:55	11/02/15 22:55	ASK
Wet Chemistry by Method 9056MOD	WG824304	1	10/27/15 13:22	10/27/15 13:22	DJD
Wet Chemistry by Method 9056MOD	WG824304	50	10/28/15 00:28	10/28/15 00:28	DJD

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-93 L798466-23 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 12:20

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG823732	1	10/23/15 15:11	10/24/15 14:59	MF
Metals (ICPMS) by Method 6020	WG824777	1	10/27/15 12:14	10/28/15 11:27	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823914	5	10/23/15 11:31	10/26/15 16:39	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG823733	1	10/27/15 14:57	10/27/15 14:57	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824206	10	10/26/15 03:59	10/26/15 03:59	JAH
Wet Chemistry by Method 353.2	WG824554	100	10/28/15 13:44	10/28/15 13:44	ASK
Wet Chemistry by Method 9056MOD	WG823862	1	10/24/15 06:29	10/24/15 06:29	DJD
Wet Chemistry by Method 9056MOD	WG823862	50	10/24/15 07:27	10/24/15 07:27	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-23 L798466-24 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 11:20

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG823732	1	10/23/15 15:11	10/24/15 14:59	MF
Metals (ICPMS) by Method 6020	WG824777	1	10/27/15 12:14	10/28/15 11:34	JDG
Metals (ICPMS) by Method 6020	WG824777	2	10/27/15 12:14	10/28/15 12:21	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823914	20	10/23/15 11:31	10/25/15 06:42	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG823733	10	10/27/15 16:47	10/27/15 16:47	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824206	1	10/26/15 04:20	10/26/15 04:20	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824662	500	10/28/15 14:21	10/28/15 14:21	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824945	50	10/28/15 01:37	10/28/15 01:37	JAH
Wet Chemistry by Method 353.2	WG824554	100	10/28/15 13:45	10/28/15 13:45	ASK
Wet Chemistry by Method 9056MOD	WG823862	1	10/24/15 06:44	10/24/15 06:44	DJD
Wet Chemistry by Method 9056MOD	WG823862	20	10/24/15 07:41	10/24/15 07:41	DJD

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-50 L798466-25 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 10:25

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG823734	1	10/24/15 02:13	10/25/15 01:42	JM
Metals (ICPMS) by Method 6020	WG824777	1	10/27/15 12:14	10/28/15 11:37	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823914	1	10/23/15 11:31	10/25/15 03:19	CLG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824945	1	10/28/15 00:58	10/28/15 00:58	JAH
Wet Chemistry by Method 353.2	WG824554	100	10/28/15 13:46	10/28/15 13:46	ASK
Wet Chemistry by Method 9056MOD	WG823862	1	10/24/15 06:58	10/24/15 06:58	DJD
Wet Chemistry by Method 9056MOD	WG823862	50	10/24/15 07:56	10/24/15 07:56	DJD

MW-91 L798466-26 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 11:15

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG823734	1	10/24/15 02:13	10/25/15 01:43	JM
Metals (ICPMS) by Method 6020	WG824777	1	10/27/15 12:14	10/28/15 11:39	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823914	5	10/23/15 11:31	10/26/15 16:19	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG823733	10	10/27/15 17:09	10/27/15 17:09	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824206	25	10/26/15 05:02	10/26/15 05:02	ACG
Wet Chemistry by Method 353.2	WG824554	100	10/28/15 13:47	10/28/15 13:47	ASK
Wet Chemistry by Method 9056MOD	WG823862	1	10/24/15 07:13	10/24/15 07:13	DJD
Wet Chemistry by Method 9056MOD	WG823862	10	10/24/15 08:10	10/24/15 08:10	DJD

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



KWB-10R L798466-27 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 14:25

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824140	1	10/24/15 11:09	10/26/15 03:37	MF
Metals (ICPMS) by Method 6020	WG824778	1	10/27/15 13:58	10/27/15 19:57	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823923	1	10/22/15 19:12	10/24/15 17:31	CLG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824210	1	10/25/15 13:24	10/25/15 13:24	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824566	100	10/27/15 14:54	10/27/15 14:54	ACG
Wet Chemistry by Method 353.2	WG824554	1	10/28/15 13:48	10/28/15 13:48	ASK
Wet Chemistry by Method 9056MOD	WG823864	1	10/24/15 09:06	10/24/15 09:06	DJD
Wet Chemistry by Method 9056MOD	WG823864	20	10/24/15 10:08	10/24/15 10:08	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-131 L798466-28 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 10:10

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824140	1	10/24/15 11:09	10/26/15 03:38	MF
Metals (ICPMS) by Method 6020	WG824778	1	10/27/15 13:58	10/27/15 19:59	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823923	1	10/22/15 19:12	10/24/15 17:51	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825076	5	10/28/15 10:58	10/28/15 10:58	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824210	1	10/25/15 13:42	10/25/15 13:42	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824945	50	10/28/15 01:56	10/28/15 01:56	JAH
Wet Chemistry by Method 353.2	WG824554	1	10/28/15 13:49	10/28/15 13:49	ASK
Wet Chemistry by Method 9056MOD	WG823864	1	10/24/15 09:22	10/24/15 09:22	DJD
Wet Chemistry by Method 9056MOD	WG823864	20	10/24/15 10:23	10/24/15 10:23	DJD

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-111 L798466-29 GW

Collected by
Greg Scherbenske

Collected date/time
10/19/15 08:25

Received date/time
10/21/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824140	1	10/24/15 11:09	10/26/15 03:38	MF
Metals (ICPMS) by Method 6020	WG824778	1	10/27/15 13:58	10/27/15 20:01	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823923	1	10/22/15 19:12	10/24/15 18:11	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG825076	1	10/28/15 11:20	10/28/15 11:20	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824210	1	10/25/15 14:00	10/25/15 14:00	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824945	25	10/28/15 02:16	10/28/15 02:16	JAH
Wet Chemistry by Method 353.2	WG824554	1	10/28/15 13:50	10/28/15 13:50	ASK
Wet Chemistry by Method 9056MOD	WG823865	1	10/23/15 20:31	10/23/15 20:31	DJD
Wet Chemistry by Method 9056MOD	WG823865	100	10/23/15 21:41	10/23/15 21:41	DJD

MW-52 L798466-30 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 12:30

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:17	MF
Mercury by Method 7470A	WG825308	1	10/29/15 10:49	10/29/15 18:04	JD
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 14:20	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/27/15 02:04	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 13:31	10/27/15 13:31	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825316	1	10/29/15 14:10	10/29/15 14:10	ACG
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:56	11/02/15 22:56	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:49	DR
Wet Chemistry by Method 9056MOD	WG824304	1	10/27/15 13:37	10/27/15 13:37	DJD
Wet Chemistry by Method 9056MOD	WG824304	20	10/27/15 14:23	10/27/15 14:23	DJD

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



EB-REST-04 L798466-31 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 15:00

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:19	MF
Mercury by Method 7470A	WG825308	1	10/29/15 10:49	10/29/15 18:07	JD
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 14:23	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/27/15 02:24	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 13:53	10/27/15 13:53	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825316	1	10/29/15 15:27	10/29/15 15:27	ACG
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:57	11/02/15 22:57	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:50	DR
Wet Chemistry by Method 9056MOD	WG824304	1	10/27/15 18:18	10/27/15 18:18	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

DUP-REST-04 L798466-32 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 12:30

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824454	1	10/26/15 11:56	10/27/15 14:18	MF
Mercury by Method 7470A	WG825308	1	10/29/15 10:49	10/29/15 18:09	JD
Metals (ICPMS) by Method 6020	WG824869	1	10/28/15 11:03	10/29/15 11:07	VSS
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG824380	1	10/26/15 00:00	10/27/15 02:44	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824603	1	10/27/15 14:15	10/27/15 14:15	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825316	1	10/29/15 15:47	10/29/15 15:47	ACG
Wet Chemistry by Method 353.2	WG825545	10	11/02/15 22:58	11/02/15 22:58	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:52	DR
Wet Chemistry by Method 9056MOD	WG824304	1	10/27/15 13:52	10/27/15 13:52	DJD
Wet Chemistry by Method 9056MOD	WG824304	50	10/27/15 14:42	10/27/15 14:42	DJD

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1470000		2820	10000	1	10/27/2015 15:23	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	230	J	197	1000	10	10/29/2015 17:20	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	236000		1040	20000	20	10/24/2015 22:03	WG824156
Fluoride	993		9.90	100	1	10/24/2015 21:17	WG824156
Sulfate	206000		1550	100000	20	10/24/2015 22:03	WG824156

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	56.0		0.250	2.00	1	10/28/2015 17:35	WG824868
Barium	38.2		0.360	5.00	1	10/28/2015 17:35	WG824868
Calcium	188000		46.0	1000	1	10/28/2015 17:35	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 17:35	WG824868
Iron	2590		15.0	100	1	10/28/2015 17:35	WG824868
Lead	U		2.40	20.0	10	10/28/2015 19:51	WG824868
Manganese	1130		0.250	5.00	1	10/28/2015 17:35	WG824868
Potassium	483	J	37.0	1000	1	10/28/2015 17:35	WG824868
Selenium	3.44	J	1.90	10.0	5	10/28/2015 19:17	WG824868
Sodium	138000		110	1000	1	10/28/2015 17:35	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	80.3	J	31.4	100	1	10/28/2015 05:26	WG824598
(S) a,a,a-Trifluorotoluene(FID)	92.5			62.0-128		10/28/2015 05:26	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		50.0	250	5	10/28/2015 23:45	WG825221
Benzene	U		1.66	5.00	5	10/28/2015 23:45	WG825221
Bromodichloromethane	U		1.90	5.00	5	10/28/2015 23:45	WG825221
Bromoform	U		2.34	5.00	5	10/28/2015 23:45	WG825221
Bromomethane	U		4.33	25.0	5	10/28/2015 23:45	WG825221
n-Butylbenzene	U		1.80	5.00	5	10/28/2015 23:45	WG825221
sec-Butylbenzene	U		1.82	5.00	5	10/28/2015 23:45	WG825221
Carbon disulfide	U		1.38	5.00	5	10/28/2015 23:45	WG825221
Carbon tetrachloride	U		1.90	5.00	5	10/28/2015 23:45	WG825221
Chlorobenzene	U		1.74	5.00	5	10/28/2015 23:45	WG825221
Chlorodibromomethane	U		1.64	5.00	5	10/28/2015 23:45	WG825221
Chloroethane	U		2.26	25.0	5	10/28/2015 23:45	WG825221
Chloroform	U		1.62	25.0	5	10/28/2015 23:45	WG825221
Chloromethane	U		1.38	12.5	5	10/28/2015 23:45	WG825221
1,2-Dibromoethane	U		1.90	5.00	5	10/28/2015 23:45	WG825221
1,1-Dichloroethane	U		1.30	5.00	5	10/28/2015 23:45	WG825221



Collected date/time: 10/20/15 14:05

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		1.80	5.00	5	10/28/2015 23:45	WG825221
1,1-Dichloroethene	U		1.99	5.00	5	10/28/2015 23:45	WG825221
cis-1,2-Dichloroethene	U		1.30	5.00	5	10/28/2015 23:45	WG825221
trans-1,2-Dichloroethene	U		1.98	5.00	5	10/28/2015 23:45	WG825221
1,2-Dichloropropane	U		1.53	5.00	5	10/28/2015 23:45	WG825221
cis-1,3-Dichloropropene	U		2.09	5.00	5	10/28/2015 23:45	WG825221
trans-1,3-Dichloropropene	U		2.10	5.00	5	10/28/2015 23:45	WG825221
Ethylbenzene	U		1.92	5.00	5	10/28/2015 23:45	WG825221
Isopropylbenzene	U		1.63	5.00	5	10/28/2015 23:45	WG825221
p-Isopropyltoluene	U		1.75	5.00	5	10/28/2015 23:45	WG825221
2-Butanone (MEK)	U		19.6	50.0	5	10/28/2015 23:45	WG825221
2-Hexanone	U		19.1	50.0	5	10/28/2015 23:45	WG825221
Methylene Chloride	U		5.00	25.0	5	10/28/2015 23:45	WG825221
4-Methyl-2-pentanone (MIBK)	U		10.7	50.0	5	10/28/2015 23:45	WG825221
Methyl tert-butyl ether	98.1		1.84	5.00	5	10/28/2015 23:45	WG825221
Naphthalene	U		5.00	25.0	5	10/28/2015 23:45	WG825221
n-Propylbenzene	U		1.74	5.00	5	10/28/2015 23:45	WG825221
Styrene	U		1.54	5.00	5	10/28/2015 23:45	WG825221
1,1,1,2-Tetrachloroethane	U		1.92	5.00	5	10/28/2015 23:45	WG825221
1,1,2,2-Tetrachloroethane	U		0.650	5.00	5	10/28/2015 23:45	WG825221
Tetrachloroethene	U		1.86	5.00	5	10/28/2015 23:45	WG825221
Toluene	U		3.90	25.0	5	10/28/2015 23:45	WG825221
1,1,1-Trichloroethane	U		1.60	5.00	5	10/28/2015 23:45	WG825221
1,1,2-Trichloroethane	U		1.92	5.00	5	10/28/2015 23:45	WG825221
Trichloroethene	U	*	1.99	5.00	5	10/28/2015 23:45	WG825221
1,2,4-Trimethylbenzene	U		1.86	5.00	5	10/28/2015 23:45	WG825221
1,3,5-Trimethylbenzene	U		1.94	5.00	5	10/28/2015 23:45	WG825221
Vinyl chloride	U		1.30	5.00	5	10/28/2015 23:45	WG825221
o-Xylene	U		1.70	5.00	5	10/28/2015 23:45	WG825221
m&p-Xylene	U		3.60	5.00	5	10/28/2015 23:45	WG825221
Xylenes, Total	U		5.30	15.0	5	10/28/2015 23:45	WG825221
(S) Toluene-d8	102			90.0-115		10/28/2015 23:45	WG825221
(S) Dibromofluoromethane	92.2			79.0-121		10/28/2015 23:45	WG825221
(S) 4-Bromofluorobenzene	103			80.1-120		10/28/2015 23:45	WG825221

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5080		24.7	100	1	10/28/2015 21:05	WG823977
(S) o-Terphenyl	96.6			50.0-150		10/28/2015 21:05	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	664000		2820	10000	1	10/27/2015 15:22	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	221	J	197	1000	10	10/29/2015 17:21	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13400		51.9	1000	1	10/27/2015 11:50	WG824303
Fluoride	330		9.90	100	1	10/27/2015 11:50	WG824303
Sulfate	297000		774	50000	10	10/27/2015 23:38	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	8.49		0.250	2.00	1	10/28/2015 18:01	WG824868
Barium	214		0.360	5.00	1	10/28/2015 18:01	WG824868
Calcium	148000		46.0	1000	1	10/28/2015 18:01	WG824868
Chromium	2.21		0.540	2.00	1	10/28/2015 18:01	WG824868
Iron	1070		15.0	100	1	10/28/2015 18:01	WG824868
Lead	5.62		0.240	2.00	1	10/28/2015 18:01	WG824868
Manganese	91.7		0.250	5.00	1	10/28/2015 18:01	WG824868
Potassium	4410		37.0	1000	1	10/28/2015 18:01	WG824868
Selenium	10.8	J	3.80	20.0	10	10/28/2015 19:54	WG824868
Sodium	12000		110	1000	1	10/28/2015 18:01	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	4370		62.8	200	2	10/28/2015 05:48	WG824598
(S) a,a,a-Trifluorotoluene(FID) 83.2				62.0-128		10/28/2015 05:48	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		100	500	10	10/29/2015 00:04	WG825221
Benzene	580		3.31	10.0	10	10/29/2015 00:04	WG825221
Bromodichloromethane	U		3.80	10.0	10	10/29/2015 00:04	WG825221
Bromoform	U		4.69	10.0	10	10/29/2015 00:04	WG825221
Bromomethane	U		8.66	50.0	10	10/29/2015 00:04	WG825221
n-Butylbenzene	6.51	J	3.61	10.0	10	10/29/2015 00:04	WG825221
sec-Butylbenzene	12.1		3.65	10.0	10	10/29/2015 00:04	WG825221
Carbon disulfide	5.57	J	2.75	10.0	10	10/29/2015 00:04	WG825221
Carbon tetrachloride	U		3.79	10.0	10	10/29/2015 00:04	WG825221
Chlorobenzene	U		3.48	10.0	10	10/29/2015 00:04	WG825221
Chlorodibromomethane	U		3.27	10.0	10	10/29/2015 00:04	WG825221
Chloroethane	U		4.53	50.0	10	10/29/2015 00:04	WG825221
Chloroform	U		3.24	50.0	10	10/29/2015 00:04	WG825221
Chloromethane	U		2.76	25.0	10	10/29/2015 00:04	WG825221
1,2-Dibromoethane	U		3.81	10.0	10	10/29/2015 00:04	WG825221
1,1-Dichloroethane	U		2.59	10.0	10	10/29/2015 00:04	WG825221



Collected date/time: 10/20/15 14:25

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		3.61	10.0	10	10/29/2015 00:04	WG825221
1,1-Dichloroethene	U		3.98	10.0	10	10/29/2015 00:04	WG825221
cis-1,2-Dichloroethene	U		2.60	10.0	10	10/29/2015 00:04	WG825221
trans-1,2-Dichloroethene	U		3.96	10.0	10	10/29/2015 00:04	WG825221
1,2-Dichloropropane	U		3.06	10.0	10	10/29/2015 00:04	WG825221
cis-1,3-Dichloropropene	U		4.18	10.0	10	10/29/2015 00:04	WG825221
trans-1,3-Dichloropropene	U		4.19	10.0	10	10/29/2015 00:04	WG825221
Ethylbenzene	188		3.84	10.0	10	10/29/2015 00:04	WG825221
Isopropylbenzene	32.1		3.26	10.0	10	10/29/2015 00:04	WG825221
p-Isopropyltoluene	6.14	U	3.50	10.0	10	10/29/2015 00:04	WG825221
2-Butanone (MEK)	U		39.3	100	10	10/29/2015 00:04	WG825221
2-Hexanone	U		38.2	100	10	10/29/2015 00:04	WG825221
Methylene Chloride	U		10.0	50.0	10	10/29/2015 00:04	WG825221
4-Methyl-2-pentanone (MIBK)	U		21.4	100	10	10/29/2015 00:04	WG825221
Methyl tert-butyl ether	U		3.67	10.0	10	10/29/2015 00:04	WG825221
Naphthalene	29.9	U	10.0	50.0	10	10/29/2015 00:04	WG825221
n-Propylbenzene	34.9		3.49	10.0	10	10/29/2015 00:04	WG825221
Styrene	U		3.07	10.0	10	10/29/2015 00:04	WG825221
1,1,1,2-Tetrachloroethane	U		3.85	10.0	10	10/29/2015 00:04	WG825221
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	10/29/2015 00:04	WG825221
Tetrachloroethene	U		3.72	10.0	10	10/29/2015 00:04	WG825221
Toluene	U		7.80	50.0	10	10/29/2015 00:04	WG825221
1,1,1-Trichloroethane	U		3.19	10.0	10	10/29/2015 00:04	WG825221
1,1,2-Trichloroethane	U		3.83	10.0	10	10/29/2015 00:04	WG825221
Trichloroethene	U	*	3.98	10.0	10	10/29/2015 00:04	WG825221
1,2,4-Trimethylbenzene	48.7		3.73	10.0	10	10/29/2015 00:04	WG825221
1,3,5-Trimethylbenzene	29.1		3.87	10.0	10	10/29/2015 00:04	WG825221
Vinyl chloride	U		2.59	10.0	10	10/29/2015 00:04	WG825221
o-Xylene	U		3.41	10.0	10	10/29/2015 00:04	WG825221
m&p-Xylene	109		7.19	10.0	10	10/29/2015 00:04	WG825221
Xylenes, Total	109		10.6	30.0	10	10/29/2015 00:04	WG825221
(S) Toluene-d8	102			90.0-115		10/29/2015 00:04	WG825221
(S) Dibromofluoromethane	92.3			79.0-121		10/29/2015 00:04	WG825221
(S) 4-Bromofluorobenzene	104			80.1-120		10/29/2015 00:04	WG825221

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2310		24.7	100	1	10/28/2015 21:22	WG823977
(S) o-Terphenyl	94.6			50.0-150		10/28/2015 21:22	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2520000		2820	10000	1	10/27/2015 15:23	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:22	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	179000		1040	20000	20	10/27/2015 13:03	WG824303
Fluoride	2610		9.90	100	1	10/27/2015 12:20	WG824303
Sulfate	2080000		3870	250000	50	10/28/2015 00:07	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.07	J	0.250	2.00	1	10/28/2015 18:03	WG824868
Barium	24.6		0.360	5.00	1	10/28/2015 18:03	WG824868
Calcium	375000		46.0	1000	1	10/28/2015 18:03	WG824868
Chromium	1.19	J	0.540	2.00	1	10/28/2015 18:03	WG824868
Iron	82.8	J	15.0	100	1	10/28/2015 18:03	WG824868
Lead	1.22	J	0.240	2.00	1	10/28/2015 18:03	WG824868
Manganese	41.6		0.250	5.00	1	10/28/2015 18:03	WG824868
Potassium	2280		37.0	1000	1	10/28/2015 18:03	WG824868
Selenium	6.88		0.380	2.00	1	10/28/2015 18:03	WG824868
Sodium	286000		110	1000	1	10/28/2015 18:03	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	5130		157	500	5	10/28/2015 06:10	WG824598
(S) a,a,a-Trifluorotoluene(FID) 89.2				62.0-128		10/28/2015 06:10	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		100	500	10	10/29/2015 00:24	WG825221
Benzene	681		3.31	10.0	10	10/29/2015 00:24	WG825221
Bromodichloromethane	U		3.80	10.0	10	10/29/2015 00:24	WG825221
Bromoform	U		4.69	10.0	10	10/29/2015 00:24	WG825221
Bromomethane	U		8.66	50.0	10	10/29/2015 00:24	WG825221
n-Butylbenzene	5.29	J	3.61	10.0	10	10/29/2015 00:24	WG825221
sec-Butylbenzene	11.5		3.65	10.0	10	10/29/2015 00:24	WG825221
Carbon disulfide	8.67	J	2.75	10.0	10	10/29/2015 00:24	WG825221
Carbon tetrachloride	U		3.79	10.0	10	10/29/2015 00:24	WG825221
Chlorobenzene	U		3.48	10.0	10	10/29/2015 00:24	WG825221
Chlorodibromomethane	U		3.27	10.0	10	10/29/2015 00:24	WG825221
Chloroethane	U		4.53	50.0	10	10/29/2015 00:24	WG825221
Chloroform	U		3.24	50.0	10	10/29/2015 00:24	WG825221
Chloromethane	U		2.76	25.0	10	10/29/2015 00:24	WG825221
1,2-Dibromoethane	U		3.81	10.0	10	10/29/2015 00:24	WG825221
1,1-Dichloroethane	U		2.59	10.0	10	10/29/2015 00:24	WG825221



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		3.61	10.0	10	10/29/2015 00:24	WG825221
1,1-Dichloroethene	U		3.98	10.0	10	10/29/2015 00:24	WG825221
cis-1,2-Dichloroethene	U		2.60	10.0	10	10/29/2015 00:24	WG825221
trans-1,2-Dichloroethene	U		3.96	10.0	10	10/29/2015 00:24	WG825221
1,2-Dichloropropane	U		3.06	10.0	10	10/29/2015 00:24	WG825221
cis-1,3-Dichloropropene	U		4.18	10.0	10	10/29/2015 00:24	WG825221
trans-1,3-Dichloropropene	U		4.19	10.0	10	10/29/2015 00:24	WG825221
Ethylbenzene	65.9		3.84	10.0	10	10/29/2015 00:24	WG825221
Isopropylbenzene	107		3.26	10.0	10	10/29/2015 00:24	WG825221
p-Isopropyltoluene	4.67	U	3.50	10.0	10	10/29/2015 00:24	WG825221
2-Butanone (MEK)	U		39.3	100	10	10/29/2015 00:24	WG825221
2-Hexanone	U		38.2	100	10	10/29/2015 00:24	WG825221
Methylene Chloride	U		10.0	50.0	10	10/29/2015 00:24	WG825221
4-Methyl-2-pentanone (MIBK)	U		21.4	100	10	10/29/2015 00:24	WG825221
Methyl tert-butyl ether	U		3.67	10.0	10	10/29/2015 00:24	WG825221
Naphthalene	66.8		10.0	50.0	10	10/29/2015 00:24	WG825221
n-Propylbenzene	137		3.49	10.0	10	10/29/2015 00:24	WG825221
Styrene	U		3.07	10.0	10	10/29/2015 00:24	WG825221
1,1,1,2-Tetrachloroethane	U		3.85	10.0	10	10/29/2015 00:24	WG825221
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	10/29/2015 00:24	WG825221
Tetrachloroethene	U		3.72	10.0	10	10/29/2015 00:24	WG825221
Toluene	37.9	U	7.80	50.0	10	10/29/2015 00:24	WG825221
1,1,1-Trichloroethane	U		3.19	10.0	10	10/29/2015 00:24	WG825221
1,1,2-Trichloroethane	U		3.83	10.0	10	10/29/2015 00:24	WG825221
Trichloroethene	U	U *	3.98	10.0	10	10/29/2015 00:24	WG825221
1,2,4-Trimethylbenzene	233		3.73	10.0	10	10/29/2015 00:24	WG825221
1,3,5-Trimethylbenzene	U		3.87	10.0	10	10/29/2015 00:24	WG825221
Vinyl chloride	U		2.59	10.0	10	10/29/2015 00:24	WG825221
o-Xylene	4.96	U	3.41	10.0	10	10/29/2015 00:24	WG825221
m&p-Xylene	369		7.19	10.0	10	10/29/2015 00:24	WG825221
Xylenes, Total	374		10.6	30.0	10	10/29/2015 00:24	WG825221
(S) Toluene-d8	101			90.0-115		10/29/2015 00:24	WG825221
(S) Dibromofluoromethane	92.3			79.0-121		10/29/2015 00:24	WG825221
(S) 4-Bromofluorobenzene	103			80.1-120		10/29/2015 00:24	WG825221

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3320		24.7	100	1	10/28/2015 21:39	WG823977
(S) o-Terphenyl	104			50.0-150		10/28/2015 21:39	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4050000		2820	10000	1	10/27/2015 15:22	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:23	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	273000		1040	20000	20	10/27/2015 13:17	WG824303
Fluoride	1930		9.90	100	1	10/27/2015 12:34	WG824303
Sulfate	1900000		1550	100000	20	10/27/2015 13:17	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	2.93		0.250	2.00	1	10/28/2015 18:05	WG824868
Barium	23.5		0.360	5.00	1	10/28/2015 18:05	WG824868
Calcium	425000		46.0	1000	1	10/28/2015 18:05	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 18:05	WG824868
Iron	15.4	J	15.0	100	1	10/28/2015 18:05	WG824868
Lead	0.278	J	0.240	2.00	1	10/28/2015 18:05	WG824868
Manganese	2.66	J	0.250	5.00	1	10/28/2015 18:05	WG824868
Potassium	1310		37.0	1000	1	10/28/2015 18:05	WG824868
Selenium	5.87		0.380	2.00	1	10/28/2015 18:05	WG824868
Sodium	399000		110	1000	1	10/28/2015 18:05	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	18500		1570	5000	50	10/28/2015 06:33	WG824598
(S) a,a,a-Trifluorotoluene(FID) 88.8				62.0-128		10/28/2015 06:33	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		200	1000	20	10/29/2015 00:43	WG825221
Benzene	1500		6.62	20.0	20	10/29/2015 00:43	WG825221
Bromodichloromethane	U		7.60	20.0	20	10/29/2015 00:43	WG825221
Bromoform	U		9.38	20.0	20	10/29/2015 00:43	WG825221
Bromomethane	U		17.3	100	20	10/29/2015 00:43	WG825221
n-Butylbenzene	8.54	J	7.22	20.0	20	10/29/2015 00:43	WG825221
sec-Butylbenzene	20.2		7.30	20.0	20	10/29/2015 00:43	WG825221
Carbon disulfide	16.1	J	5.50	20.0	20	10/29/2015 00:43	WG825221
Carbon tetrachloride	U		7.58	20.0	20	10/29/2015 00:43	WG825221
Chlorobenzene	U		6.96	20.0	20	10/29/2015 00:43	WG825221
Chlorodibromomethane	U		6.54	20.0	20	10/29/2015 00:43	WG825221
Chloroethane	U		9.06	100	20	10/29/2015 00:43	WG825221
Chloroform	U		6.48	100	20	10/29/2015 00:43	WG825221
Chloromethane	U		5.52	50.0	20	10/29/2015 00:43	WG825221
1,2-Dibromoethane	U		7.62	20.0	20	10/29/2015 00:43	WG825221
1,1-Dichloroethane	U		5.18	20.0	20	10/29/2015 00:43	WG825221



Collected date/time: 10/20/15 10:25

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		7.22	20.0	20	10/29/2015 00:43	WG825221
1,1-Dichloroethene	U		7.96	20.0	20	10/29/2015 00:43	WG825221
cis-1,2-Dichloroethene	U		5.20	20.0	20	10/29/2015 00:43	WG825221
trans-1,2-Dichloroethene	U		7.92	20.0	20	10/29/2015 00:43	WG825221
1,2-Dichloropropane	U		6.12	20.0	20	10/29/2015 00:43	WG825221
cis-1,3-Dichloropropene	U		8.36	20.0	20	10/29/2015 00:43	WG825221
trans-1,3-Dichloropropene	U		8.38	20.0	20	10/29/2015 00:43	WG825221
Ethylbenzene	163		7.68	20.0	20	10/29/2015 00:43	WG825221
Isopropylbenzene	138		6.52	20.0	20	10/29/2015 00:43	WG825221
p-Isopropyltoluene	U		7.00	20.0	20	10/29/2015 00:43	WG825221
2-Butanone (MEK)	U		78.6	200	20	10/29/2015 00:43	WG825221
2-Hexanone	U		76.4	200	20	10/29/2015 00:43	WG825221
Methylene Chloride	U		20.0	100	20	10/29/2015 00:43	WG825221
4-Methyl-2-pentanone (MIBK)	U		42.8	200	20	10/29/2015 00:43	WG825221
Methyl tert-butyl ether	U		7.34	20.0	20	10/29/2015 00:43	WG825221
Naphthalene	186		20.0	100	20	10/29/2015 00:43	WG825221
n-Propylbenzene	244		6.98	20.0	20	10/29/2015 00:43	WG825221
Styrene	U		6.14	20.0	20	10/29/2015 00:43	WG825221
1,1,1,2-Tetrachloroethane	U		7.70	20.0	20	10/29/2015 00:43	WG825221
1,1,2,2-Tetrachloroethane	U		2.60	20.0	20	10/29/2015 00:43	WG825221
Tetrachloroethene	U		7.44	20.0	20	10/29/2015 00:43	WG825221
Toluene	U		15.6	100	20	10/29/2015 00:43	WG825221
1,1,1-Trichloroethane	U		6.38	20.0	20	10/29/2015 00:43	WG825221
1,1,2-Trichloroethane	U		7.66	20.0	20	10/29/2015 00:43	WG825221
Trichloroethene	U	*	7.96	20.0	20	10/29/2015 00:43	WG825221
1,2,4-Trimethylbenzene	662		7.46	20.0	20	10/29/2015 00:43	WG825221
1,3,5-Trimethylbenzene	158		7.74	20.0	20	10/29/2015 00:43	WG825221
Vinyl chloride	U		5.18	20.0	20	10/29/2015 00:43	WG825221
o-Xylene	8.86	U	6.82	20.0	20	10/29/2015 00:43	WG825221
m&p-Xylene	1720		14.4	20.0	20	10/29/2015 00:43	WG825221
Xylenes, Total	1730		21.2	60.0	20	10/29/2015 00:43	WG825221
(S) Toluene-d8	101			90.0-115		10/29/2015 00:43	WG825221
(S) Dibromofluoromethane	92.0			79.0-121		10/29/2015 00:43	WG825221
(S) 4-Bromofluorobenzene	102			80.1-120		10/29/2015 00:43	WG825221

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7620		24.7	100	1	10/28/2015 22:14	WG823977
(S) o-Terphenyl	95.9			50.0-150		10/28/2015 22:14	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2960000		2820	10000	1	10/27/2015 15:23	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	300	* J	197	1000	10	10/29/2015 17:24	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	152000		1040	20000	20	10/27/2015 13:32	WG824303
Fluoride	2480		9.90	100	1	10/27/2015 12:49	WG824303
Sulfate	1660000		1550	100000	20	10/27/2015 13:32	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.56	J	0.250	2.00	1	10/28/2015 18:08	WG824868
Barium	22.2		0.360	5.00	1	10/28/2015 18:08	WG824868
Calcium	432000		46.0	1000	1	10/28/2015 18:08	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 18:08	WG824868
Iron	19.9	J	15.0	100	1	10/28/2015 18:08	WG824868
Lead	U		2.40	20.0	10	10/28/2015 19:56	WG824868
Manganese	186		0.250	5.00	1	10/28/2015 18:08	WG824868
Potassium	3140		37.0	1000	1	10/28/2015 18:08	WG824868
Selenium	2.66		0.380	2.00	1	10/28/2015 18:08	WG824868
Sodium	133000		110	1000	1	10/28/2015 18:08	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	75.9	J	31.4	100	1	10/28/2015 06:55	WG824598
(S) a,a,a-Trifluorotoluene(FID) 91.5				62.0-128		10/28/2015 06:55	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/27/2015 23:17	WG824847
Benzene	U	*	0.331	1.00	1	10/29/2015 02:59	WG825127
Bromodichloromethane	U	-	0.380	1.00	1	10/27/2015 23:17	WG824847
Bromoform	U		0.469	1.00	1	10/27/2015 23:17	WG824847
Bromomethane	U		0.866	5.00	1	10/27/2015 23:17	WG824847
n-Butylbenzene	U		0.361	1.00	1	10/27/2015 23:17	WG824847
sec-Butylbenzene	0.697	J	0.365	1.00	1	10/27/2015 23:17	WG824847
Carbon disulfide	1.17		0.275	1.00	1	10/27/2015 23:17	WG824847
Carbon tetrachloride	U		0.379	1.00	1	10/27/2015 23:17	WG824847
Chlorobenzene	U		0.348	1.00	1	10/27/2015 23:17	WG824847
Chlorodibromomethane	U		0.327	1.00	1	10/27/2015 23:17	WG824847
Chloroethane	U		0.453	5.00	1	10/27/2015 23:17	WG824847
Chloroform	U		0.324	5.00	1	10/27/2015 23:17	WG824847
Chloromethane	U		0.276	2.50	1	10/27/2015 23:17	WG824847
1,2-Dibromoethane	U		0.381	1.00	1	10/27/2015 23:17	WG824847
1,1-Dichloroethane	U		0.259	1.00	1	10/27/2015 23:17	WG824847



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/27/2015 23:17	WG824847
1,1-Dichloroethene	U		0.398	1.00	1	10/27/2015 23:17	WG824847
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/27/2015 23:17	WG824847
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/27/2015 23:17	WG824847
1,2-Dichloropropane	U		0.306	1.00	1	10/27/2015 23:17	WG824847
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/27/2015 23:17	WG824847
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/27/2015 23:17	WG824847
Ethylbenzene	0.727	U	0.384	1.00	1	10/27/2015 23:17	WG824847
Isopropylbenzene	6.00		0.326	1.00	1	10/27/2015 23:17	WG824847
p-Isopropyltoluene	U		0.350	1.00	1	10/27/2015 23:17	WG824847
2-Butanone (MEK)	U		3.93	10.0	1	10/27/2015 23:17	WG824847
2-Hexanone	U		3.82	10.0	1	10/27/2015 23:17	WG824847
Methylene Chloride	U		1.00	5.00	1	10/27/2015 23:17	WG824847
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/27/2015 23:17	WG824847
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 02:59	WG825127
Naphthalene	5.83		1.00	5.00	1	10/27/2015 23:17	WG824847
n-Propylbenzene	U		0.349	1.00	1	10/27/2015 23:17	WG824847
Styrene	U		0.307	1.00	1	10/27/2015 23:17	WG824847
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/27/2015 23:17	WG824847
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/27/2015 23:17	WG824847
Tetrachloroethene	U		0.372	1.00	1	10/27/2015 23:17	WG824847
Toluene	1.08	U	0.780	5.00	1	10/27/2015 23:17	WG824847
1,1,1-Trichloroethane	U		0.319	1.00	1	10/27/2015 23:17	WG824847
1,1,2-Trichloroethane	U		0.383	1.00	1	10/27/2015 23:17	WG824847
Trichloroethene	U		0.398	1.00	1	10/27/2015 23:17	WG824847
1,2,4-Trimethylbenzene	0.527	U	0.373	1.00	1	10/27/2015 23:17	WG824847
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/27/2015 23:17	WG824847
Vinyl chloride	U		0.259	1.00	1	10/27/2015 23:17	WG824847
o-Xylene	5.30		0.341	1.00	1	10/27/2015 23:17	WG824847
m&p-Xylene	1.15		0.719	1.00	1	10/27/2015 23:17	WG824847
Xylenes, Total	6.45		1.06	3.00	1	10/27/2015 23:17	WG824847
(S) Toluene-d8	102			90.0-115		10/27/2015 23:17	WG824847
(S) Dibromofluoromethane	97.2			79.0-121		10/27/2015 23:17	WG824847
(S) 4-Bromofluorobenzene	99.4			80.1-120		10/27/2015 23:17	WG824847

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3830		24.7	100	1	10/28/2015 21:57	WG823977
(S) o-Terphenyl	115			50.0-150		10/28/2015 21:57	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3340000		2820	10000	1	10/27/2015 15:23	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:26	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	55700		51.9	1000	1	10/27/2015 14:45	WG824303
Fluoride	1530		9.90	100	1	10/27/2015 14:45	WG824303
Sulfate	1790000		1550	100000	20	10/27/2015 13:46	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.09	J	0.250	2.00	1	10/28/2015 18:10	WG824868
Barium	14.9		0.360	5.00	1	10/28/2015 18:10	WG824868
Calcium	427000		46.0	1000	1	10/28/2015 18:10	WG824868
Chromium	0.932	J	0.540	2.00	1	10/28/2015 18:10	WG824868
Iron	33.9	J	15.0	100	1	10/28/2015 18:10	WG824868
Lead	6.59		0.240	2.00	1	10/28/2015 18:10	WG824868
Manganese	21.3		0.250	5.00	1	10/28/2015 18:10	WG824868
Potassium	134	J	37.0	1000	1	10/28/2015 18:10	WG824868
Selenium	5.14		0.380	2.00	1	10/28/2015 18:10	WG824868
Sodium	74900		110	1000	1	10/28/2015 18:10	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	18600		314	1000	10	10/28/2015 07:17	WG824598
(S) a,a,a-Trifluorotoluene(FID) 81.6				62.0-128		10/28/2015 07:17	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		250	1250	25	10/27/2015 23:40	WG824847
Benzene	4790		8.28	25.0	25	10/27/2015 23:40	WG824847
Bromodichloromethane	U		9.50	25.0	25	10/27/2015 23:40	WG824847
Bromoform	U		11.7	25.0	25	10/27/2015 23:40	WG824847
Bromomethane	U		21.6	125	25	10/27/2015 23:40	WG824847
n-Butylbenzene	U		9.02	25.0	25	10/27/2015 23:40	WG824847
sec-Butylbenzene	U		9.12	25.0	25	10/27/2015 23:40	WG824847
Carbon disulfide	34.4		6.88	25.0	25	10/27/2015 23:40	WG824847
Carbon tetrachloride	U		9.48	25.0	25	10/27/2015 23:40	WG824847
Chlorobenzene	U		8.70	25.0	25	10/27/2015 23:40	WG824847
Chlorodibromomethane	U		8.18	25.0	25	10/27/2015 23:40	WG824847
Chloroethane	U		11.3	125	25	10/27/2015 23:40	WG824847
Chloroform	U		8.10	125	25	10/27/2015 23:40	WG824847
Chloromethane	U		6.90	62.5	25	10/27/2015 23:40	WG824847
1,2-Dibromoethane	U		9.52	25.0	25	10/27/2015 23:40	WG824847
1,1-Dichloroethane	U		6.48	25.0	25	10/27/2015 23:40	WG824847



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		9.02	25.0	25	10/27/2015 23:40	WG824847
1,1-Dichloroethene	U		9.95	25.0	25	10/27/2015 23:40	WG824847
cis-1,2-Dichloroethene	U		6.50	25.0	25	10/27/2015 23:40	WG824847
trans-1,2-Dichloroethene	U		9.90	25.0	25	10/27/2015 23:40	WG824847
1,2-Dichloropropane	U		7.65	25.0	25	10/27/2015 23:40	WG824847
cis-1,3-Dichloropropene	U		10.4	25.0	25	10/27/2015 23:40	WG824847
trans-1,3-Dichloropropene	U		10.5	25.0	25	10/27/2015 23:40	WG824847
Ethylbenzene	659		9.60	25.0	25	10/27/2015 23:40	WG824847
Isopropylbenzene	78.1		8.15	25.0	25	10/27/2015 23:40	WG824847
p-Isopropyltoluene	U		8.75	25.0	25	10/27/2015 23:40	WG824847
2-Butanone (MEK)	U		98.2	250	25	10/27/2015 23:40	WG824847
2-Hexanone	U		95.5	250	25	10/27/2015 23:40	WG824847
Methylene Chloride	U		25.0	125	25	10/27/2015 23:40	WG824847
4-Methyl-2-pentanone (MIBK)	U		53.5	250	25	10/27/2015 23:40	WG824847
Methyl tert-butyl ether	U		9.18	25.0	25	10/27/2015 23:40	WG824847
Naphthalene	237		25.0	125	25	10/27/2015 23:40	WG824847
n-Propylbenzene	98.1		8.72	25.0	25	10/27/2015 23:40	WG824847
Styrene	U		7.68	25.0	25	10/27/2015 23:40	WG824847
1,1,1,2-Tetrachloroethane	U		9.62	25.0	25	10/27/2015 23:40	WG824847
1,1,2,2-Tetrachloroethane	U		3.25	25.0	25	10/27/2015 23:40	WG824847
Tetrachloroethene	U		9.30	25.0	25	10/27/2015 23:40	WG824847
Toluene	268		19.5	125	25	10/27/2015 23:40	WG824847
1,1,1-Trichloroethane	U		7.98	25.0	25	10/27/2015 23:40	WG824847
1,1,2-Trichloroethane	U		9.58	25.0	25	10/27/2015 23:40	WG824847
Trichloroethene	U		9.95	25.0	25	10/27/2015 23:40	WG824847
1,2,4-Trimethylbenzene	380		9.32	25.0	25	10/27/2015 23:40	WG824847
1,3,5-Trimethylbenzene	83.6		9.68	25.0	25	10/27/2015 23:40	WG824847
Vinyl chloride	U		6.48	25.0	25	10/27/2015 23:40	WG824847
o-Xylene	31.6		8.52	25.0	25	10/27/2015 23:40	WG824847
m&p-Xylene	1680		18.0	25.0	25	10/27/2015 23:40	WG824847
Xylenes, Total	1710		26.5	75.0	25	10/27/2015 23:40	WG824847
(S) Toluene-d8	103			90.0-115		10/27/2015 23:40	WG824847
(S) Dibromofluoromethane	101			79.0-121		10/27/2015 23:40	WG824847
(S) 4-Bromofluorobenzene	100			80.1-120		10/27/2015 23:40	WG824847

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6380		24.7	100	1	10/28/2015 22:32	WG823977
(S) o-Terphenyl	99.5			50.0-150		10/28/2015 22:32	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3330000		2820	10000	1	10/27/2015 15:23	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:27	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	115000		1040	20000	20	10/27/2015 14:01	WG824303
Fluoride	722		9.90	100	1	10/27/2015 14:59	WG824303
Sulfate	2080000		3870	250000	50	10/28/2015 00:07	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.00	J	0.250	2.00	1	10/28/2015 18:12	WG824868
Barium	16.1		0.360	5.00	1	10/28/2015 18:12	WG824868
Calcium	397000		46.0	1000	1	10/28/2015 18:12	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 18:12	WG824868
Iron	U		15.0	100	1	10/28/2015 18:12	WG824868
Lead	U		1.20	10.0	5	10/28/2015 19:24	WG824868
Manganese	369		0.250	5.00	1	10/28/2015 18:12	WG824868
Potassium	823	J	37.0	1000	1	10/28/2015 18:12	WG824868
Selenium	1.65	J	0.380	2.00	1	10/28/2015 18:12	WG824868
Sodium	167000		110	1000	1	10/28/2015 18:12	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	73.8	J	31.4	100	1	10/29/2015 03:28	WG825222
(S) a,a,a-Trifluorotoluene(FID) 95.0				62.0-128		10/29/2015 03:28	WG825222

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 13:32	WG825316
Benzene	U		0.331	1.00	1	10/29/2015 13:32	WG825316
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 13:32	WG825316
Bromoform	U		0.469	1.00	1	10/29/2015 13:32	WG825316
Bromomethane	U		0.866	5.00	1	10/29/2015 13:32	WG825316
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 13:32	WG825316
sec-Butylbenzene	0.791	J	0.365	1.00	1	10/29/2015 13:32	WG825316
Carbon disulfide	U		0.275	1.00	1	10/29/2015 13:32	WG825316
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 13:32	WG825316
Chlorobenzene	U		0.348	1.00	1	10/29/2015 13:32	WG825316
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 13:32	WG825316
Chloroethane	U		0.453	5.00	1	10/29/2015 13:32	WG825316
Chloroform	U		0.324	5.00	1	10/29/2015 13:32	WG825316
Chloromethane	U		0.276	2.50	1	10/29/2015 13:32	WG825316
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 13:32	WG825316
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 13:32	WG825316



Collected date/time: 10/20/15 08:40

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 13:32	WG825316
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 13:32	WG825316
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 13:32	WG825316
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 13:32	WG825316
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 13:32	WG825316
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 13:32	WG825316
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 13:32	WG825316
Ethylbenzene	U		0.384	1.00	1	10/29/2015 13:32	WG825316
Isopropylbenzene	0.961	U	0.326	1.00	1	10/29/2015 13:32	WG825316
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 13:32	WG825316
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 13:32	WG825316
2-Hexanone	U		3.82	10.0	1	10/29/2015 13:32	WG825316
Methylene Chloride	U		1.00	5.00	1	10/29/2015 13:32	WG825316
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 13:32	WG825316
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 13:32	WG825316
Naphthalene	U		1.00	5.00	1	10/29/2015 13:32	WG825316
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 13:32	WG825316
Styrene	U		0.307	1.00	1	10/29/2015 13:32	WG825316
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 13:32	WG825316
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 13:32	WG825316
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 13:32	WG825316
Toluene	U		0.780	5.00	1	10/29/2015 13:32	WG825316
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 13:32	WG825316
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 13:32	WG825316
Trichloroethene	U		0.398	1.00	1	10/29/2015 13:32	WG825316
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 13:32	WG825316
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 13:32	WG825316
Vinyl chloride	U		0.259	1.00	1	10/29/2015 13:32	WG825316
o-Xylene	U		0.341	1.00	1	10/29/2015 13:32	WG825316
m&p-Xylene	U		0.719	1.00	1	10/29/2015 13:32	WG825316
Xylenes, Total	U		1.06	3.00	1	10/29/2015 13:32	WG825316
(S) Toluene-d8	104			90.0-115		10/29/2015 13:32	WG825316
(S) Dibromofluoromethane	97.1			79.0-121		10/29/2015 13:32	WG825316
(S) 4-Bromofluorobenzene	96.1			80.1-120		10/29/2015 13:32	WG825316

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	658		24.7	100	1	10/28/2015 22:50	WG823977
(S) o-Terphenyl	102			50.0-150		10/28/2015 22:50	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3420000		2820	10000	1	10/27/2015 15:22	WG824448

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:28	WG825446

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	148000		2600	50000	50	10/27/2015 15:56	WG824303
Fluoride	1760		9.90	100	1	10/27/2015 15:13	WG824303
Sulfate	1790000		3870	250000	50	10/27/2015 15:56	WG824303

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	7.26		0.250	2.00	1	10/28/2015 18:15	WG824868
Barium	45.1		0.360	5.00	1	10/28/2015 18:15	WG824868
Calcium	373000		46.0	1000	1	10/28/2015 18:15	WG824868
Chromium	3.85		0.540	2.00	1	10/28/2015 18:15	WG824868
Iron	650		15.0	100	1	10/28/2015 18:15	WG824868
Lead	9.07		0.240	2.00	1	10/28/2015 18:15	WG824868
Manganese	11.9		0.250	5.00	1	10/28/2015 18:15	WG824868
Potassium	2430		37.0	1000	1	10/28/2015 18:15	WG824868
Selenium	5.22		0.380	2.00	1	10/28/2015 18:15	WG824868
Sodium	221000		110	1000	1	10/28/2015 18:15	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	23800		314	1000	10	10/29/2015 03:53	WG825222
(S) a,a,a-Trifluorotoluene(FID) 89.4				62.0-128		10/29/2015 03:53	WG825222

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1000	5000	100	10/28/2015 00:03	WG824847
Benzene	10400		33.1	100	100	10/28/2015 00:03	WG824847
Bromodichloromethane	U		38.0	100	100	10/28/2015 00:03	WG824847
Bromoform	U		46.9	100	100	10/28/2015 00:03	WG824847
Bromomethane	U		86.6	500	100	10/28/2015 00:03	WG824847
n-Butylbenzene	U		36.1	100	100	10/28/2015 00:03	WG824847
sec-Butylbenzene	U		36.5	100	100	10/28/2015 00:03	WG824847
Carbon disulfide	91.4	J	27.5	100	100	10/28/2015 00:03	WG824847
Carbon tetrachloride	U		37.9	100	100	10/28/2015 00:03	WG824847
Chlorobenzene	U		34.8	100	100	10/28/2015 00:03	WG824847
Chlorodibromomethane	U		32.7	100	100	10/28/2015 00:03	WG824847
Chloroethane	U		45.3	500	100	10/28/2015 00:03	WG824847
Chloroform	U		32.4	500	100	10/28/2015 00:03	WG824847
Chloromethane	U		27.6	250	100	10/28/2015 00:03	WG824847
1,2-Dibromoethane	U		38.1	100	100	10/28/2015 00:03	WG824847
1,1-Dichloroethane	U		25.9	100	100	10/28/2015 00:03	WG824847



Collected date/time: 10/20/15 12:25

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		36.1	100	100	10/28/2015 00:03	WG824847
1,1-Dichloroethene	U		39.8	100	100	10/28/2015 00:03	WG824847
cis-1,2-Dichloroethene	U		26.0	100	100	10/28/2015 00:03	WG824847
trans-1,2-Dichloroethene	U		39.6	100	100	10/28/2015 00:03	WG824847
1,2-Dichloropropane	U		30.6	100	100	10/28/2015 00:03	WG824847
cis-1,3-Dichloropropene	U		41.8	100	100	10/28/2015 00:03	WG824847
trans-1,3-Dichloropropene	U		41.9	100	100	10/28/2015 00:03	WG824847
Ethylbenzene	82.3	L	38.4	100	100	10/28/2015 00:03	WG824847
Isopropylbenzene	U		32.6	100	100	10/28/2015 00:03	WG824847
p-Isopropyltoluene	U		35.0	100	100	10/28/2015 00:03	WG824847
2-Butanone (MEK)	U		393	1000	100	10/28/2015 00:03	WG824847
2-Hexanone	U		382	1000	100	10/28/2015 00:03	WG824847
Methylene Chloride	U		100	500	100	10/28/2015 00:03	WG824847
4-Methyl-2-pentanone (MIBK)	U		214	1000	100	10/28/2015 00:03	WG824847
Methyl tert-butyl ether	39.7	L	36.7	100	100	10/28/2015 00:03	WG824847
Naphthalene	113	L	100	500	100	10/28/2015 00:03	WG824847
n-Propylbenzene	U		34.9	100	100	10/28/2015 00:03	WG824847
Styrene	U		30.7	100	100	10/28/2015 00:03	WG824847
1,1,1,2-Tetrachloroethane	U		38.5	100	100	10/28/2015 00:03	WG824847
1,1,2,2-Tetrachloroethane	U		13.0	100	100	10/28/2015 00:03	WG824847
Tetrachloroethene	U		37.2	100	100	10/28/2015 00:03	WG824847
Toluene	216	L	78.0	500	100	10/28/2015 00:03	WG824847
1,1,1-Trichloroethane	U		31.9	100	100	10/28/2015 00:03	WG824847
1,1,2-Trichloroethane	U		38.3	100	100	10/28/2015 00:03	WG824847
Trichloroethene	U		39.8	100	100	10/28/2015 00:03	WG824847
1,2,4-Trimethylbenzene	92.1	L	37.3	100	100	10/28/2015 00:03	WG824847
1,3,5-Trimethylbenzene	U		38.7	100	100	10/28/2015 00:03	WG824847
Vinyl chloride	U		25.9	100	100	10/28/2015 00:03	WG824847
o-Xylene	U		34.1	100	100	10/28/2015 00:03	WG824847
m&p-Xylene	217		71.9	100	100	10/28/2015 00:03	WG824847
Xylenes, Total	217	L	106	300	100	10/28/2015 00:03	WG824847
(S) Toluene-d8	105			90.0-115		10/28/2015 00:03	WG824847
(S) Dibromofluoromethane	98.7			79.0-121		10/28/2015 00:03	WG824847
(S) 4-Bromofluorobenzene	96.3			80.1-120		10/28/2015 00:03	WG824847

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	19600		494	2000	20	10/29/2015 02:44	WG823977
(S) o-Terphenyl	0.000	X		50.0-150		10/29/2015 02:44	WG823977



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/27/2015 14:21	WG824438
Benzene	U		0.331	1.00	1	10/27/2015 14:21	WG824438
Bromodichloromethane	U		0.380	1.00	1	10/27/2015 14:21	WG824438
Bromoform	U		0.469	1.00	1	10/27/2015 14:21	WG824438
Bromomethane	U		0.866	5.00	1	10/27/2015 14:21	WG824438
n-Butylbenzene	U		0.361	1.00	1	10/27/2015 14:21	WG824438
sec-Butylbenzene	U		0.365	1.00	1	10/27/2015 14:21	WG824438
Carbon disulfide	U		0.275	1.00	1	10/27/2015 14:21	WG824438
Carbon tetrachloride	U		0.379	1.00	1	10/27/2015 14:21	WG824438
Chlorobenzene	U		0.348	1.00	1	10/27/2015 14:21	WG824438
Chlorodibromomethane	U		0.327	1.00	1	10/27/2015 14:21	WG824438
Chloroethane	U		0.453	5.00	1	10/27/2015 14:21	WG824438
Chloroform	U		0.324	5.00	1	10/27/2015 14:21	WG824438
Chloromethane	U		0.276	2.50	1	10/27/2015 14:21	WG824438
1,2-Dibromoethane	U		0.381	1.00	1	10/27/2015 14:21	WG824438
1,1-Dichloroethane	U		0.259	1.00	1	10/27/2015 14:21	WG824438
1,2-Dichloroethane	U		0.361	1.00	1	10/27/2015 14:21	WG824438
1,1-Dichloroethene	U		0.398	1.00	1	10/27/2015 14:21	WG824438
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/27/2015 14:21	WG824438
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/27/2015 14:21	WG824438
1,2-Dichloropropane	U		0.306	1.00	1	10/27/2015 14:21	WG824438
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/27/2015 14:21	WG824438
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/27/2015 14:21	WG824438
Ethylbenzene	U		0.384	1.00	1	10/27/2015 14:21	WG824438
Isopropylbenzene	U		0.326	1.00	1	10/27/2015 14:21	WG824438
p-Isopropyltoluene	U		0.350	1.00	1	10/27/2015 14:21	WG824438
2-Butanone (MEK)	U		3.93	10.0	1	10/27/2015 14:21	WG824438
2-Hexanone	U		3.82	10.0	1	10/27/2015 14:21	WG824438
Methylene Chloride	U		1.00	5.00	1	10/27/2015 14:21	WG824438
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/27/2015 14:21	WG824438
Methyl tert-butyl ether	U		0.367	1.00	1	10/27/2015 14:21	WG824438
Naphthalene	U		1.00	5.00	1	10/27/2015 14:21	WG824438
n-Propylbenzene	U		0.349	1.00	1	10/27/2015 14:21	WG824438
Styrene	U		0.307	1.00	1	10/27/2015 14:21	WG824438
1,1,1,2-Tetrachloroethane	U	*	0.385	1.00	1	10/27/2015 14:21	WG824438
1,1,2,2-Tetrachloroethane	U	-	0.130	1.00	1	10/27/2015 14:21	WG824438
Tetrachloroethene	U		0.372	1.00	1	10/27/2015 14:21	WG824438
Toluene	U		0.780	5.00	1	10/27/2015 14:21	WG824438
1,1,1-Trichloroethane	U		0.319	1.00	1	10/27/2015 14:21	WG824438
1,1,2-Trichloroethane	U		0.383	1.00	1	10/27/2015 14:21	WG824438
Trichloroethene	U		0.398	1.00	1	10/27/2015 14:21	WG824438
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/27/2015 14:21	WG824438
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/27/2015 14:21	WG824438
Vinyl chloride	U		0.259	1.00	1	10/27/2015 14:21	WG824438
o-Xylene	U		0.341	1.00	1	10/27/2015 14:21	WG824438
m&p-Xylene	U		0.719	1.00	1	10/27/2015 14:21	WG824438
Xylenes, Total	U		1.06	3.00	1	10/27/2015 14:21	WG824438
(S) Toluene-d8	112			90.0-115		10/27/2015 14:21	WG824438
(S) Dibromofluoromethane	103			79.0-121		10/27/2015 14:21	WG824438
(S) 4-Bromofluorobenzene	104			80.1-120		10/27/2015 14:21	WG824438

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3960000		2820	10000	1	10/27/2015 14:17	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	622	J	197	1000	10	11/02/2015 22:47	WG825545

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	86600		2600	50000	50	10/27/2015 23:10	WG824303
Fluoride	5130		9.90	100	1	10/27/2015 22:26	WG824303
Sulfate	2690000		3870	250000	50	10/27/2015 23:10	WG824303

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	11.7		0.250	2.00	1	10/29/2015 12:07	WG824869
Barium	13.1		0.360	5.00	1	10/29/2015 12:07	WG824869
Calcium	583000		92.0	2000	2	10/29/2015 14:09	WG824869
Chromium	1.37	J	0.540	2.00	1	10/29/2015 12:07	WG824869
Iron	155		15.0	100	1	10/29/2015 12:07	WG824869
Lead	0.329	J	0.240	2.00	1	10/29/2015 12:07	WG824869
Manganese	2.23	J	0.250	5.00	1	10/29/2015 12:07	WG824869
Potassium	5640		37.0	1000	1	10/29/2015 12:07	WG824869
Selenium	5.09		0.380	2.00	1	10/29/2015 12:07	WG824869
Sodium	162000		110	1000	1	10/29/2015 14:13	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/27/2015 12:25	WG824603
(S) a,a,a-Trifluorotoluene(FID) 90.7				62.0-128		10/27/2015 12:25	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 03:52	WG825269
Benzene	U		0.331	1.00	1	10/29/2015 03:52	WG825269
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 03:52	WG825269
Bromoform	U		0.469	1.00	1	10/29/2015 03:52	WG825269
Bromomethane	U		0.866	5.00	1	10/29/2015 03:52	WG825269
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 03:52	WG825269
sec-Butylbenzene	U		0.365	1.00	1	10/29/2015 03:52	WG825269
Carbon disulfide	U		0.275	1.00	1	10/29/2015 03:52	WG825269
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 03:52	WG825269
Chlorobenzene	U		0.348	1.00	1	10/29/2015 03:52	WG825269
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 03:52	WG825269
Chloroethane	U		0.453	5.00	1	10/29/2015 03:52	WG825269
Chloroform	U		0.324	5.00	1	10/29/2015 03:52	WG825269
Chloromethane	U		0.276	2.50	1	10/29/2015 03:52	WG825269
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 03:52	WG825269
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 03:52	WG825269



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 03:52	WG825269
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 03:52	WG825269
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 03:52	WG825269
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 03:52	WG825269
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 03:52	WG825269
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 03:52	WG825269
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 03:52	WG825269
Ethylbenzene	U		0.384	1.00	1	10/29/2015 03:52	WG825269
Isopropylbenzene	U		0.326	1.00	1	10/29/2015 03:52	WG825269
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 03:52	WG825269
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 03:52	WG825269
2-Hexanone	U		3.82	10.0	1	10/29/2015 03:52	WG825269
Methylene Chloride	U		1.00	5.00	1	10/29/2015 03:52	WG825269
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 03:52	WG825269
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 03:52	WG825269
Naphthalene	U		1.00	5.00	1	10/29/2015 03:52	WG825269
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 03:52	WG825269
Styrene	U		0.307	1.00	1	10/29/2015 03:52	WG825269
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 03:52	WG825269
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 03:52	WG825269
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 03:52	WG825269
Toluene	U		0.780	5.00	1	10/29/2015 03:52	WG825269
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 03:52	WG825269
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 03:52	WG825269
Trichloroethene	U		0.398	1.00	1	10/29/2015 03:52	WG825269
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 03:52	WG825269
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 03:52	WG825269
Vinyl chloride	U		0.259	1.00	1	10/29/2015 03:52	WG825269
o-Xylene	U		0.341	1.00	1	10/29/2015 03:52	WG825269
m&p-Xylene	U		0.719	1.00	1	10/29/2015 03:52	WG825269
Xylenes, Total	U		1.06	3.00	1	10/29/2015 03:52	WG825269
(S) Toluene-d8	106			90.0-115		10/29/2015 03:52	WG825269
(S) Dibromofluoromethane	99.7			79.0-121		10/29/2015 03:52	WG825269
(S) 4-Bromofluorobenzene	98.9			80.1-120		10/29/2015 03:52	WG825269

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		24.7	100	1	10/26/2015 23:44	WG824380
(S) o-Terphenyl	57.5			50.0-150		10/26/2015 23:44	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3500000		2820	10000	1	10/27/2015 14:17	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	437	J	197	1000	10	11/02/2015 22:53	WG825545

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	152000		2600	50000	50	10/27/2015 14:08	WG824304
Fluoride	2650		9.90	100	1	10/27/2015 13:06	WG824304
Sulfate	2290000		3870	250000	50	10/27/2015 14:08	WG824304

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.17		0.250	2.00	1	10/29/2015 12:14	WG824869
Barium	10.5		0.360	5.00	1	10/29/2015 12:14	WG824869
Calcium	624000		92.0	2000	2	10/29/2015 14:11	WG824869
Chromium	0.744	J	0.540	2.00	1	10/29/2015 12:14	WG824869
Iron	88.6	J	15.0	100	1	10/29/2015 12:14	WG824869
Lead	U		0.240	2.00	1	10/29/2015 12:14	WG824869
Manganese	4.85	J	0.250	5.00	1	10/29/2015 12:14	WG824869
Potassium	985	J	37.0	1000	1	10/29/2015 12:14	WG824869
Selenium	1.89	J	0.380	2.00	1	10/29/2015 12:14	WG824869
Sodium	86300		110	1000	1	10/29/2015 14:16	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/27/2015 12:47	WG824603
(S) a,a,a-Trifluorotoluene(FID) 90.9				62.0-128		10/27/2015 12:47	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 04:10	WG825269
Benzene	U		0.331	1.00	1	10/29/2015 04:10	WG825269
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 04:10	WG825269
Bromoform	U		0.469	1.00	1	10/29/2015 04:10	WG825269
Bromomethane	U		0.866	5.00	1	10/29/2015 04:10	WG825269
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 04:10	WG825269
sec-Butylbenzene	U		0.365	1.00	1	10/29/2015 04:10	WG825269
Carbon disulfide	U		0.275	1.00	1	10/29/2015 04:10	WG825269
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 04:10	WG825269
Chlorobenzene	U		0.348	1.00	1	10/29/2015 04:10	WG825269
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 04:10	WG825269
Chloroethane	U		0.453	5.00	1	10/29/2015 04:10	WG825269
Chloroform	U		0.324	5.00	1	10/29/2015 04:10	WG825269
Chloromethane	U		0.276	2.50	1	10/29/2015 04:10	WG825269
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 04:10	WG825269
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 04:10	WG825269



Collected date/time: 10/20/15 15:10

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 04:10	WG825269
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 04:10	WG825269
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 04:10	WG825269
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 04:10	WG825269
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 04:10	WG825269
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 04:10	WG825269
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 04:10	WG825269
Ethylbenzene	U		0.384	1.00	1	10/29/2015 04:10	WG825269
Isopropylbenzene	U		0.326	1.00	1	10/29/2015 04:10	WG825269
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 04:10	WG825269
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 04:10	WG825269
2-Hexanone	U		3.82	10.0	1	10/29/2015 04:10	WG825269
Methylene Chloride	U		1.00	5.00	1	10/29/2015 04:10	WG825269
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 04:10	WG825269
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 04:10	WG825269
Naphthalene	U		1.00	5.00	1	10/29/2015 04:10	WG825269
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 04:10	WG825269
Styrene	U		0.307	1.00	1	10/29/2015 04:10	WG825269
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 04:10	WG825269
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 04:10	WG825269
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 04:10	WG825269
Toluene	U		0.780	5.00	1	10/29/2015 04:10	WG825269
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 04:10	WG825269
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 04:10	WG825269
Trichloroethene	U		0.398	1.00	1	10/29/2015 04:10	WG825269
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 04:10	WG825269
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 04:10	WG825269
Vinyl chloride	U		0.259	1.00	1	10/29/2015 04:10	WG825269
o-Xylene	U		0.341	1.00	1	10/29/2015 04:10	WG825269
m&p-Xylene	U		0.719	1.00	1	10/29/2015 04:10	WG825269
Xylenes, Total	U		1.06	3.00	1	10/29/2015 04:10	WG825269
(S) Toluene-d8	99.6			90.0-115		10/29/2015 04:10	WG825269
(S) Dibromofluoromethane	97.5			79.0-121		10/29/2015 04:10	WG825269
(S) 4-Bromofluorobenzene	97.2			80.1-120		10/29/2015 04:10	WG825269

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		24.7	100	1	10/27/2015 00:04	WG824380
(S) o-Terphenyl	69.1			50.0-150		10/27/2015 00:04	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2980000		2820	10000	1	10/27/2015 14:17	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	779	J	197	1000	10	11/02/2015 22:55	WG825545

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	55400		51.9	1000	1	10/27/2015 13:22	WG824304
Fluoride	3400		9.90	100	1	10/27/2015 13:22	WG824304
Sulfate	1690000		3870	250000	50	10/28/2015 00:28	WG824304

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.51		0.250	2.00	1	10/29/2015 12:16	WG824869
Barium	21.4		0.360	5.00	1	10/29/2015 12:16	WG824869
Calcium	478000		46.0	1000	1	10/29/2015 12:16	WG824869
Chromium	3.64		0.540	2.00	1	10/29/2015 12:16	WG824869
Iron	1420		15.0	100	1	10/29/2015 12:16	WG824869
Lead	1.13	J	0.240	2.00	1	10/29/2015 12:16	WG824869
Manganese	14.9		0.250	5.00	1	10/29/2015 12:16	WG824869
Potassium	6440		37.0	1000	1	10/29/2015 12:16	WG824869
Selenium	4.86		0.380	2.00	1	10/29/2015 12:16	WG824869
Sodium	109000		110	1000	1	10/29/2015 14:18	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/27/2015 13:09	WG824603
(S) a,a,a-Trifluorotoluene(FID) 91.4				62.0-128		10/27/2015 13:09	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 04:28	WG825269
Benzene	U		0.331	1.00	1	10/29/2015 04:28	WG825269
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 04:28	WG825269
Bromoform	U		0.469	1.00	1	10/29/2015 04:28	WG825269
Bromomethane	U		0.866	5.00	1	10/29/2015 04:28	WG825269
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 04:28	WG825269
sec-Butylbenzene	U		0.365	1.00	1	10/29/2015 04:28	WG825269
Carbon disulfide	U		0.275	1.00	1	10/29/2015 04:28	WG825269
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 04:28	WG825269
Chlorobenzene	U		0.348	1.00	1	10/29/2015 04:28	WG825269
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 04:28	WG825269
Chloroethane	U		0.453	5.00	1	10/29/2015 04:28	WG825269
Chloroform	U		0.324	5.00	1	10/29/2015 04:28	WG825269
Chloromethane	U		0.276	2.50	1	10/29/2015 04:28	WG825269
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 04:28	WG825269
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 04:28	WG825269



Collected date/time: 10/20/15 13:25

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 04:28	WG825269
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 04:28	WG825269
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 04:28	WG825269
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 04:28	WG825269
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 04:28	WG825269
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 04:28	WG825269
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 04:28	WG825269
Ethylbenzene	U		0.384	1.00	1	10/29/2015 04:28	WG825269
Isopropylbenzene	U		0.326	1.00	1	10/29/2015 04:28	WG825269
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 04:28	WG825269
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 04:28	WG825269
2-Hexanone	U		3.82	10.0	1	10/29/2015 04:28	WG825269
Methylene Chloride	U		1.00	5.00	1	10/29/2015 04:28	WG825269
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 04:28	WG825269
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 04:28	WG825269
Naphthalene	U		1.00	5.00	1	10/29/2015 04:28	WG825269
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 04:28	WG825269
Styrene	U		0.307	1.00	1	10/29/2015 04:28	WG825269
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 04:28	WG825269
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 04:28	WG825269
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 04:28	WG825269
Toluene	U		0.780	5.00	1	10/29/2015 04:28	WG825269
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 04:28	WG825269
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 04:28	WG825269
Trichloroethene	U		0.398	1.00	1	10/29/2015 04:28	WG825269
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 04:28	WG825269
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 04:28	WG825269
Vinyl chloride	U		0.259	1.00	1	10/29/2015 04:28	WG825269
o-Xylene	U		0.341	1.00	1	10/29/2015 04:28	WG825269
m&p-Xylene	U		0.719	1.00	1	10/29/2015 04:28	WG825269
Xylenes, Total	U		1.06	3.00	1	10/29/2015 04:28	WG825269
(S) Toluene-d8	105			90.0-115		10/29/2015 04:28	WG825269
(S) Dibromofluoromethane	98.6			79.0-121		10/29/2015 04:28	WG825269
(S) 4-Bromofluorobenzene	103			80.1-120		10/29/2015 04:28	WG825269

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		24.7	100	1	10/27/2015 01:44	WG824380
(S) o-Terphenyl	68.4			50.0-150		10/27/2015 01:44	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3080000		2820	10000	1	10/24/2015 14:59	WG823732

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2920	J	1970	10000	100	10/28/2015 13:44	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	251000		2600	50000	50	10/24/2015 07:27	WG823862
Fluoride	2370		9.90	100	1	10/24/2015 06:29	WG823862
Sulfate	3070000		3870	250000	50	10/24/2015 07:27	WG823862

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	5.02		0.250	2.00	1	10/28/2015 11:27	WG824777
Barium	48.6		0.360	5.00	1	10/28/2015 11:27	WG824777
Calcium	516000		46.0	1000	1	10/28/2015 11:27	WG824777
Chromium	3.65		0.540	2.00	1	10/28/2015 11:27	WG824777
Iron	1290		15.0	100	1	10/28/2015 11:27	WG824777
Lead	3.27		0.240	2.00	1	10/28/2015 11:27	WG824777
Manganese	120		0.250	5.00	1	10/28/2015 11:27	WG824777
Potassium	5230		37.0	1000	1	10/28/2015 11:27	WG824777
Selenium	70.9		0.380	2.00	1	10/28/2015 11:27	WG824777
Sodium	133000		110	1000	1	10/28/2015 11:27	WG824777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	5140		31.4	100	1	10/27/2015 14:57	WG823733
(S) a,a,a-Trifluorotoluene(FID) 89.8				62.0-128		10/27/2015 14:57	WG823733

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		100	500	10	10/26/2015 03:59	WG824206
Benzene	1210		3.31	10.0	10	10/26/2015 03:59	WG824206
Bromodichloromethane	U		3.80	10.0	10	10/26/2015 03:59	WG824206
Bromoform	U		4.69	10.0	10	10/26/2015 03:59	WG824206
Bromomethane	U		8.66	50.0	10	10/26/2015 03:59	WG824206
n-Butylbenzene	4.96	J	3.61	10.0	10	10/26/2015 03:59	WG824206
sec-Butylbenzene	6.53	J	3.65	10.0	10	10/26/2015 03:59	WG824206
Carbon disulfide	3.41	J	2.75	10.0	10	10/26/2015 03:59	WG824206
Carbon tetrachloride	U		3.79	10.0	10	10/26/2015 03:59	WG824206
Chlorobenzene	U		3.48	10.0	10	10/26/2015 03:59	WG824206
Chlorodibromomethane	U		3.27	10.0	10	10/26/2015 03:59	WG824206
Chloroethane	U		4.53	50.0	10	10/26/2015 03:59	WG824206
Chloroform	U		3.24	50.0	10	10/26/2015 03:59	WG824206
Chloromethane	U		2.76	25.0	10	10/26/2015 03:59	WG824206
1,2-Dibromoethane	U		3.81	10.0	10	10/26/2015 03:59	WG824206
1,1-Dichloroethane	U		2.59	10.0	10	10/26/2015 03:59	WG824206



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		3.61	10.0	10	10/26/2015 03:59	WG824206
1,1-Dichloroethene	U		3.98	10.0	10	10/26/2015 03:59	WG824206
cis-1,2-Dichloroethene	U		2.60	10.0	10	10/26/2015 03:59	WG824206
trans-1,2-Dichloroethene	U		3.96	10.0	10	10/26/2015 03:59	WG824206
1,2-Dichloropropane	U		3.06	10.0	10	10/26/2015 03:59	WG824206
cis-1,3-Dichloropropene	U		4.18	10.0	10	10/26/2015 03:59	WG824206
trans-1,3-Dichloropropene	U		4.19	10.0	10	10/26/2015 03:59	WG824206
Ethylbenzene	71.7		3.84	10.0	10	10/26/2015 03:59	WG824206
Isopropylbenzene	51.8		3.26	10.0	10	10/26/2015 03:59	WG824206
p-Isopropyltoluene	U		3.50	10.0	10	10/26/2015 03:59	WG824206
2-Butanone (MEK)	U		39.3	100	10	10/26/2015 03:59	WG824206
2-Hexanone	U		38.2	100	10	10/26/2015 03:59	WG824206
Methylene Chloride	U		10.0	50.0	10	10/26/2015 03:59	WG824206
4-Methyl-2-pentanone (MIBK)	U		21.4	100	10	10/26/2015 03:59	WG824206
Methyl tert-butyl ether	U		3.67	10.0	10	10/26/2015 03:59	WG824206
Naphthalene	100		10.0	50.0	10	10/26/2015 03:59	WG824206
n-Propylbenzene	74.3		3.49	10.0	10	10/26/2015 03:59	WG824206
Styrene	U		3.07	10.0	10	10/26/2015 03:59	WG824206
1,1,1,2-Tetrachloroethane	U		3.85	10.0	10	10/26/2015 03:59	WG824206
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	10/26/2015 03:59	WG824206
Tetrachloroethene	U		3.72	10.0	10	10/26/2015 03:59	WG824206
Toluene	17.0	U	7.80	50.0	10	10/26/2015 03:59	WG824206
1,1,1-Trichloroethane	U		3.19	10.0	10	10/26/2015 03:59	WG824206
1,1,2-Trichloroethane	U		3.83	10.0	10	10/26/2015 03:59	WG824206
Trichloroethene	U		3.98	10.0	10	10/26/2015 03:59	WG824206
1,2,4-Trimethylbenzene	241		3.73	10.0	10	10/26/2015 03:59	WG824206
1,3,5-Trimethylbenzene	41.4		3.87	10.0	10	10/26/2015 03:59	WG824206
Vinyl chloride	U		2.59	10.0	10	10/26/2015 03:59	WG824206
o-Xylene	11.0		3.41	10.0	10	10/26/2015 03:59	WG824206
m&p-Xylene	483		7.19	10.0	10	10/26/2015 03:59	WG824206
Xylenes, Total	494		10.6	30.0	10	10/26/2015 03:59	WG824206
(S) Toluene-d8	107			90.0-115		10/26/2015 03:59	WG824206
(S) Dibromofluoromethane	100			79.0-121		10/26/2015 03:59	WG824206
(S) 4-Bromofluorobenzene	97.0			80.1-120		10/26/2015 03:59	WG824206

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	16500		124	500	5	10/26/2015 16:39	WG823914
(S) o-Terphenyl	102			50.0-150		10/26/2015 16:39	WG823914



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2190000		2820	10000	1	10/24/2015 14:59	WG823732

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2700	J	1970	10000	100	10/28/2015 13:45	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	480000		1040	20000	20	10/24/2015 07:41	WG823862
Fluoride	1720		9.90	100	1	10/24/2015 06:44	WG823862
Sulfate	29900		77.4	5000	1	10/24/2015 06:44	WG823862

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	10.4		0.250	2.00	1	10/28/2015 11:34	WG824777
Barium	11000		0.720	10.0	2	10/28/2015 12:21	WG824777
Calcium	114000		46.0	1000	1	10/28/2015 11:34	WG824777
Chromium	1.13	J	0.540	2.00	1	10/28/2015 11:34	WG824777
Iron	74.2	J	15.0	100	1	10/28/2015 11:34	WG824777
Lead	5.78		0.240	2.00	1	10/28/2015 11:34	WG824777
Manganese	89.0		0.250	5.00	1	10/28/2015 11:34	WG824777
Potassium	1920		37.0	1000	1	10/28/2015 11:34	WG824777
Selenium	1.09	J	0.380	2.00	1	10/28/2015 11:34	WG824777
Sodium	463000		110	1000	1	10/28/2015 11:34	WG824777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	34000		314	1000	10	10/27/2015 16:47	WG823733
(S) a,a,a-Trifluorotoluene(FID) 97.1				62.0-128		10/27/2015 16:47	WG823733

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	60.0		10.0	50.0	1	10/26/2015 04:20	WG824206
Benzene	20300		166	500	500	10/28/2015 14:21	WG824662
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 04:20	WG824206
Bromoform	U		0.469	1.00	1	10/26/2015 04:20	WG824206
Bromomethane	U		0.866	5.00	1	10/26/2015 04:20	WG824206
n-Butylbenzene	13.4		0.361	1.00	1	10/26/2015 04:20	WG824206
sec-Butylbenzene	15.2		0.365	1.00	1	10/26/2015 04:20	WG824206
Carbon disulfide	0.766	J	0.275	1.00	1	10/26/2015 04:20	WG824206
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 04:20	WG824206
Chlorobenzene	U		0.348	1.00	1	10/26/2015 04:20	WG824206
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 04:20	WG824206
Chloroethane	U		0.453	5.00	1	10/26/2015 04:20	WG824206
Chloroform	U		0.324	5.00	1	10/26/2015 04:20	WG824206
Chloromethane	U		0.276	2.50	1	10/26/2015 04:20	WG824206
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 04:20	WG824206
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 04:20	WG824206



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 04:20	WG824206
1,1-Dichloroethene	1.26		0.398	1.00	1	10/26/2015 04:20	WG824206
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 04:20	WG824206
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 04:20	WG824206
1,2-Dichloropropane	2.06		0.306	1.00	1	10/26/2015 04:20	WG824206
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 04:20	WG824206
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 04:20	WG824206
Ethylbenzene	519		19.2	50.0	50	10/28/2015 01:37	WG824945
Isopropylbenzene	121		0.326	1.00	1	10/26/2015 04:20	WG824206
p-Isopropyltoluene	0.898	J	0.350	1.00	1	10/26/2015 04:20	WG824206
2-Butanone (MEK)	U		3.93	10.0	1	10/26/2015 04:20	WG824206
2-Hexanone	U		3.82	10.0	1	10/26/2015 04:20	WG824206
Methylene Chloride	U		1.00	5.00	1	10/26/2015 04:20	WG824206
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 04:20	WG824206
Methyl tert-butyl ether	20.0		0.367	1.00	1	10/26/2015 04:20	WG824206
Naphthalene	213	J	50.0	250	50	10/28/2015 01:37	WG824945
n-Propylbenzene	181		0.349	1.00	1	10/26/2015 04:20	WG824206
Styrene	U		0.307	1.00	1	10/26/2015 04:20	WG824206
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 04:20	WG824206
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 04:20	WG824206
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 04:20	WG824206
Toluene	5.01		0.780	5.00	1	10/26/2015 04:20	WG824206
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 04:20	WG824206
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 04:20	WG824206
Trichloroethene	U		0.398	1.00	1	10/26/2015 04:20	WG824206
1,2,4-Trimethylbenzene	0.677	J	0.373	1.00	1	10/26/2015 04:20	WG824206
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/26/2015 04:20	WG824206
Vinyl chloride	U		0.259	1.00	1	10/26/2015 04:20	WG824206
o-Xylene	2.37		0.341	1.00	1	10/26/2015 04:20	WG824206
m&p-Xylene	5.68		0.719	1.00	1	10/26/2015 04:20	WG824206
Xylenes, Total	8.05		1.06	3.00	1	10/26/2015 04:20	WG824206
(S) Toluene-d8	106			90.0-115		10/26/2015 04:20	WG824206
(S) Dibromofluoromethane	67.3	X		79.0-121		10/26/2015 04:20	WG824206
(S) 4-Bromofluorobenzene	98.4			80.1-120		10/26/2015 04:20	WG824206

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	41800		494	2000	20	10/25/2015 06:42	WG823914
(S) o-Terphenyl	0.000	X		50.0-150		10/25/2015 06:42	WG823914



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2770000		2820	10000	1	10/25/2015 01:42	WG823734

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2610	J	1970	10000	100	10/28/2015 13:46	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	226000		2600	50000	50	10/24/2015 07:56	WG823862
Fluoride	899		9.90	100	1	10/24/2015 06:58	WG823862
Sulfate	1740000		3870	250000	50	10/24/2015 07:56	WG823862

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.66	J	0.250	2.00	1	10/28/2015 11:37	WG824777
Barium	21.9		0.360	5.00	1	10/28/2015 11:37	WG824777
Calcium	403000		46.0	1000	1	10/28/2015 11:37	WG824777
Chromium	U		0.540	2.00	1	10/28/2015 11:37	WG824777
Iron	27.1	J	15.0	100	1	10/28/2015 11:37	WG824777
Lead	0.889	J	0.240	2.00	1	10/28/2015 11:37	WG824777
Manganese	1370		0.250	5.00	1	10/28/2015 11:37	WG824777
Potassium	2290		37.0	1000	1	10/28/2015 11:37	WG824777
Selenium	0.495	J	0.380	2.00	1	10/28/2015 11:37	WG824777
Sodium	175000		110	1000	1	10/28/2015 11:37	WG824777

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/28/2015 00:58	WG824945
Benzene	U	*	0.331	1.00	1	10/28/2015 00:58	WG824945
Bromodichloromethane	U	* F	0.380	1.00	1	10/28/2015 00:58	WG824945
Bromoform	U	*	0.469	1.00	1	10/28/2015 00:58	WG824945
Bromomethane	0.881	J	0.866	5.00	1	10/28/2015 00:58	WG824945
n-Butylbenzene	U	* F	0.361	1.00	1	10/28/2015 00:58	WG824945
sec-Butylbenzene	0.946	* F J	0.365	1.00	1	10/28/2015 00:58	WG824945
Carbon disulfide	0.553	J	0.275	1.00	1	10/28/2015 00:58	WG824945
Carbon tetrachloride	U	* F	0.379	1.00	1	10/28/2015 00:58	WG824945
Chlorobenzene	U	* F	0.348	1.00	1	10/28/2015 00:58	WG824945
Chlorodibromomethane	U	*	0.327	1.00	1	10/28/2015 00:58	WG824945
Chloroethane	U		0.453	5.00	1	10/28/2015 00:58	WG824945
Chloroform	U	*	0.324	5.00	1	10/28/2015 00:58	WG824945
Chloromethane	U		0.276	2.50	1	10/28/2015 00:58	WG824945
1,2-Dibromoethane	U	*	0.381	1.00	1	10/28/2015 00:58	WG824945
1,1-Dichloroethane	U		0.259	1.00	1	10/28/2015 00:58	WG824945
1,2-Dichloroethane	U		0.361	1.00	1	10/28/2015 00:58	WG824945
1,1-Dichloroethene	U		0.398	1.00	1	10/28/2015 00:58	WG824945
cis-1,2-Dichloroethene	U	*	0.260	1.00	1	10/28/2015 00:58	WG824945
trans-1,2-Dichloroethene	U	*	0.396	1.00	1	10/28/2015 00:58	WG824945
1,2-Dichloropropane	U	* F	0.306	1.00	1	10/28/2015 00:58	WG824945
cis-1,3-Dichloropropene	U	* F	0.418	1.00	1	10/28/2015 00:58	WG824945
trans-1,3-Dichloropropene	U	* F	0.419	1.00	1	10/28/2015 00:58	WG824945



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	¹ Cp
Ethylbenzene	U	*F	0.384	1.00	1	10/28/2015 00:58	WG824945	² Tc
Isopropylbenzene	U	*F	0.326	1.00	1	10/28/2015 00:58	WG824945	³ Ss
p-Isopropyltoluene	U	*F	0.350	1.00	1	10/28/2015 00:58	WG824945	⁴ Cn
2-Butanone (MEK)	U		3.93	10.0	1	10/28/2015 00:58	WG824945	⁵ Sr
2-Hexanone	U		3.82	10.0	1	10/28/2015 00:58	WG824945	⁶ Qc
Methylene Chloride	U		1.00	5.00	1	10/28/2015 00:58	WG824945	⁷ Gl
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/28/2015 00:58	WG824945	⁸ Al
Methyl tert-butyl ether	U		0.367	1.00	1	10/28/2015 00:58	WG824945	⁹ Sc
Naphthalene	U	*	1.00	5.00	1	10/28/2015 00:58	WG824945	
n-Propylbenzene	U	*F	0.349	1.00	1	10/28/2015 00:58	WG824945	
Styrene	U	*F	0.307	1.00	1	10/28/2015 00:58	WG824945	
1,1,1,2-Tetrachloroethane	U	*F	0.385	1.00	1	10/28/2015 00:58	WG824945	
1,1,2,2-Tetrachloroethane	U	**F	0.130	1.00	1	10/28/2015 00:58	WG824945	
Tetrachloroethene	U	*F	0.372	1.00	1	10/28/2015 00:58	WG824945	
Toluene	U	*F	0.780	5.00	1	10/28/2015 00:58	WG824945	
1,1,1-Trichloroethane	U	*F	0.319	1.00	1	10/28/2015 00:58	WG824945	
1,1,2-Trichloroethane	U	*	0.383	1.00	1	10/28/2015 00:58	WG824945	
Trichloroethene	U	*	0.398	1.00	1	10/28/2015 00:58	WG824945	
1,2,4-Trimethylbenzene	U	*F	0.373	1.00	1	10/28/2015 00:58	WG824945	
1,3,5-Trimethylbenzene	U	*F	0.387	1.00	1	10/28/2015 00:58	WG824945	
Vinyl chloride	U		0.259	1.00	1	10/28/2015 00:58	WG824945	
o-Xylene	U	*F	0.341	1.00	1	10/28/2015 00:58	WG824945	
m&p-Xylene	U	*F	0.719	1.00	1	10/28/2015 00:58	WG824945	
Xylenes, Total	U	*F	1.06	3.00	1	10/28/2015 00:58	WG824945	
(S) Toluene-d8	102			90.0-115		10/28/2015 00:58	WG824945	
(S) Dibromofluoromethane	92.5			79.0-121		10/28/2015 00:58	WG824945	
(S) 4-Bromofluorobenzene	101			80.1-120		10/28/2015 00:58	WG824945	

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	642		24.7	100	1	10/25/2015 03:19	WG823914
(S) o-Terphenyl	81.3			50.0-150		10/25/2015 03:19	WG823914



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2280000		2820	10000	1	10/25/2015 01:43	WG823734

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		1970	10000	100	10/28/2015 13:47	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	35700		51.9	1000	1	10/24/2015 07:13	WG823862
Fluoride	1340		9.90	100	1	10/24/2015 07:13	WG823862
Sulfate	854000		774	50000	10	10/24/2015 08:10	WG823862

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	5.52		0.250	2.00	1	10/28/2015 11:39	WG824777
Barium	82.4		0.360	5.00	1	10/28/2015 11:39	WG824777
Calcium	361000		46.0	1000	1	10/28/2015 11:39	WG824777
Chromium	U		0.540	2.00	1	10/28/2015 11:39	WG824777
Iron	16.5	J	15.0	100	1	10/28/2015 11:39	WG824777
Lead	2.70		0.240	2.00	1	10/28/2015 11:39	WG824777
Manganese	2.46	J	0.250	5.00	1	10/28/2015 11:39	WG824777
Potassium	686	J	37.0	1000	1	10/28/2015 11:39	WG824777
Selenium	24.8		0.380	2.00	1	10/28/2015 11:39	WG824777
Sodium	35000		110	1000	1	10/28/2015 11:39	WG824777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	12200		314	1000	10	10/27/2015 17:09	WG823733
(S) a,a,a-Trifluorotoluene(FID) 92.9				62.0-128		10/27/2015 17:09	WG823733

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		250	1250	25	10/26/2015 05:02	WG824206
Benzene	3470		8.28	25.0	25	10/26/2015 05:02	WG824206
Bromodichloromethane	U		9.50	25.0	25	10/26/2015 05:02	WG824206
Bromoform	U		11.7	25.0	25	10/26/2015 05:02	WG824206
Bromomethane	U		21.6	125	25	10/26/2015 05:02	WG824206
n-Butylbenzene	U		9.02	25.0	25	10/26/2015 05:02	WG824206
sec-Butylbenzene	13.4	J	9.12	25.0	25	10/26/2015 05:02	WG824206
Carbon disulfide	8.49	J	6.88	25.0	25	10/26/2015 05:02	WG824206
Carbon tetrachloride	U		9.48	25.0	25	10/26/2015 05:02	WG824206
Chlorobenzene	U		8.70	25.0	25	10/26/2015 05:02	WG824206
Chlorodibromomethane	U		8.18	25.0	25	10/26/2015 05:02	WG824206
Chloroethane	U		11.3	125	25	10/26/2015 05:02	WG824206
Chloroform	U		8.10	125	25	10/26/2015 05:02	WG824206
Chloromethane	U		6.90	62.5	25	10/26/2015 05:02	WG824206
1,2-Dibromoethane	U		9.52	25.0	25	10/26/2015 05:02	WG824206
1,1-Dichloroethane	U		6.48	25.0	25	10/26/2015 05:02	WG824206



Collected date/time: 10/19/15 11:15

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		9.02	25.0	25	10/26/2015 05:02	WG824206
1,1-Dichloroethene	U		9.95	25.0	25	10/26/2015 05:02	WG824206
cis-1,2-Dichloroethene	U		6.50	25.0	25	10/26/2015 05:02	WG824206
trans-1,2-Dichloroethene	U		9.90	25.0	25	10/26/2015 05:02	WG824206
1,2-Dichloropropane	U		7.65	25.0	25	10/26/2015 05:02	WG824206
cis-1,3-Dichloropropene	U		10.4	25.0	25	10/26/2015 05:02	WG824206
trans-1,3-Dichloropropene	U		10.5	25.0	25	10/26/2015 05:02	WG824206
Ethylbenzene	449		9.60	25.0	25	10/26/2015 05:02	WG824206
Isopropylbenzene	108		8.15	25.0	25	10/26/2015 05:02	WG824206
p-Isopropyltoluene	U		8.75	25.0	25	10/26/2015 05:02	WG824206
2-Butanone (MEK)	U		98.2	250	25	10/26/2015 05:02	WG824206
2-Hexanone	U		95.5	250	25	10/26/2015 05:02	WG824206
Methylene Chloride	U		25.0	125	25	10/26/2015 05:02	WG824206
4-Methyl-2-pentanone (MIBK)	U		53.5	250	25	10/26/2015 05:02	WG824206
Methyl tert-butyl ether	U		9.18	25.0	25	10/26/2015 05:02	WG824206
Naphthalene	88.4	U	25.0	125	25	10/26/2015 05:02	WG824206
n-Propylbenzene	119		8.72	25.0	25	10/26/2015 05:02	WG824206
Styrene	U		7.68	25.0	25	10/26/2015 05:02	WG824206
1,1,1,2-Tetrachloroethane	U		9.62	25.0	25	10/26/2015 05:02	WG824206
1,1,2,2-Tetrachloroethane	U		3.25	25.0	25	10/26/2015 05:02	WG824206
Tetrachloroethene	U		9.30	25.0	25	10/26/2015 05:02	WG824206
Toluene	652		19.5	125	25	10/26/2015 05:02	WG824206
1,1,1-Trichloroethane	U		7.98	25.0	25	10/26/2015 05:02	WG824206
1,1,2-Trichloroethane	U		9.58	25.0	25	10/26/2015 05:02	WG824206
Trichloroethene	U		9.95	25.0	25	10/26/2015 05:02	WG824206
1,2,4-Trimethylbenzene	226		9.32	25.0	25	10/26/2015 05:02	WG824206
1,3,5-Trimethylbenzene	62.6		9.68	25.0	25	10/26/2015 05:02	WG824206
Vinyl chloride	U		6.48	25.0	25	10/26/2015 05:02	WG824206
o-Xylene	180		8.52	25.0	25	10/26/2015 05:02	WG824206
m&p-Xylene	753		18.0	25.0	25	10/26/2015 05:02	WG824206
Xylenes, Total	933		26.5	75.0	25	10/26/2015 05:02	WG824206
(S) Toluene-d8	105			90.0-115		10/26/2015 05:02	WG824206
(S) Dibromofluoromethane	99.0			79.0-121		10/26/2015 05:02	WG824206
(S) 4-Bromofluorobenzene	97.5			80.1-120		10/26/2015 05:02	WG824206

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	20300		124	500	5	10/26/2015 16:19	WG823914
(S) o-Terphenyl	87.1			50.0-150		10/26/2015 16:19	WG823914



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1090000		2820	10000	1	10/26/2015 03:37	WG824140

1 Cp

2 Tc

3 Ss

4 Cn

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	42.0	J	19.7	100	1	10/28/2015 13:48	WG824554

5 Sr

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	192000		1040	20000	20	10/24/2015 10:08	WG823864
Fluoride	1310		9.90	100	1	10/24/2015 09:06	WG823864
Sulfate	117	J	77.4	5000	1	10/24/2015 09:06	WG823864

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	21.7		0.250	2.00	1	10/27/2015 19:57	WG824778
Barium	3720		0.360	5.00	1	10/27/2015 19:57	WG824778
Calcium	132000		46.0	1000	1	10/27/2015 19:57	WG824778
Chromium	U		0.540	2.00	1	10/27/2015 19:57	WG824778
Iron	5840		15.0	100	1	10/27/2015 19:57	WG824778
Lead	1.09	J	0.240	2.00	1	10/27/2015 19:57	WG824778
Manganese	157		0.250	5.00	1	10/27/2015 19:57	WG824778
Potassium	491	J	37.0	1000	1	10/27/2015 19:57	WG824778
Selenium	U		0.380	2.00	1	10/27/2015 19:57	WG824778
Sodium	136000		110	1000	1	10/27/2015 19:57	WG824778

8 Al

9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/25/2015 13:24	WG824210
Benzene	6770		33.1	100	100	10/27/2015 14:54	WG824566
Bromodichloromethane	U		0.380	1.00	1	10/25/2015 13:24	WG824210
Bromoform	U		0.469	1.00	1	10/25/2015 13:24	WG824210
Bromomethane	U		0.866	5.00	1	10/25/2015 13:24	WG824210
n-Butylbenzene	10.0		0.361	1.00	1	10/25/2015 13:24	WG824210
sec-Butylbenzene	9.27		0.365	1.00	1	10/25/2015 13:24	WG824210
Carbon disulfide	U		27.5	100	100	10/27/2015 14:54	WG824566
Carbon tetrachloride	U		0.379	1.00	1	10/25/2015 13:24	WG824210
Chlorobenzene	U		0.348	1.00	1	10/25/2015 13:24	WG824210
Chlorodibromomethane	U		0.327	1.00	1	10/25/2015 13:24	WG824210
Chloroethane	U		0.453	5.00	1	10/25/2015 13:24	WG824210
Chloroform	U		0.324	5.00	1	10/25/2015 13:24	WG824210
Chloromethane	U		0.276	2.50	1	10/25/2015 13:24	WG824210
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2015 13:24	WG824210
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2015 13:24	WG824210
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2015 13:24	WG824210
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2015 13:24	WG824210
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2015 13:24	WG824210
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2015 13:24	WG824210
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2015 13:24	WG824210
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2015 13:24	WG824210
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2015 13:24	WG824210



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylbenzene	523		38.4	100	100	10/27/2015 14:54	WG824566
Isopropylbenzene	47.8		0.326	1.00	1	10/25/2015 13:24	WG824210
p-Isopropyltoluene	5.43		0.350	1.00	1	10/25/2015 13:24	WG824210
2-Butanone (MEK)	U		3.93	10.0	1	10/25/2015 13:24	WG824210
2-Hexanone	U		3.82	10.0	1	10/25/2015 13:24	WG824210
Methylene Chloride	U		1.00	5.00	1	10/25/2015 13:24	WG824210
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/25/2015 13:24	WG824210
Methyl tert-butyl ether	4660		36.7	100	100	10/27/2015 14:54	WG824566
Naphthalene	186		1.00	5.00	1	10/25/2015 13:24	WG824210
n-Propylbenzene	69.9		0.349	1.00	1	10/25/2015 13:24	WG824210
Styrene	U		0.307	1.00	1	10/25/2015 13:24	WG824210
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/25/2015 13:24	WG824210
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2015 13:24	WG824210
Tetrachloroethene	U		0.372	1.00	1	10/25/2015 13:24	WG824210
Toluene	124		0.780	5.00	1	10/25/2015 13:24	WG824210
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2015 13:24	WG824210
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2015 13:24	WG824210
Trichloroethene	U		0.398	1.00	1	10/25/2015 13:24	WG824210
1,2,4-Trimethylbenzene	358		37.3	100	100	10/27/2015 14:54	WG824566
1,3,5-Trimethylbenzene	100		0.387	1.00	1	10/25/2015 13:24	WG824210
Vinyl chloride	U		0.259	1.00	1	10/25/2015 13:24	WG824210
o-Xylene	254		34.1	100	100	10/27/2015 14:54	WG824566
m&p-Xylene	828		71.9	100	100	10/27/2015 14:54	WG824566
Xylenes, Total	1080		106	300	100	10/27/2015 14:54	WG824566
(S) Toluene-d8	103			90.0-115		10/25/2015 13:24	WG824210
(S) Dibromofluoromethane	148	X		79.0-121		10/25/2015 13:24	WG824210
(S) 4-Bromofluorobenzene	91.1			80.1-120		10/25/2015 13:24	WG824210

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4650		24.7	100	1	10/24/2015 17:31	WG823923
(S) o-Terphenyl	85.2			50.0-150		10/24/2015 17:31	WG823923



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1180000		2820	10000	1	10/26/2015 03:38	WG824140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	38.0	J	19.7	100	1	10/28/2015 13:49	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	295000		1040	20000	20	10/24/2015 10:23	WG823864
Fluoride	787		9.90	100	1	10/24/2015 09:22	WG823864
Sulfate	16100		77.4	5000	1	10/24/2015 09:22	WG823864

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	26.1		0.250	2.00	1	10/27/2015 19:59	WG824778
Barium	2880		0.360	5.00	1	10/27/2015 19:59	WG824778
Calcium	197000		46.0	1000	1	10/27/2015 19:59	WG824778
Chromium	3.71		0.540	2.00	1	10/27/2015 19:59	WG824778
Iron	4710		15.0	100	1	10/27/2015 19:59	WG824778
Lead	2.94		0.240	2.00	1	10/27/2015 19:59	WG824778
Manganese	337		0.250	5.00	1	10/27/2015 19:59	WG824778
Potassium	622	J	37.0	1000	1	10/27/2015 19:59	WG824778
Selenium	U		0.380	2.00	1	10/27/2015 19:59	WG824778
Sodium	161000		110	1000	1	10/27/2015 19:59	WG824778

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	6760		157	500	5	10/28/2015 10:58	WG825076
(S) a,a,a-Trifluorotoluene(FID) 91.7				62.0-128		10/28/2015 10:58	WG825076

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/25/2015 13:42	WG824210
Benzene	2190		16.6	50.0	50	10/28/2015 01:56	WG824945
Bromodichloromethane	U		0.380	1.00	1	10/25/2015 13:42	WG824210
Bromoform	U		0.469	1.00	1	10/25/2015 13:42	WG824210
Bromomethane	U		0.866	5.00	1	10/25/2015 13:42	WG824210
n-Butylbenzene	3.75		0.361	1.00	1	10/25/2015 13:42	WG824210
sec-Butylbenzene	4.37		0.365	1.00	1	10/25/2015 13:42	WG824210
Carbon disulfide	U		13.8	50.0	50	10/28/2015 01:56	WG824945
Carbon tetrachloride	U		0.379	1.00	1	10/25/2015 13:42	WG824210
Chlorobenzene	U		0.348	1.00	1	10/25/2015 13:42	WG824210
Chlorodibromomethane	U		0.327	1.00	1	10/25/2015 13:42	WG824210
Chloroethane	U		0.453	5.00	1	10/25/2015 13:42	WG824210
Chloroform	U		0.324	5.00	1	10/25/2015 13:42	WG824210
Chloromethane	U		0.276	2.50	1	10/25/2015 13:42	WG824210
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2015 13:42	WG824210
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2015 13:42	WG824210



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2015 13:42	WG824210
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2015 13:42	WG824210
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2015 13:42	WG824210
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2015 13:42	WG824210
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2015 13:42	WG824210
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2015 13:42	WG824210
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2015 13:42	WG824210
Ethylbenzene	48.0		0.384	1.00	1	10/25/2015 13:42	WG824210
Isopropylbenzene	22.0		0.326	1.00	1	10/25/2015 13:42	WG824210
p-Isopropyltoluene	1.05		0.350	1.00	1	10/25/2015 13:42	WG824210
2-Butanone (MEK)	U		3.93	10.0	1	10/25/2015 13:42	WG824210
2-Hexanone	U		3.82	10.0	1	10/25/2015 13:42	WG824210
Methylene Chloride	U		1.00	5.00	1	10/25/2015 13:42	WG824210
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/25/2015 13:42	WG824210
Methyl tert-butyl ether	4540		18.4	50.0	50	10/28/2015 01:56	WG824945
Naphthalene	58.9		1.00	5.00	1	10/25/2015 13:42	WG824210
n-Propylbenzene	37.0		0.349	1.00	1	10/25/2015 13:42	WG824210
Styrene	U		0.307	1.00	1	10/25/2015 13:42	WG824210
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/25/2015 13:42	WG824210
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2015 13:42	WG824210
Tetrachloroethene	U		0.372	1.00	1	10/25/2015 13:42	WG824210
Toluene	52.2		0.780	5.00	1	10/25/2015 13:42	WG824210
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2015 13:42	WG824210
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2015 13:42	WG824210
Trichloroethene	U		0.398	1.00	1	10/25/2015 13:42	WG824210
1,2,4-Trimethylbenzene	23.1		0.373	1.00	1	10/25/2015 13:42	WG824210
1,3,5-Trimethylbenzene	6.94		0.387	1.00	1	10/25/2015 13:42	WG824210
Vinyl chloride	U		0.259	1.00	1	10/25/2015 13:42	WG824210
o-Xylene	24.3		0.341	1.00	1	10/25/2015 13:42	WG824210
m&p-Xylene	61.5		0.719	1.00	1	10/25/2015 13:42	WG824210
Xylenes, Total	85.9		1.06	3.00	1	10/25/2015 13:42	WG824210
(S) Toluene-d8	97.4			90.0-115		10/25/2015 13:42	WG824210
(S) Dibromofluoromethane	100			79.0-121		10/25/2015 13:42	WG824210
(S) 4-Bromofluorobenzene	112			80.1-120		10/25/2015 13:42	WG824210

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4000		24.7	100	1	10/24/2015 17:51	WG823923
(S) o-Terphenyl	78.3			50.0-150		10/24/2015 17:51	WG823923



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1530000		2820	10000	1	10/26/2015 03:38	WG824140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	22.0	F J	19.7	100	1	10/28/2015 13:50	WG824554

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	408000		5190	100000	100	10/23/2015 21:41	WG823865
Fluoride	1510		9.90	100	1	10/23/2015 20:31	WG823865
Sulfate	473000	J	7740	500000	100	10/23/2015 21:41	WG823865

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	14.4		0.250	2.00	1	10/27/2015 20:01	WG824778
Barium	127		0.360	5.00	1	10/27/2015 20:01	WG824778
Calcium	227000		46.0	1000	1	10/27/2015 20:01	WG824778
Chromium	2.39		0.540	2.00	1	10/27/2015 20:01	WG824778
Iron	7140		15.0	100	1	10/27/2015 20:01	WG824778
Lead	2.05		0.240	2.00	1	10/27/2015 20:01	WG824778
Manganese	1520		0.250	5.00	1	10/27/2015 20:01	WG824778
Potassium	415	J	37.0	1000	1	10/27/2015 20:01	WG824778
Selenium	U		0.380	2.00	1	10/27/2015 20:01	WG824778
Sodium	222000		110	1000	1	10/27/2015 20:01	WG824778

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	674		31.4	100	1	10/28/2015 11:20	WG825076
(S) a,a,a-Trifluorotoluene(FID) 93.6				62.0-128		10/28/2015 11:20	WG825076

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/25/2015 14:00	WG824210
Benzene	24.3		0.331	1.00	1	10/25/2015 14:00	WG824210
Bromodichloromethane	U		0.380	1.00	1	10/25/2015 14:00	WG824210
Bromoform	U		0.469	1.00	1	10/25/2015 14:00	WG824210
Bromomethane	U		0.866	5.00	1	10/25/2015 14:00	WG824210
n-Butylbenzene	U		0.361	1.00	1	10/25/2015 14:00	WG824210
sec-Butylbenzene	U		0.365	1.00	1	10/25/2015 14:00	WG824210
Carbon disulfide	U		6.88	25.0	25	10/28/2015 02:16	WG824945
Carbon tetrachloride	U		0.379	1.00	1	10/25/2015 14:00	WG824210
Chlorobenzene	U		0.348	1.00	1	10/25/2015 14:00	WG824210
Chlorodibromomethane	U		0.327	1.00	1	10/25/2015 14:00	WG824210
Chloroethane	U		0.453	5.00	1	10/25/2015 14:00	WG824210
Chloroform	U		0.324	5.00	1	10/25/2015 14:00	WG824210
Chloromethane	U		0.276	2.50	1	10/25/2015 14:00	WG824210
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2015 14:00	WG824210
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2015 14:00	WG824210



Collected date/time: 10/19/15 08:25

L798466

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2015 14:00	WG824210
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2015 14:00	WG824210
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2015 14:00	WG824210
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2015 14:00	WG824210
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2015 14:00	WG824210
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2015 14:00	WG824210
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2015 14:00	WG824210
Ethylbenzene	6.15		0.384	1.00	1	10/25/2015 14:00	WG824210
Isopropylbenzene	0.862	L	0.326	1.00	1	10/25/2015 14:00	WG824210
p-Isopropyltoluene	U		0.350	1.00	1	10/25/2015 14:00	WG824210
2-Butanone (MEK)	U		3.93	10.0	1	10/25/2015 14:00	WG824210
2-Hexanone	U		3.82	10.0	1	10/25/2015 14:00	WG824210
Methylene Chloride	U		1.00	5.00	1	10/25/2015 14:00	WG824210
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/25/2015 14:00	WG824210
Methyl tert-butyl ether	1320		9.18	25.0	25	10/28/2015 02:16	WG824945
Naphthalene	6.45		1.00	5.00	1	10/25/2015 14:00	WG824210
n-Propylbenzene	0.839	L	0.349	1.00	1	10/25/2015 14:00	WG824210
Styrene	U		0.307	1.00	1	10/25/2015 14:00	WG824210
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/25/2015 14:00	WG824210
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2015 14:00	WG824210
Tetrachloroethene	U		0.372	1.00	1	10/25/2015 14:00	WG824210
Toluene	U		0.780	5.00	1	10/25/2015 14:00	WG824210
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2015 14:00	WG824210
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2015 14:00	WG824210
Trichloroethene	U		0.398	1.00	1	10/25/2015 14:00	WG824210
1,2,4-Trimethylbenzene	1.22		0.373	1.00	1	10/25/2015 14:00	WG824210
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/25/2015 14:00	WG824210
Vinyl chloride	U		0.259	1.00	1	10/25/2015 14:00	WG824210
o-Xylene	U		0.341	1.00	1	10/25/2015 14:00	WG824210
m&p-Xylene	1.13		0.719	1.00	1	10/25/2015 14:00	WG824210
Xylenes, Total	1.13	L	1.06	3.00	1	10/25/2015 14:00	WG824210
(S) Toluene-d8	100			90.0-115		10/25/2015 14:00	WG824210
(S) Dibromofluoromethane	93.5			79.0-121		10/25/2015 14:00	WG824210
(S) 4-Bromofluorobenzene	92.7			80.1-120		10/25/2015 14:00	WG824210

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2100		24.7	100	1	10/24/2015 18:11	WG823923
(S) o-Terphenyl	83.0			50.0-150		10/24/2015 18:11	WG823923



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2040000		2820	10000	1	10/27/2015 14:17	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	3130		197	1000	10	11/02/2015 22:56	WG825545

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	10/29/2015 10:49	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	144000		1040	20000	20	10/27/2015 14:23	WG824304
Fluoride	1760		9.90	100	1	10/27/2015 13:37	WG824304
Sulfate	998000		1550	100000	20	10/27/2015 14:23	WG824304

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/29/2015 18:04	WG825308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.29		0.250	2.00	1	10/29/2015 14:20	WG824869
Barium	12.9		0.360	5.00	1	10/29/2015 14:20	WG824869
Calcium	196000		46.0	1000	1	10/29/2015 14:20	WG824869
Chromium	0.582	J	0.540	2.00	1	10/29/2015 14:20	WG824869
Iron	18.0	J	15.0	100	1	10/29/2015 14:20	WG824869
Lead	U		0.240	2.00	1	10/29/2015 14:20	WG824869
Manganese	44.6		0.250	5.00	1	10/29/2015 14:20	WG824869
Nickel	6.84		0.350	2.00	1	10/29/2015 14:20	WG824869
Potassium	242	J	37.0	1000	1	10/29/2015 14:20	WG824869
Selenium	1.87	J	0.380	2.00	1	10/29/2015 14:20	WG824869
Sodium	285000		110	1000	1	10/29/2015 14:20	WG824869
Vanadium	26.2		0.180	5.00	1	10/29/2015 14:20	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/27/2015 13:31	WG824603
(S) a,a,a-Trifluorotoluene(FID) 91.3				62.0-128		10/27/2015 13:31	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 14:10	WG825316
Benzene	U		0.331	1.00	1	10/29/2015 14:10	WG825316
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 14:10	WG825316



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Bromoform	U		0.469	1.00	1	10/29/2015 14:10	WG825316
Bromomethane	U	F	0.866	5.00	1	10/29/2015 14:10	WG825316
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 14:10	WG825316
sec-Butylbenzene	U		0.365	1.00	1	10/29/2015 14:10	WG825316
Carbon disulfide	U	F	0.275	1.00	1	10/29/2015 14:10	WG825316
Carbon tetrachloride	U	F	0.379	1.00	1	10/29/2015 14:10	WG825316
Chlorobenzene	U		0.348	1.00	1	10/29/2015 14:10	WG825316
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 14:10	WG825316
Chloroethane	U		0.453	5.00	1	10/29/2015 14:10	WG825316
Chloroform	U		0.324	5.00	1	10/29/2015 14:10	WG825316
Chloromethane	U	F	0.276	2.50	1	10/29/2015 14:10	WG825316
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 14:10	WG825316
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 14:10	WG825316
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 14:10	WG825316
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 14:10	WG825316
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 14:10	WG825316
trans-1,2-Dichloroethene	U	F	0.396	1.00	1	10/29/2015 14:10	WG825316
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 14:10	WG825316
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 14:10	WG825316
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 14:10	WG825316
Ethylbenzene	U		0.384	1.00	1	10/29/2015 14:10	WG825316
Isopropylbenzene	U		0.326	1.00	1	10/29/2015 14:10	WG825316
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 14:10	WG825316
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 14:10	WG825316
2-Hexanone	U		3.82	10.0	1	10/29/2015 14:10	WG825316
Methylene Chloride	U	F	1.00	5.00	1	10/29/2015 14:10	WG825316
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 14:10	WG825316
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 14:10	WG825316
Naphthalene	U		1.00	5.00	1	10/29/2015 14:10	WG825316
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 14:10	WG825316
Styrene	U		0.307	1.00	1	10/29/2015 14:10	WG825316
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 14:10	WG825316
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 14:10	WG825316
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 14:10	WG825316
Toluene	U	F	0.780	5.00	1	10/29/2015 14:10	WG825316
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 14:10	WG825316
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 14:10	WG825316
Trichloroethene	U		0.398	1.00	1	10/29/2015 14:10	WG825316
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 14:10	WG825316
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 14:10	WG825316
Vinyl chloride	U	F	0.259	1.00	1	10/29/2015 14:10	WG825316
o-Xylene	U		0.341	1.00	1	10/29/2015 14:10	WG825316
m&p-Xylene	U		0.719	1.00	1	10/29/2015 14:10	WG825316
Xylenes, Total	U		1.06	3.00	1	10/29/2015 14:10	WG825316
(S) Toluene-d8	103			90.0-115		10/29/2015 14:10	WG825316
(S) Dibromofluoromethane	100			79.0-121		10/29/2015 14:10	WG825316
(S) 4-Bromofluorobenzene	101			80.1-120		10/29/2015 14:10	WG825316

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	158		24.7	100	1	10/27/2015 02:04	WG824380
(S) o-Terphenyl	67.6			50.0-150		10/27/2015 02:04	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3000	J	2820	10000	1	10/27/2015 14:19	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	246	J	197	1000	10	11/02/2015 22:57	WG825545

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	10/29/2015 10:50	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	U		51.9	1000	1	10/27/2015 18:18	WG824304
Fluoride	U		9.90	100	1	10/27/2015 18:18	WG824304
Sulfate	496	* J	77.4	5000	1	10/27/2015 18:18	WG824304

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/29/2015 18:07	WG825308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	0.668	J	0.250	2.00	1	10/29/2015 14:23	WG824869
Barium	2.33	J	0.360	5.00	1	10/29/2015 14:23	WG824869
Calcium	119	J	46.0	1000	1	10/29/2015 14:23	WG824869
Chromium	1.40	J	0.540	2.00	1	10/29/2015 14:23	WG824869
Iron	21.1	J	15.0	100	1	10/29/2015 14:23	WG824869
Lead	U		0.240	2.00	1	10/29/2015 14:23	WG824869
Manganese	0.774	J	0.250	5.00	1	10/29/2015 14:23	WG824869
Nickel	0.393	J	0.350	2.00	1	10/29/2015 14:23	WG824869
Potassium	U		37.0	1000	1	10/29/2015 14:23	WG824869
Selenium	U		0.380	2.00	1	10/29/2015 14:23	WG824869
Sodium	713	J	110	1000	1	10/29/2015 14:23	WG824869
Vanadium	1.10	J	0.180	5.00	1	10/29/2015 14:23	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	10/27/2015 13:53	WG824603
(S) a,a,a-Trifluorotoluene(FID) 91.0				62.0-128		10/27/2015 13:53	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 15:27	WG825316
Benzene	U		0.331	1.00	1	10/29/2015 15:27	WG825316
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 15:27	WG825316



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Bromoform	U		0.469	1.00	1	10/29/2015 15:27	WG825316
Bromomethane	U		0.866	5.00	1	10/29/2015 15:27	WG825316
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 15:27	WG825316
sec-Butylbenzene	U		0.365	1.00	1	10/29/2015 15:27	WG825316
Carbon disulfide	U		0.275	1.00	1	10/29/2015 15:27	WG825316
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 15:27	WG825316
Chlorobenzene	U		0.348	1.00	1	10/29/2015 15:27	WG825316
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 15:27	WG825316
Chloroethane	U		0.453	5.00	1	10/29/2015 15:27	WG825316
Chloroform	1.68	U	0.324	5.00	1	10/29/2015 15:27	WG825316
Chloromethane	U		0.276	2.50	1	10/29/2015 15:27	WG825316
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 15:27	WG825316
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 15:27	WG825316
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 15:27	WG825316
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 15:27	WG825316
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 15:27	WG825316
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 15:27	WG825316
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 15:27	WG825316
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 15:27	WG825316
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 15:27	WG825316
Ethylbenzene	U		0.384	1.00	1	10/29/2015 15:27	WG825316
Isopropylbenzene	U		0.326	1.00	1	10/29/2015 15:27	WG825316
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 15:27	WG825316
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 15:27	WG825316
2-Hexanone	U		3.82	10.0	1	10/29/2015 15:27	WG825316
Methylene Chloride	U		1.00	5.00	1	10/29/2015 15:27	WG825316
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 15:27	WG825316
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 15:27	WG825316
Naphthalene	U		1.00	5.00	1	10/29/2015 15:27	WG825316
n-Propylbenzene	U		0.349	1.00	1	10/29/2015 15:27	WG825316
Styrene	U		0.307	1.00	1	10/29/2015 15:27	WG825316
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 15:27	WG825316
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 15:27	WG825316
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 15:27	WG825316
Toluene	U		0.780	5.00	1	10/29/2015 15:27	WG825316
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 15:27	WG825316
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 15:27	WG825316
Trichloroethene	U		0.398	1.00	1	10/29/2015 15:27	WG825316
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 15:27	WG825316
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 15:27	WG825316
Vinyl chloride	U		0.259	1.00	1	10/29/2015 15:27	WG825316
o-Xylene	U		0.341	1.00	1	10/29/2015 15:27	WG825316
m&p-Xylene	U		0.719	1.00	1	10/29/2015 15:27	WG825316
Xylenes, Total	U		1.06	3.00	1	10/29/2015 15:27	WG825316
(S) Toluene-d8	102			90.0-115		10/29/2015 15:27	WG825316
(S) Dibromofluoromethane	95.6			79.0-121		10/29/2015 15:27	WG825316
(S) 4-Bromofluorobenzene	99.7			80.1-120		10/29/2015 15:27	WG825316

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		24.7	100	1	10/27/2015 02:24	WG824380
(S) o-Terphenyl	80.4			50.0-150		10/27/2015 02:24	WG824380



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3660000		2820	10000	1	10/27/2015 14:18	WG824454

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	276	J	197	1000	10	11/02/2015 22:58	WG825545

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	10/29/2015 10:52	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	210000		2600	50000	50	10/27/2015 14:42	WG824304
Fluoride	996		9.90	100	1	10/27/2015 13:52	WG824304
Sulfate	1990000		3870	250000	50	10/27/2015 14:42	WG824304

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/29/2015 18:09	WG825308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	8.80		0.250	2.00	1	10/29/2015 11:07	WG824869
Barium	17.9		0.360	5.00	1	10/29/2015 11:07	WG824869
Calcium	416000	4	46.0	1000	1	10/29/2015 11:07	WG824869
Chromium	U		0.540	2.00	1	10/29/2015 11:07	WG824869
Iron	291		15.0	100	1	10/29/2015 11:07	WG824869
Lead	0.328	J	0.240	2.00	1	10/29/2015 11:07	WG824869
Manganese	342		0.250	5.00	1	10/29/2015 11:07	WG824869
Nickel	0.516	J	0.350	2.00	1	10/29/2015 11:07	WG824869
Potassium	569	J	37.0	1000	1	10/29/2015 11:07	WG824869
Selenium	U		0.380	2.00	1	10/29/2015 11:07	WG824869
Sodium	191000	4 O1	110	1000	1	10/29/2015 11:07	WG824869
Vanadium	1.15	J	0.180	5.00	1	10/29/2015 11:07	WG824869

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	249		31.4	100	1	10/27/2015 14:15	WG824603
(S) a,a,a-Trifluorotoluene(FID) 87.1				62.0-128		10/27/2015 14:15	WG824603

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/29/2015 15:47	WG825316
Benzene	3.07		0.331	1.00	1	10/29/2015 15:47	WG825316
Bromodichloromethane	U		0.380	1.00	1	10/29/2015 15:47	WG825316



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Bromoform	U		0.469	1.00	1	10/29/2015 15:47	WG825316
Bromomethane	U		0.866	5.00	1	10/29/2015 15:47	WG825316
n-Butylbenzene	U		0.361	1.00	1	10/29/2015 15:47	WG825316
sec-Butylbenzene	2.93		0.365	1.00	1	10/29/2015 15:47	WG825316
Carbon disulfide	0.361	J	0.275	1.00	1	10/29/2015 15:47	WG825316
Carbon tetrachloride	U		0.379	1.00	1	10/29/2015 15:47	WG825316
Chlorobenzene	U		0.348	1.00	1	10/29/2015 15:47	WG825316
Chlorodibromomethane	U		0.327	1.00	1	10/29/2015 15:47	WG825316
Chloroethane	U		0.453	5.00	1	10/29/2015 15:47	WG825316
Chloroform	U		0.324	5.00	1	10/29/2015 15:47	WG825316
Chloromethane	U		0.276	2.50	1	10/29/2015 15:47	WG825316
1,2-Dibromoethane	U		0.381	1.00	1	10/29/2015 15:47	WG825316
1,1-Dichloroethane	U		0.259	1.00	1	10/29/2015 15:47	WG825316
1,2-Dichloroethane	U		0.361	1.00	1	10/29/2015 15:47	WG825316
1,1-Dichloroethene	U		0.398	1.00	1	10/29/2015 15:47	WG825316
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/29/2015 15:47	WG825316
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/29/2015 15:47	WG825316
1,2-Dichloropropane	U		0.306	1.00	1	10/29/2015 15:47	WG825316
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/29/2015 15:47	WG825316
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/29/2015 15:47	WG825316
Ethylbenzene	0.395	J	0.384	1.00	1	10/29/2015 15:47	WG825316
Isopropylbenzene	17.9		0.326	1.00	1	10/29/2015 15:47	WG825316
p-Isopropyltoluene	U		0.350	1.00	1	10/29/2015 15:47	WG825316
2-Butanone (MEK)	U		3.93	10.0	1	10/29/2015 15:47	WG825316
2-Hexanone	U		3.82	10.0	1	10/29/2015 15:47	WG825316
Methylene Chloride	U		1.00	5.00	1	10/29/2015 15:47	WG825316
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/29/2015 15:47	WG825316
Methyl tert-butyl ether	U		0.367	1.00	1	10/29/2015 15:47	WG825316
Naphthalene	U		1.00	5.00	1	10/29/2015 15:47	WG825316
n-Propylbenzene	1.28		0.349	1.00	1	10/29/2015 15:47	WG825316
Styrene	U		0.307	1.00	1	10/29/2015 15:47	WG825316
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/29/2015 15:47	WG825316
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/29/2015 15:47	WG825316
Tetrachloroethene	U		0.372	1.00	1	10/29/2015 15:47	WG825316
Toluene	U		0.780	5.00	1	10/29/2015 15:47	WG825316
1,1,1-Trichloroethane	U		0.319	1.00	1	10/29/2015 15:47	WG825316
1,1,2-Trichloroethane	U		0.383	1.00	1	10/29/2015 15:47	WG825316
Trichloroethene	U		0.398	1.00	1	10/29/2015 15:47	WG825316
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/29/2015 15:47	WG825316
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/29/2015 15:47	WG825316
Vinyl chloride	U		0.259	1.00	1	10/29/2015 15:47	WG825316
o-Xylene	U		0.341	1.00	1	10/29/2015 15:47	WG825316
m&p-Xylene	1.81		0.719	1.00	1	10/29/2015 15:47	WG825316
Xylenes, Total	1.81	J	1.06	3.00	1	10/29/2015 15:47	WG825316
(S) Toluene-d8	104			90.0-115		10/29/2015 15:47	WG825316
(S) Dibromofluoromethane	97.1			79.0-121		10/29/2015 15:47	WG825316
(S) 4-Bromofluorobenzene	96.3			80.1-120		10/29/2015 15:47	WG825316

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	627		24.7	100	1	10/27/2015 02:44	WG824380
(S) o-Terphenyl	76.8			50.0-150		10/27/2015 02:44	WG824380

Method Blank (MB)

(MB) 10/24/15 14:52

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798587-12 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 14:55 • (DUP) 10/24/15 14:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	ND	1.00	1	0.000		5

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

(LCS) 10/24/15 14:58 • (LCSD) 10/24/15 14:58

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8630	8720	98.1	99.1	85.0-115			1.04	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/25/15 01:45

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L795831-09 Original Sample (OS) • Duplicate (DUP)

(OS) 10/25/15 01:43 • (DUP) 10/25/15 01:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	30.0	30.0	1	0.000		5

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

(LCS) 10/25/15 01:43 • (LCSD) 10/25/15 01:43

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8250	8290	93.8	94.2	85.0-115			0.484	5

Method Blank (MB)

(MB) 10/26/15 03:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L795831-16 Original Sample (OS) • Duplicate (DUP)

(OS) 10/26/15 03:37 • (DUP) 10/26/15 03:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1900	1920	1	1.05		5

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

(LCS) 10/26/15 03:37 • (LCSD) 10/26/15 03:36

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8120	8190	92.3	93.1	85.0-115			0.858	5

Method Blank (MB)

(MB) 10/27/15 15:20

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L796346-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 15:21 • (DUP) 10/27/15 15:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	2680	2670	1	0.561		5

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

(LCS) 10/27/15 15:22 • (LCSD) 10/27/15 15:21

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8540	8640	97.0	98.2	85.0-115			1.16	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/27/15 14:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798587-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 14:18 • (DUP) 10/27/15 14:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	5490	5430	1	1.10		5

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

(LCS) 10/27/15 14:15 • (LCSD) 10/27/15 14:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8600	8560	97.7	97.3	85.0-115			0.466	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 13:16

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L795822-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 13:27 • (DUP) 10/28/15 13:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.000		20

L795822-14 Original Sample (OS) • Duplicate (DUP)

(OS) 10/28/15 13:39 • (DUP) 10/28/15 13:41

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	5.79	5.78	1	0.000		20

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

(LCS) 10/28/15 13:19 • (LCSD) 10/28/15 13:21

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	4.97	5.05	99.0	101	90.0-110			2.00	20

L795822-13 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/28/15 13:33 • (MS) 10/28/15 13:34

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	5.00	4.32	7.86	71.0	1	90.0-110	F



[L798466-23,24,25,26,27,28,29](#)

L795836-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 13:50 • (MS) 10/28/15 13:51 • (MSD) 10/28/15 13:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.0220	3.51	3.61	70.0	72.0	1	90.0-110	E	E	3.00	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/29/15 16:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0200		0.0197	0.100

L796127-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:07 • (DUP) 10/29/15 17:08

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	9.00		20

L796127-16 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:24 • (DUP) 10/29/15 17:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	51.0	*	20

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

(LCS) 10/29/15 17:00 • (LCSD) 10/29/15 17:01

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.16	5.33	103	107	90.0-110			3.00	20

L796127-10 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/29/15 17:13 • (MS) 10/29/15 17:14

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	0.500	0.0900	50.8	101	10	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796252-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 17:30 • (MS) 10/29/15 17:31 • (MSD) 10/29/15 17:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	0.500	19.3	65.6	65.7	93.0	93.0	10	90.0-110			0.000	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 11/02/15 22:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0280		0.0197	0.100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796143-15 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 22:47 • (DUP) 11/02/15 22:48

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	1.00		20

L796143-20 Original Sample (OS) • Duplicate (DUP)

(OS) 11/02/15 22:58 • (DUP) 11/02/15 22:59

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	11.0		20

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

(LCS) 11/02/15 22:33 • (LCSD) 11/02/15 22:35

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	4.91	4.98	98.0	100	90.0-110			1.00	20

L796013-01 Original Sample (OS) • Matrix Spike (MS)

(OS) 11/02/15 22:41 • (MS) 11/02/15 22:42

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	5.00	1.55	6.42	97.0	1	90.0-110	



L796686-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 11/02/15 23:04 • (MS) 11/02/15 23:05 • (MSD) 11/02/15 23:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	0.0370	4.86	4.83	96.0	96.0	1	90.0-110			0.000	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/29/15 10:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

L796143-19 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:50 • (DUP) 10/29/15 10:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

L795910-02 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:58 • (DUP) 10/29/15 11:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

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

(LCS) 10/29/15 10:26 • (LCSD) 10/29/15 10:27

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.110	0.103	110	103	90.0-110			6.57	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/23/15 22:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795822-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 00:32 • (DUP) 10/24/15 00:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.122	0.0126	1	163	*	20
Fluoride	ND	0.000	1	0		20
Sulfate	1.97	-0.371	1	293	*	20

L795823-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 09:08 • (DUP) 10/24/15 09:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	99.7	99.2	1	1		20
Fluoride	0.0243	0.0229	1	6		20
Sulfate	4.23	4.24	1	0		20

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

(LCS) 10/23/15 22:51 • (LCSD) 10/23/15 23:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.6	40.5	101	101	90-110			0	20
Fluoride	8.00	8.11	8.08	101	101	90-110			0	20
Sulfate	40.0	40.7	40.6	102	101	90-110			0	20

L795822-07 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 01:01 • (MS) 10/24/15 01:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	ND	51.4	103	1	80-120	
Fluoride	5.00	ND	5.18	104	1	80-120	
Sulfate	50.0	ND	51.3	103	1	80-120	

L795823-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 09:37 • (MS) 10/24/15 09:51 • (MSD) 10/24/15 10:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	8.62	59.0	58.1	101	99	1	80-120			2	20
Fluoride	5.00	ND	5.03	5.01	101	100	1	80-120			0	20
Sulfate	50.0	ND	49.8	49.1	100	98	1	80-120			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/23/15 19:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795831-09 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 00:09 • (DUP) 10/24/15 00:25

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.333	0.203	1	48	*	20
Fluoride	0.000300	0.000	1	0		20
Sulfate	0.726	0.287	1	87	*	20

L795831-14 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 03:58 • (DUP) 10/24/15 04:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	1.03	1.07	1	4		20

L795831-14 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 05:46 • (DUP) 10/24/15 06:01

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	200	197	20	1		20
Sulfate	1300	1300	20	1		20

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

(LCS) 10/23/15 19:32 • (LCSD) 10/23/15 19:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.2	40.1	100	100	90-110			0	20
Fluoride	8.00	8.11	8.11	101	101	90-110			0	20



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

(LCS) 10/23/15 19:32 • (LCSD) 10/23/15 19:47

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfate	40.0	40.1	40.8	100	102	90-110			2	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795831-08 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/23/15 23:38 • (MS) 10/23/15 23:54

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.32	5.34	80	1	80-120	

L795831-08 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 01:55 • (MS) 10/24/15 02:10

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	2.50	516	1510	100	20	80-120	

L795831-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 04:29 • (MS) 10/24/15 04:44 • (MSD) 10/24/15 05:00

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	5.00	0.850	5.06	5.15	84	86	1	80-120			2	20

L795831-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 06:17 • (MS) 10/24/15 06:32 • (MSD) 10/24/15 06:48

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	2.50	295	1210	1220	92	92	20	80-120			0	20



Method Blank (MB)

(MB) 10/23/15 19:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.0531		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L795844-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 00:42 • (DUP) 10/24/15 00:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.32	2.31	1	0		20
Fluoride	0.0305	0.0293	1	0		20
Sulfate	2.08	2.04	1	0		20

L795847-07 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 09:33 • (DUP) 10/24/15 09:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.63	7.61	1	0		20
Fluoride	0.0576	0.0546	1	0		20
Sulfate	5.70	5.64	1	1		20

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

(LCS) 10/23/15 19:36 • (LCSD) 10/23/15 19:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.6	40.7	101	102	90-110			0	20
Fluoride	8.00	8.07	8.13	101	102	90-110			1	20
Sulfate	40.0	38.5	38.7	96	97	90-110			0	20



L795844-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 01:10 • (MS) 10/24/15 01:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	8.82	60.7	104	1	80-120	
Fluoride	5.00	0.00760	5.19	104	1	80-120	
Sulfate	50.0	0.724	52.0	103	1	80-120	

L795847-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 08:51 • (MS) 10/24/15 09:05 • (MSD) 10/24/15 09:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	1.50	54.2	53.6	105	104	1	80-120			1	20
Fluoride	5.00	0.445	5.68	5.63	105	104	1	80-120			1	20
Sulfate	50.0	29.6	80.3	79.7	101	100	1	80-120			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/24/15 11:40

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L797108-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 14:36 • (DUP) 10/24/15 14:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	15.9	15.8	2	0		20
Sulfate	121	121	2	0		20

L796035-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 17:57 • (DUP) 10/24/15 18:12

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	24.1	24.2	1	0		20

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

(LCS) 10/24/15 11:56 • (LCSD) 10/24/15 12:11

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	40.4	39.4	101	99	90-110			3	20
Fluoride	8.00	8.18	8.00	102	100	90-110			2	20
Sulfate	40.0	40.8	40.2	102	101	90-110			2	20

L796014-05 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 15:07 • (MS) 10/24/15 15:22

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	23.2	78.8	111	1	80-120	
Sulfate	50.0	10.6	63.7	106	1	80-120	



[L798466-11](#)

L796035-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 18:27 • (MS) 10/24/15 18:43 • (MSD) 10/24/15 18:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	50.0	6.08	59.0	59.5	106	107	1	80-120			1	20
Sulfate	50.0	17.7	69.4	69.9	103	104	1	80-120			1	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/27/15 09:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L796127-13 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 11:50 • (DUP) 10/27/15 12:06

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13.4	13.4	1	0		20
Fluoride	0.330	0.332	1	0		20

L796143-15 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 22:26 • (DUP) 10/27/15 22:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	5.13	5.27	1	3		20

L796143-15 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:10 • (DUP) 10/27/15 23:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	86.6	85.9	50	1		20
Sulfate	2690	2720	50	1		20

L798466-12 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:38 • (DUP) 10/27/15 23:53

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	297	309	10	4		20



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

(LCS) 10/27/15 09:14 • (LCSD) 10/27/15 09:29

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	40.3	40.3	101	101	90-110			0	20
Fluoride	8.00	8.04	8.05	100	101	90-110			0	20
Sulfate	40.0	40.6	40.9	102	102	90-110			1	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L796143-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 16:40 • (MS) 10/27/15 16:55

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	1.00	182	2730	102	50	80-120	
Sulfate	1.00	633	3150	101	50	80-120	

L796143-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 17:53 • (MS) 10/27/15 18:07

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.69	6.10	88	1	80-120	

L796143-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 19:05 • (MS) 10/27/15 19:19 • (MSD) 10/27/15 19:33

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	50.0	0.0427	53.3	53.1	106	106	1	80-120			0	20
Fluoride	5.00	ND	5.29	5.27	106	105	1	80-120			0	20
Sulfate	50.0	1.30	53.7	53.5	105	104	1	80-120			0	20

Method Blank (MB)

(MB) 10/27/15 11:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L796143-19 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 18:18 • (DUP) 10/27/15 18:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.0347	0.0330	1	0		20
Fluoride	ND	0.000	1	0		20
Sulfate	0.496	0.000	1	0.1	*	20

L796185-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 23:42 • (DUP) 10/27/15 23:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	114	112	20	2		20
Fluoride	ND	0.000	20	0		20
Sulfate	1300	1310	20	1		20

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

(LCS) 10/27/15 11:19 • (LCSD) 10/27/15 11:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	39.8	39.8	100	99	90-110			0	20
Fluoride	8.00	8.00	8.01	100	100	90-110			0	20
Sulfate	40.0	40.0	40.0	100	100	90-110			0	20



L796154-05 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/27/15 14:57 • (MS) 10/27/15 15:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	0.0669	51.4	103	1	80-120	
Fluoride	5.00	ND	5.10	102	1	80-120	
Sulfate	50.0	0.192	52.1	104	1	80-120	

L796185-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 11:15 • (MS) 10/28/15 11:31 • (MSD) 10/28/15 11:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	5.00	50.3	546	549	99	100	10	80-120			0	20
Fluoride	0.500	0.598	49.5	51.0	98	101	10	80-120			3	20
Sulfate	5.00	379	861	860	96	96	10	80-120			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/29/15 17:51

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

(LCS) 10/29/15 17:53 • (LCSD) 10/29/15 17:56

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Mercury	0.00300	0.00303	0.00306	101	102	80-120			1	20

L796122-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 17:58 • (MS) 10/29/15 18:00 • (MSD) 10/29/15 18:02

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	0.00000327	0.00314	0.00284	104	95	1	75-125			10	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 10:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	0.000431		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 10:40 • (LCSD) 10/28/15 10:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0479	0.0482	96	96	80-120			1	20
Barium	0.0500	0.0506	0.0480	101	96	80-120			5	20
Calcium	5.00	5.44	4.74	109	95	80-120			14	20
Chromium	0.0500	0.0495	0.0493	99	99	80-120			0	20
Iron	5.00	4.84	4.81	97	96	80-120			1	20
Lead	0.0500	0.0495	0.0487	99	97	80-120			2	20
Manganese	0.0500	0.0516	0.0483	103	97	80-120			7	20
Potassium	5.00	4.80	4.76	96	95	80-120			1	20
Selenium	0.0500	0.0464	0.0477	93	95	80-120			3	20
Sodium	5.00	5.20	4.96	104	99	80-120			5	20

L798587-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 10:45 • (MS) 10/28/15 10:50 • (MSD) 10/28/15 10:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.000621	0.0480	0.0496	95	98	1	75-125			3	20
Barium	0.0500	0.00137	0.0498	0.0524	97	102	1	75-125			5	20
Calcium	5.00	0.447	4.77	4.98	86	91	1	75-125			4	20



L798587-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 10:45 • (MS) 10/28/15 10:50 • (MSD) 10/28/15 10:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium	0.0500	0.000206	0.0487	0.0493	97	98	1	75-125			1	20
Potassium	5.00	ND	4.72	4.88	94	98	1	75-125			3	20
Iron	5.00	ND	4.74	4.85	95	97	1	75-125			2	20
Lead	0.0500	0.000108	0.0491	0.0510	98	102	1	75-125			4	20
Manganese	0.0500	0.000759	0.0481	0.0493	95	97	1	75-125			3	20
Selenium	0.0500	ND	0.0476	0.0487	95	97	1	75-125			2	20
Sodium	5.00	0.489	5.35	5.50	97	100	1	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 18:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/27/15 18:32 • (LCSD) 10/27/15 18:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0489	0.0482	98	96	80-120			1	20
Barium	0.0500	0.0508	0.0509	102	102	80-120			0	20
Calcium	5.00	5.07	5.03	101	101	80-120			1	20
Chromium	0.0500	0.0510	0.0505	102	101	80-120			1	20
Iron	5.00	4.99	4.91	100	98	80-120			2	20
Lead	0.0500	0.0514	0.0512	103	102	80-120			0	20
Manganese	0.0500	0.0494	0.0491	99	98	80-120			1	20
Potassium	5.00	4.96	5.01	99	100	80-120			1	20
Selenium	0.0500	0.0479	0.0471	96	94	80-120			2	20
Sodium	5.00	5.25	5.26	105	105	80-120			0	20

L798300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:36 • (MS) 10/27/15 18:41 • (MSD) 10/27/15 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00635	0.0566	0.0582	101	104	1	75-125			3	20
Barium	0.0500	0.00939	0.0606	0.0616	102	104	1	75-125			2	20
Calcium	5.00	530	525	526	0	0	1	75-125	<u>4</u>	<u>4</u>	0	20



[L798466-27,28,29](#)

L798300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:36 • (MS) 10/27/15 18:41 • (MSD) 10/27/15 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium	0.0500	0.000124	0.0467	0.0468	93	93	1	75-125			0	20
Potassium	5.00	2.00	6.87	6.86	97	97	1	75-125			0	20
Iron	5.00	0.00328	4.57	4.56	91	91	1	75-125			0	20
Lead	0.0500	0.000127	0.0499	0.0500	100	100	1	75-125			0	20
Manganese	0.0500	0.658	0.688	0.689	59	62	1	75-125	4	4	0	20
Selenium	0.0500	0.0290	0.0776	0.0771	97	96	1	75-125			1	20
Sodium	5.00	436	436	436	1	0	1	75-125	4	4	0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 16:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/28/15 16:37 • (LCSD) 10/28/15 16:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0495	0.0495	99	99	80-120			0	20
Barium	0.0500	0.0506	0.0498	101	100	80-120			2	20
Calcium	5.00	5.05	5.03	101	101	80-120			0	20
Chromium	0.0500	0.0497	0.0492	99	98	80-120			1	20
Iron	5.00	4.86	4.82	97	96	80-120			1	20
Lead	0.0500	0.0499	0.0499	100	100	80-120			0	20
Manganese	0.0500	0.0499	0.0484	100	97	80-120			3	20
Potassium	5.00	4.99	5.10	100	102	80-120			2	20
Selenium	0.0500	0.0489	0.0488	98	98	80-120			0	20
Sodium	5.00	4.99	5.11	100	102	80-120			2	20

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:42 • (MS) 10/28/15 16:46 • (MSD) 10/28/15 16:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00368	0.0565	0.0552	106	103	1	75-125			2	20
Barium	0.0500	0.0134	0.0640	0.0636	101	101	1	75-125			1	20
Chromium	0.0500	0.000393	0.0469	0.0470	93	93	1	75-125			0	20



L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:42 • (MS) 10/28/15 16:46 • (MSD) 10/28/15 16:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Potassium	5.00	1.70	6.48	6.56	96	97	1	75-125			1	20
Iron	5.00	0.0193	4.58	4.58	91	91	1	75-125			0	20
Lead	0.0500	0.000120	0.0494	0.0497	98	99	1	75-125			1	20
Manganese	0.0500	0.110	0.155	0.153	90	87	1	75-125			1	20
Selenium	0.0500	0.00109	0.0529	0.0516	104	101	1	75-125			2	20
Sodium	5.00	157	160	161	57	88	1	75-125	4		1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/29/15 11:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	U		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Vanadium	0.000647		0.00018	0.00500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/29/15 11:03 • (LCSD) 10/29/15 11:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0501	0.0483	100	97	80-120			4	20
Barium	0.0500	0.0518	0.0523	104	105	80-120			1	20
Calcium	5.00	5.29	5.15	106	103	80-120			3	20
Chromium	0.0500	0.0516	0.0502	103	100	80-120			3	20
Iron	5.00	5.08	4.99	102	100	80-120			2	20
Lead	0.0500	0.0505	0.0497	101	99	80-120			2	20
Manganese	0.0500	0.0503	0.0494	101	99	80-120			2	20
Nickel	0.0500	0.0526	0.0516	105	103	80-120			2	20
Potassium	5.00	5.18	5.06	104	101	80-120			2	20
Selenium	0.0500	0.0495	0.0488	99	98	80-120			1	20
Sodium	5.00	5.35	5.34	107	107	80-120			0	20
Vanadium	0.0500	0.0509	0.0495	102	99	80-120			3	20



L798466-20,21,22,30,31,32

L798466-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 11:07 • (MS) 10/29/15 11:12 • (MSD) 10/29/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00880	0.0573	0.0597	97	102	1	75-125			4	20
Barium	0.0500	0.0179	0.0691	0.0709	102	106	1	75-125			3	20
Calcium	5.00	416	421	416	96	0	1	75-125		4	1	20
Chromium	0.0500	0.000372	0.0466	0.0486	92	96	1	75-125			4	20
Potassium	5.00	0.569	5.37	5.46	96	98	1	75-125			2	20
Iron	5.00	0.291	4.89	5.00	92	94	1	75-125			2	20
Lead	0.0500	0.000328	0.0483	0.0491	96	98	1	75-125			2	20
Manganese	0.0500	0.342	0.382	0.382	79	81	1	75-125			0	20
Nickel	0.0500	0.000516	0.0469	0.0476	93	94	1	75-125			2	20
Selenium	0.0500	0.000195	0.0445	0.0457	89	91	1	75-125			3	20
Sodium	5.00	191	199	199	154	163	1	75-125	4	4	0	20
Vanadium	0.0500	0.00115	0.0480	0.0495	94	97	1	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 06:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.2			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/27/15 05:49 • (LCSD) 10/27/15 06:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.38	5.68	97.7	103	67.0-132			5.50	20
(S) a,a,a-Trifluorotoluene(FID)				96.0	99.1	62.0-128				

L795810-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 09:06 • (MS) 10/27/15 07:59 • (MSD) 10/27/15 08:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	5.31	5.31	96.5	96.5	1	50.0-143			0.0800	20
(S) a,a,a-Trifluorotoluene(FID)					95.7	97.4		62.0-128				

Method Blank (MB)

(MB) 10/27/15 22:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	90.9			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/27/15 21:41 • (LCSD) 10/27/15 22:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.48	5.53	99.7	101	67.0-132			0.910	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	62.0-128				

L798475-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 01:22 • (MS) 10/28/15 03:57 • (MSD) 10/28/15 04:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.241	5.05	4.80	87.5	82.8	1	50.0-143			5.15	20
(S) a,a,a-Trifluorotoluene(FID)					97.1	97.4		62.0-128				



Method Blank (MB)

(MB) 10/27/15 06:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	91.8			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/27/15 05:43 • (LCSD) 10/27/15 06:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.81	5.98	106	109	67.0-132			2.85	20
(S) a,a,a-Trifluorotoluene(FID)				100	102	62.0-128				

L796143-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 09:05 • (MS) 10/27/15 07:59 • (MSD) 10/27/15 08:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	1.24	6.16	6.15	89.5	89.3	1	50.0-143			0.170	20
(S) a,a,a-Trifluorotoluene(FID)					99.3	99.2		62.0-128				

Method Blank (MB)

(MB) 10/28/15 08:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.5			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 07:26 • (LCSD) 10/28/15 07:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	4.88	4.90	88.7	89.2	67.0-132			0.570	20
(S) a,a,a-Trifluorotoluene(FID)				100	100	62.0-128				

L796056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 12:27 • (MS) 10/28/15 09:07 • (MSD) 10/28/15 09:30

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	0.727	5.15	5.54	80.4	87.5	1	50.0-143			7.35	20
(S) a,a,a-Trifluorotoluene(FID)					99.4	101		62.0-128				



Method Blank (MB)

(MB) 10/28/15 17:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.3			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 16:38 • (LCSD) 10/28/15 17:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.82	4.97	87.6	90.3	67.0-132			3.12	20
(S) a,a,a-Trifluorotoluene(FID)				103	104	62.0-128				

L796114-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 18:53 • (MS) 10/28/15 23:47 • (MSD) 10/29/15 00:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	14.4	12.3	12.5	0.000	0.000	1	50.0-143	F	F	1.14	20
(S) a,a,a-Trifluorotoluene(FID)					109	109		62.0-128				

Method Blank (MB)

(MB) 10/25/15 20:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 10/25/15 20:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	106			90.0-115
(S) Dibromofluoromethane	103			79.0-121
(S) 4-Bromofluorobenzene	96.9			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/25/15 19:10 • (LCSD) 10/25/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.140	0.144	112	115	28.7-175			2.54	20.9
Benzene	0.0250	0.0280	0.0279	112	112	73.0-122			0.340	20
Bromodichloromethane	0.0250	0.0250	0.0249	100	99.7	75.5-121			0.450	20
Bromoform	0.0250	0.0221	0.0226	88.4	90.5	71.5-131			2.34	20
Bromomethane	0.0250	0.0225	0.0226	89.9	90.3	22.4-187			0.410	20
n-Butylbenzene	0.0250	0.0244	0.0242	97.8	96.6	75.9-134			1.18	20
sec-Butylbenzene	0.0250	0.0236	0.0234	94.4	93.5	80.6-126			0.950	20
Carbon disulfide	0.0250	0.0230	0.0227	91.9	90.7	53.0-134			1.35	20
Carbon tetrachloride	0.0250	0.0240	0.0237	96.0	94.7	70.9-129			1.41	20
Chlorobenzene	0.0250	0.0243	0.0242	97.0	96.8	79.7-122			0.240	20
Chlorodibromomethane	0.0250	0.0232	0.0236	92.9	94.2	78.2-124			1.39	20
Chloroethane	0.0250	0.0230	0.0228	91.9	91.3	41.2-153			0.660	20
Chloroform	0.0250	0.0270	0.0273	108	109	73.2-125			1.20	20
Chloromethane	0.0250	0.0258	0.0256	103	102	55.8-134			0.780	20
1,2-Dibromoethane	0.0250	0.0245	0.0252	98.0	101	79.8-122			2.85	20
1,1-Dichloroethane	0.0250	0.0273	0.0272	109	109	71.7-127			0.450	20



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

(LCS) 10/25/15 19:10 • (LCSD) 10/25/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0256	0.0262	102	105	65.3-126			2.50	20
1,1-Dichloroethene	0.0250	0.0223	0.0222	89.1	88.6	59.9-137			0.510	20
cis-1,2-Dichloroethene	0.0250	0.0275	0.0275	110	110	77.3-122			0.0600	20
trans-1,2-Dichloroethene	0.0250	0.0266	0.0260	106	104	72.6-125			2.02	20
1,2-Dichloropropane	0.0250	0.0275	0.0274	110	109	77.4-125			0.420	20
cis-1,3-Dichloropropene	0.0250	0.0267	0.0268	107	107	77.7-124			0.580	20
trans-1,3-Dichloropropene	0.0250	0.0258	0.0261	103	104	73.5-127			1.10	20
Ethylbenzene	0.0250	0.0238	0.0238	95.2	95.0	80.9-121			0.240	20
2-Hexanone	0.125	0.119	0.126	95.2	101	59.4-151			5.56	20
Isopropylbenzene	0.0250	0.0238	0.0237	95.3	94.7	81.6-124			0.630	20
p-Isopropyltoluene	0.0250	0.0226	0.0224	90.5	89.5	77.6-129			1.10	20
2-Butanone (MEK)	0.125	0.139	0.146	111	117	46.4-155			4.53	20
Methylene Chloride	0.0250	0.0268	0.0268	107	107	69.5-120			0.0900	20
4-Methyl-2-pentanone (MIBK)	0.125	0.123	0.129	98.7	103	63.3-138			4.30	20
Methyl tert-butyl ether	0.0250	0.0265	0.0272	106	109	70.1-125			2.34	20
Naphthalene	0.0250	0.0250	0.0260	99.9	104	69.7-134			4.12	20
n-Propylbenzene	0.0250	0.0238	0.0236	95.1	94.6	81.9-122			0.510	20
Styrene	0.0250	0.0247	0.0247	98.8	98.7	79.9-124			0.100	20
1,1,1,2-Tetrachloroethane	0.0250	0.0221	0.0222	88.4	88.8	78.5-125			0.490	20
1,1,2,2-Tetrachloroethane	0.0250	0.0249	0.0256	99.4	103	79.3-123			3.12	20
Tetrachloroethene	0.0250	0.0225	0.0225	90.0	89.9	73.5-130			0.0800	20
Toluene	0.0250	0.0261	0.0259	104	104	77.9-116			0.710	20
1,1,1-Trichloroethane	0.0250	0.0254	0.0251	101	100	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0256	0.0259	102	104	81.6-120			1.41	20
Trichloroethene	0.0250	0.0247	0.0246	98.8	98.3	79.5-121			0.510	20
1,2,4-Trimethylbenzene	0.0250	0.0233	0.0233	93.1	93.1	79.0-122			0.0400	20
1,3,5-Trimethylbenzene	0.0250	0.0234	0.0229	93.4	91.7	81.0-123			1.86	20
Vinyl chloride	0.0250	0.0251	0.0254	100	102	61.5-134			1.18	20
Xylenes, Total	0.0750	0.0717	0.0710	95.6	94.6	79.2-122			0.990	20
o-Xylene	0.0250	0.0236	0.0236	94.4	94.3	79.1-123			0.0800	20
m&p-Xylenes	0.0500	0.0481	0.0474	96.2	94.8	78.5-122			1.44	20
(S) Toluene-d8				107	107	90.0-115				
(S) Dibromofluoromethane				105	103	79.0-121				
(S) 4-Bromofluorobenzene				95.9	94.8	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798587-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 22:24 • (MS) 10/25/15 21:20 • (MSD) 10/25/15 21:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00309	0.139	0.143	109	112	1	25.0-156			2.73	21.5
Benzene	0.0250	ND	0.0277	0.0274	111	110	1	58.6-133			1.09	20
Bromodichloromethane	0.0250	ND	0.0237	0.0236	94.8	94.2	1	69.2-127			0.570	20
Bromoform	0.0250	ND	0.0217	0.0222	86.8	88.7	1	66.3-140			2.20	20
Bromomethane	0.0250	ND	0.0224	0.0221	89.6	88.6	1	16.6-183			1.15	20.5
n-Butylbenzene	0.0250	ND	0.0272	0.0267	109	107	1	64.8-145			2.07	20
sec-Butylbenzene	0.0250	ND	0.0265	0.0255	106	102	1	66.8-139			3.93	20
Carbon disulfide	0.0250	ND	0.0251	0.0242	101	96.9	1	34.9-138			3.77	20
Carbon tetrachloride	0.0250	ND	0.0264	0.0256	106	102	1	60.6-139			3.15	20
Chlorobenzene	0.0250	ND	0.0242	0.0237	96.8	94.7	1	70.1-130			2.16	20
Chlorodibromomethane	0.0250	ND	0.0225	0.0225	89.8	90.1	1	71.6-132			0.300	20
Chloroethane	0.0250	ND	0.0241	0.0238	96.3	95.3	1	33.3-155			1.12	20
Chloroform	0.0250	ND	0.0266	0.0263	106	105	1	66.1-133			1.01	20
Chloromethane	0.0250	ND	0.0260	0.0255	104	102	1	40.7-139			1.97	20
1,2-Dibromoethane	0.0250	ND	0.0238	0.0237	95.1	94.7	1	73.8-131			0.420	20
1,1-Dichloroethane	0.0250	ND	0.0273	0.0268	109	107	1	64.0-134			1.78	20
1,2-Dichloroethane	0.0250	ND	0.0238	0.0240	95.1	95.9	1	60.7-132			0.860	20
1,1-Dichloroethene	0.0250	ND	0.0251	0.0240	100	96.0	1	48.8-144			4.41	20
cis-1,2-Dichloroethene	0.0250	ND	0.0270	0.0266	108	106	1	60.6-136			1.50	20
trans-1,2-Dichloroethene	0.0250	ND	0.0269	0.0266	108	106	1	61.0-132			1.15	20
1,2-Dichloropropane	0.0250	ND	0.0263	0.0259	105	104	1	69.7-130			1.37	20
cis-1,3-Dichloropropene	0.0250	ND	0.0250	0.0250	100	100	1	71.1-129			0.0300	20
trans-1,3-Dichloropropene	0.0250	ND	0.0255	0.0253	102	101	1	66.3-136			0.910	20
Ethylbenzene	0.0250	ND	0.0248	0.0244	99.3	97.5	1	62.7-136			1.86	20
2-Hexanone	0.125	ND	0.119	0.120	95.3	95.9	1	59.4-154			0.590	20.1
Isopropylbenzene	0.0250	ND	0.0258	0.0250	103	100	1	67.4-136			3.17	20
p-Isopropyltoluene	0.0250	ND	0.0251	0.0239	100	95.8	1	62.8-143			4.74	20
2-Butanone (MEK)	0.125	0.000859	0.142	0.145	113	116	1	45.0-156			2.47	20.8
Methylene Chloride	0.0250	ND	0.0255	0.0254	102	102	1	61.5-125			0.470	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.125	0.124	99.7	99.5	1	60.7-150			0.160	20
Methyl tert-butyl ether	0.0250	0.00175	0.0268	0.0272	100	102	1	61.4-136			1.49	20
Naphthalene	0.0250	ND	0.0259	0.0268	104	107	1	61.8-143			3.38	20
n-Propylbenzene	0.0250	ND	0.0262	0.0252	105	101	1	63.2-139			3.58	20
Styrene	0.0250	ND	0.0244	0.0239	97.4	95.5	1	68.2-133			1.99	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0219	0.0218	87.8	87.2	1	70.5-132			0.670	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0256	0.0255	103	102	1	64.9-145			0.570	20

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

L798587-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 22:24 • (MS) 10/25/15 21:20 • (MSD) 10/25/15 21:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0248	0.0242	99.1	97.0	1	57.4-141			2.18	20
Toluene	0.0250	ND	0.0264	0.0255	106	102	1	67.8-124			3.53	20
1,1,1-Trichloroethane	0.0250	ND	0.0276	0.0266	110	106	1	58.7-134			3.79	20
1,1,2-Trichloroethane	0.0250	ND	0.0249	0.0249	99.5	99.6	1	74.1-130			0.0800	20
Trichloroethene	0.0250	ND	0.0251	0.0246	100	98.3	1	48.9-148			2.04	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0246	0.0238	98.2	95.1	1	60.5-137			3.26	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0250	0.0239	100	95.5	1	67.9-134			4.61	20
Vinyl chloride	0.0250	ND	0.0272	0.0265	109	106	1	44.3-143			2.60	20
Xylenes, Total	0.0750	ND	0.0748	0.0721	99.7	96.2	1	65.6-133			3.62	20
o-Xylene	0.0250	ND	0.0243	0.0237	97.2	94.9	1	67.1-133			2.40	20
m&p-Xylenes	0.0500	ND	0.0505	0.0484	101	96.8	1	64.1-133			4.21	20
(S) Toluene-d8					106	105		90.0-115				
(S) Dibromofluoromethane					103	103		79.0-121				
(S) 4-Bromofluorobenzene					97.9	96.8		80.1-120				

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc



Method Blank (MB)

(MB) 10/25/15 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Naphthalene	U		0.00100	0.00500
Tetrachloroethene	U		0.000372	0.00100
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
Toluene	U		0.000780	0.00500
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/25/15 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,1-Trichloroethane	U		0.000319	0.00100
Trichloroethene	U		0.000398	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	99.5			90.0-115
(S) Dibromofluoromethane	96.7			79.0-121
(S) 4-Bromofluorobenzene	87.6			80.1-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/25/15 09:52 • (LCSD) 10/25/15 10:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.101	0.100	81.1	80.3	28.7-175			1.02	20.9
Benzene	0.0250	0.0244	0.0244	97.5	97.8	73.0-122			0.240	20
Bromodichloromethane	0.0250	0.0239	0.0240	95.7	95.9	75.5-121			0.260	20
Bromoform	0.0250	0.0276	0.0281	110	112	71.5-131			1.85	20
Bromomethane	0.0250	0.0250	0.0251	99.9	101	22.4-187			0.630	20
n-Butylbenzene	0.0250	0.0243	0.0257	97.1	103	75.9-134			5.58	20
sec-Butylbenzene	0.0250	0.0238	0.0250	95.1	100	80.6-126			5.14	20
Carbon tetrachloride	0.0250	0.0256	0.0256	103	102	70.9-129			0.280	20
Chlorobenzene	0.0250	0.0254	0.0259	102	103	79.7-122			1.84	20
Chlorodibromomethane	0.0250	0.0253	0.0255	101	102	78.2-124			0.790	20
Chloroethane	0.0250	0.0241	0.0231	96.5	92.3	41.2-153			4.44	20
Chloroform	0.0250	0.0234	0.0238	93.8	95.0	73.2-125			1.32	20
Chloromethane	0.0250	0.0243	0.0242	97.4	96.7	55.8-134			0.690	20
1,2-Dibromoethane	0.0250	0.0240	0.0244	95.9	97.7	79.8-122			1.90	20
1,1-Dichloroethane	0.0250	0.0245	0.0246	98.0	98.2	71.7-127			0.260	20
1,2-Dichloroethane	0.0250	0.0211	0.0208	84.6	83.1	65.3-126			1.71	20
1,1-Dichloroethene	0.0250	0.0225	0.0225	89.8	89.9	59.9-137			0.100	20
cis-1,2-Dichloroethene	0.0250	0.0248	0.0244	99.2	97.7	77.3-122			1.54	20

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

(LCS) 10/25/15 09:52 • (LCSD) 10/25/15 10:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,2-Dichloroethene	0.0250	0.0248	0.0244	99.2	97.8	72.6-125			1.47	20
1,2-Dichloropropane	0.0250	0.0258	0.0264	103	106	77.4-125			2.19	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0266	104	106	77.7-124			2.03	20
trans-1,3-Dichloropropene	0.0250	0.0244	0.0245	97.8	98.0	73.5-127			0.170	20
Ethylbenzene	0.0250	0.0249	0.0259	99.8	104	80.9-121			3.70	20
2-Hexanone	0.125	0.119	0.121	95.3	96.6	59.4-151			1.40	20
Isopropylbenzene	0.0250	0.0246	0.0254	98.4	101	81.6-124			3.06	20
p-Isopropyltoluene	0.0250	0.0244	0.0257	97.7	103	77.6-129			5.20	20
2-Butanone (MEK)	0.125	0.115	0.114	91.8	91.2	46.4-155			0.620	20
Methylene Chloride	0.0250	0.0209	0.0205	83.6	82.2	69.5-120			1.69	20
4-Methyl-2-pentanone (MIBK)	0.125	0.103	0.104	82.8	83.2	63.3-138			0.500	20
Naphthalene	0.0250	0.0213	0.0217	85.0	86.8	69.7-134			2.11	20
n-Propylbenzene	0.0250	0.0241	0.0250	96.2	99.8	81.9-122			3.66	20
Styrene	0.0250	0.0238	0.0244	95.2	97.5	79.9-124			2.39	20
1,1,1,2-Tetrachloroethane	0.0250	0.0259	0.0261	104	104	78.5-125			0.730	20
1,1,2,2-Tetrachloroethane	0.0250	0.0229	0.0237	91.7	95.0	79.3-123			3.57	20
Tetrachloroethene	0.0250	0.0278	0.0286	111	115	73.5-130			3.13	20
Toluene	0.0250	0.0243	0.0248	97.3	99.1	77.9-116			1.82	20
1,1,1-Trichloroethane	0.0250	0.0237	0.0237	94.7	94.7	71.1-129			0.0600	20
1,1,2-Trichloroethane	0.0250	0.0243	0.0241	97.3	96.3	81.6-120			1.05	20
Trichloroethene	0.0250	0.0277	0.0278	111	111	79.5-121			0.470	20
1,2,4-Trimethylbenzene	0.0250	0.0239	0.0248	95.5	99.4	79.0-122			3.93	20
1,3,5-Trimethylbenzene	0.0250	0.0244	0.0250	97.4	100	81.0-123			2.74	20
Vinyl chloride	0.0250	0.0230	0.0235	92.1	94.1	61.5-134			2.09	20
Xylenes, Total	0.0750	0.0762	0.0777	102	104	79.2-122			1.87	20
o-Xylene	0.0250	0.0251	0.0256	100	102	79.1-123			2.03	20
m&p-Xylenes	0.0500	0.0511	0.0521	102	104	78.5-122			1.79	20
(S) Toluene-d8				101	101	90.0-115				
(S) Dibromofluoromethane				93.2	93.3	79.0-121				
(S) 4-Bromofluorobenzene				91.9	92.3	80.1-120				

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
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L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.111	0.164	0.143	43.0	26.0	1	25.0-156			13.8	21.5
Benzene	0.0250	0.000765	0.0239	0.0228	92.4	88.1	1	58.6-133			4.62	20
Bromodichloromethane	0.0250	0.000770	0.0240	0.0231	93.1	89.3	1	69.2-127			4.00	20
Bromoform	0.0250	ND	0.0300	0.0272	120	109	1	66.3-140			9.62	20
Bromomethane	0.0250	ND	0.0216	0.0198	86.6	79.4	1	16.6-183			8.71	20.5
n-Butylbenzene	0.0250	ND	0.0251	0.0239	100	95.7	1	64.8-145			4.67	20
sec-Butylbenzene	0.0250	ND	0.0234	0.0222	93.5	88.9	1	66.8-139			5.02	20
Carbon tetrachloride	0.0250	ND	0.0253	0.0238	101	95.4	1	60.6-139			6.01	20
Chlorobenzene	0.0250	ND	0.0246	0.0229	98.5	91.4	1	70.1-130			7.42	20
Chlorodibromomethane	0.0250	ND	0.0254	0.0236	102	94.5	1	71.6-132			7.38	20
Chloroethane	0.0250	ND	0.0213	0.0209	85.3	83.5	1	33.3-155			2.14	20
Chloroform	0.0250	0.00564	0.0284	0.0269	91.2	85.2	1	66.1-133			5.49	20
Chloromethane	0.0250	ND	0.0209	0.0198	83.7	79.3	1	40.7-139			5.46	20
1,2-Dibromoethane	0.0250	ND	0.0251	0.0234	100	93.6	1	73.8-131			6.95	20
1,1-Dichloroethane	0.0250	ND	0.0239	0.0225	95.5	90.0	1	64.0-134			5.88	20
1,2-Dichloroethane	0.0250	ND	0.0204	0.0194	81.8	77.7	1	60.7-132			5.11	20
1,1-Dichloroethene	0.0250	ND	0.0206	0.0197	82.3	78.9	1	48.8-144			4.23	20
trans-1,2-Dichloroethene	0.0250	ND	0.0224	0.0212	89.5	84.7	1	61.0-132			5.49	20
cis-1,2-Dichloroethene	0.0250	ND	0.0236	0.0226	94.4	90.5	1	60.6-136			4.12	20
1,2-Dichloropropane	0.0250	0.00142	0.0247	0.0241	93.0	90.9	1	69.7-130			2.18	20
cis-1,3-Dichloropropene	0.0250	ND	0.0245	0.0230	97.9	92.1	1	71.1-129			6.13	20
trans-1,3-Dichloropropene	0.0250	0.000656	0.0242	0.0229	94.2	89.0	1	66.3-136			5.53	20
Ethylbenzene	0.0250	ND	0.0244	0.0231	97.4	92.3	1	62.7-136			5.42	20
2-Hexanone	0.125	ND	0.122	0.114	97.4	91.3	1	59.4-154			6.48	20.1
Isopropylbenzene	0.0250	ND	0.0240	0.0227	96.2	90.9	1	67.4-136			5.71	20
p-Isopropyltoluene	0.0250	ND	0.0237	0.0226	94.8	90.4	1	62.8-143			4.71	20
Methylene Chloride	0.0250	0.000546	0.0198	0.0184	76.9	71.3	1	61.5-125			7.22	20
2-Butanone (MEK)	0.125	0.00478	0.114	0.109	87.0	83.2	1	45.0-156			4.30	20.8
4-Methyl-2-pentanone (MIBK)	0.125	0.000534	0.127	0.122	101	97.4	1	60.7-150			3.97	20
Naphthalene	0.0250	0.00125	0.0255	0.0257	96.9	97.8	1	61.8-143			0.850	20
n-Propylbenzene	0.0250	ND	0.0235	0.0223	94.0	89.1	1	63.2-139			5.34	20
Styrene	0.0250	ND	0.0213	0.0205	85.3	81.8	1	68.2-133			4.13	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0255	0.0235	102	94.1	1	70.5-132			7.95	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0262	0.0251	105	100	1	64.9-145			4.56	20
Tetrachloroethene	0.0250	ND	0.0261	0.0246	104	98.5	1	57.4-141			5.65	20
Toluene	0.0250	ND	0.0231	0.0224	92.5	89.5	1	67.8-124			3.28	20

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc



L795756-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/25/15 12:13 • (MS) 10/25/15 10:38 • (MSD) 10/25/15 10:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	0.0250	ND	0.0234	0.0223	93.5	89.3	1	58.7-134			4.50	20
Trichloroethene	0.0250	0.000956	0.0265	0.0255	102	98.3	1	48.9-148			3.59	20
1,1,2-Trichloroethane	0.0250	ND	0.0245	0.0235	98.0	93.9	1	74.1-130			4.26	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0230	0.0220	91.9	87.9	1	60.5-137			4.40	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0235	0.0225	94.1	89.9	1	67.9-134			4.55	20
Vinyl chloride	0.0250	ND	0.0211	0.0202	84.5	80.8	1	44.3-143			4.43	20
Xylenes, Total	0.0750	ND	0.0736	0.0685	98.1	91.4	1	65.6-133			7.16	20
o-Xylene	0.0250	ND	0.0240	0.0223	95.9	89.4	1	67.1-133			7.08	20
m&p-Xylenes	0.0500	ND	0.0496	0.0462	99.2	92.3	1	64.1-133			7.19	20
(S) Toluene-d8					99.4	101		90.0-115				
(S) Dibromofluoromethane					94.5	96.0		79.0-121				
(S) 4-Bromofluorobenzene					90.8	91.5		80.1-120				

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) 10/27/15 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) 10/27/15 12:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	111			90.0-115
(S) Dibromofluoromethane	102			79.0-121
(S) 4-Bromofluorobenzene	104			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/27/15 09:40 • (LCSD) 10/27/15 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.137	0.141	109	112	28.7-175			2.78	20.9
Benzene	0.0250	0.0283	0.0289	113	116	73.0-122			2.34	20
Bromodichloromethane	0.0250	0.0221	0.0223	88.4	89.4	75.5-121			1.12	20
Bromoform	0.0250	0.0185	0.0198	74.1	79.1	71.5-131			6.48	20
Bromomethane	0.0250	0.0314	0.0331	126	132	22.4-187			5.13	20
n-Butylbenzene	0.0250	0.0229	0.0234	91.7	93.7	75.9-134			2.13	20
sec-Butylbenzene	0.0250	0.0224	0.0232	89.6	92.9	80.6-126			3.63	20
Carbon disulfide	0.0250	0.0239	0.0251	95.8	100	53.0-134			4.55	20
Carbon tetrachloride	0.0250	0.0209	0.0215	83.5	85.8	70.9-129			2.70	20
Chlorobenzene	0.0250	0.0229	0.0242	91.6	96.6	79.7-122			5.36	20
Chlorodibromomethane	0.0250	0.0196	0.0210	78.3	83.9	78.2-124			6.93	20
Chloroethane	0.0250	0.0278	0.0293	111	117	41.2-153			5.40	20
Chloroform	0.0250	0.0244	0.0249	97.7	99.5	73.2-125			1.83	20
Chloromethane	0.0250	0.0260	0.0268	104	107	55.8-134			3.28	20
1,2-Dibromoethane	0.0250	0.0229	0.0240	91.5	96.0	79.8-122			4.85	20
1,1-Dichloroethane	0.0250	0.0257	0.0259	103	103	71.7-127			0.620	20



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

(LCS) 10/27/15 09:40 • (LCSD) 10/27/15 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0254	0.0260	102	104	65.3-126			2.01	20
1,1-Dichloroethene	0.0250	0.0239	0.0245	95.7	97.9	59.9-137			2.25	20
cis-1,2-Dichloroethene	0.0250	0.0243	0.0243	97.3	97.2	77.3-122			0.140	20
trans-1,2-Dichloroethene	0.0250	0.0240	0.0241	95.9	96.5	72.6-125			0.630	20
1,2-Dichloropropane	0.0250	0.0267	0.0265	107	106	77.4-125			0.680	20
cis-1,3-Dichloropropene	0.0250	0.0254	0.0264	102	105	77.7-124			3.52	20
trans-1,3-Dichloropropene	0.0250	0.0268	0.0277	107	111	73.5-127			3.20	20
Ethylbenzene	0.0250	0.0221	0.0231	88.6	92.4	80.9-121			4.20	20
2-Hexanone	0.125	0.132	0.140	106	112	59.4-151			5.60	20
Isopropylbenzene	0.0250	0.0216	0.0224	86.5	89.5	81.6-124			3.40	20
p-Isopropyltoluene	0.0250	0.0216	0.0224	86.2	89.4	77.6-129			3.62	20
2-Butanone (MEK)	0.125	0.146	0.150	117	120	46.4-155			2.48	20
Methylene Chloride	0.0250	0.0251	0.0255	100	102	69.5-120			1.52	20
4-Methyl-2-pentanone (MIBK)	0.125	0.128	0.131	102	105	63.3-138			2.57	20
Methyl tert-butyl ether	0.0250	0.0255	0.0255	102	102	70.1-125			0.240	20
Naphthalene	0.0250	0.0202	0.0210	81.0	83.8	69.7-134			3.50	20
n-Propylbenzene	0.0250	0.0229	0.0236	91.6	94.2	81.9-122			2.84	20
Styrene	0.0250	0.0259	0.0269	103	107	79.9-124			3.82	20
1,1,1,2-Tetrachloroethane	0.0250	0.0178	0.0184	71.0	73.8	78.5-125	*	*	3.81	20
1,1,2,2-Tetrachloroethane	0.0250	0.0215	0.0220	86.0	87.8	79.3-123	-	-	2.13	20
Tetrachloroethene	0.0250	0.0200	0.0207	79.9	82.8	73.5-130			3.65	20
Toluene	0.0250	0.0251	0.0257	101	103	77.9-116			2.16	20
1,1,1-Trichloroethane	0.0250	0.0232	0.0238	93.0	95.4	71.1-129			2.56	20
1,1,2-Trichloroethane	0.0250	0.0217	0.0229	86.9	91.8	81.6-120			5.51	20
Trichloroethene	0.0250	0.0230	0.0231	91.9	92.2	79.5-121			0.370	20
1,2,4-Trimethylbenzene	0.0250	0.0222	0.0224	88.7	89.5	79.0-122			0.930	20
1,3,5-Trimethylbenzene	0.0250	0.0222	0.0229	88.7	91.4	81.0-123			2.99	20
Vinyl chloride	0.0250	0.0254	0.0264	102	106	61.5-134			3.88	20
Xylenes, Total	0.0750	0.0669	0.0690	89.2	92.0	79.2-122			3.07	20
o-Xylene	0.0250	0.0220	0.0227	88.2	90.6	79.1-123			2.70	20
m&p-Xylenes	0.0500	0.0449	0.0463	89.7	92.7	78.5-122			3.25	20
(S) Toluene-d8				113	112	90.0-115				
(S) Dibromofluoromethane				106	104	79.0-121				
(S) 4-Bromofluorobenzene				106	108	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798576-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:42 • (MS) 10/27/15 15:03 • (MSD) 10/27/15 15:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00212	0.0529	0.0547	40.7	42.0	1	25.0-156			3.19	21.5
Benzene	0.0250	ND	0.0172	0.0174	68.8	69.5	1	58.6-133			0.970	20
Bromodichloromethane	0.0250	ND	0.0176	0.0178	70.2	71.3	1	69.2-127			1.48	20
Bromoform	0.0250	ND	0.0159	0.0166	63.4	66.3	1	66.3-140	F		4.35	20
Bromomethane	0.0250	ND	0.0109	0.0114	43.5	45.8	1	16.6-183			5.21	20.5
n-Butylbenzene	0.0250	ND	0.0206	0.0205	82.2	81.9	1	64.8-145			0.380	20
sec-Butylbenzene	0.0250	ND	0.0191	0.0191	76.3	76.3	1	66.8-139			0.0500	20
Carbon disulfide	0.0250	ND	0.00325	0.00334	13.0	13.4	1	34.9-138	F	F	2.67	20
Carbon tetrachloride	0.0250	ND	0.0135	0.0140	54.0	56.1	1	60.6-139	F	F	3.80	20
Chlorobenzene	0.0250	ND	0.0175	0.0181	70.0	72.5	1	70.1-130	F		3.53	20
Chlorodibromomethane	0.0250	ND	0.0163	0.0174	65.3	69.4	1	71.6-132	F	F	6.04	20
Chloroethane	0.0250	ND	0.0120	0.0123	48.2	49.1	1	33.3-155			1.96	20
Chloroform	0.0250	ND	0.0183	0.0188	73.4	75.1	1	66.1-133			2.42	20
Chloromethane	0.0250	ND	0.00804	0.00809	32.1	32.4	1	40.7-139	F	F	0.680	20
1,2-Dibromoethane	0.0250	ND	0.0174	0.0181	69.8	72.3	1	73.8-131	F	F	3.53	20
1,1-Dichloroethane	0.0250	ND	0.0178	0.0180	71.1	72.1	1	64.0-134			1.45	20
1,2-Dichloroethane	0.0250	ND	0.0183	0.0183	73.2	73.4	1	60.7-132			0.170	20
1,1-Dichloroethene	0.0250	ND	0.0119	0.0119	47.5	47.7	1	48.8-144	F	F	0.450	20
cis-1,2-Dichloroethene	0.0250	ND	0.0160	0.0159	63.8	63.7	1	60.6-136			0.280	20
trans-1,2-Dichloroethene	0.0250	ND	0.0110	0.0111	44.1	44.2	1	61.0-132	F	F	0.330	20
1,2-Dichloropropane	0.0250	ND	0.0196	0.0201	78.4	80.5	1	69.7-130			2.62	20
cis-1,3-Dichloropropene	0.0250	ND	0.0190	0.0191	75.8	76.5	1	71.1-129			0.910	20
trans-1,3-Dichloropropene	0.0250	ND	0.0210	0.0210	83.9	84.0	1	66.3-136			0.200	20
Ethylbenzene	0.0250	ND	0.0163	0.0167	65.1	66.7	1	62.7-136			2.41	20
2-Hexanone	0.125	ND	0.0943	0.0975	75.4	78.0	1	59.4-154			3.39	20.1
Isopropylbenzene	0.0250	ND	0.0172	0.0177	68.7	70.8	1	67.4-136			2.94	20
p-Isopropyltoluene	0.0250	ND	0.0185	0.0187	74.2	74.7	1	62.8-143			0.740	20
2-Butanone (MEK)	0.125	ND	0.0853	0.0864	68.2	69.1	1	45.0-156			1.32	20.8
Methylene Chloride	0.0250	ND	0.0150	0.0154	60.1	61.8	1	61.5-125	F		2.74	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.111	0.113	88.7	90.0	1	60.7-150			1.44	20
Methyl tert-butyl ether	0.0250	0.000324	0.0205	0.0214	80.9	84.3	1	61.4-136			4.07	20
Naphthalene	0.0250	ND	0.0175	0.0182	70.0	72.8	1	61.8-143			3.95	20
n-Propylbenzene	0.0250	ND	0.0186	0.0189	74.4	75.7	1	63.2-139			1.76	20
Styrene	0.0250	ND	0.0205	0.0210	82.0	83.9	1	68.2-133			2.36	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0148	0.0152	59.2	60.9	1	70.5-132	F	F	2.93	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0197	0.0206	78.8	82.3	1	64.9-145			4.35	20

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc



L798576-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:42 • (MS) 10/27/15 15:03 • (MSD) 10/27/15 15:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0124	0.0125	49.8	49.9	1	57.4-141	E	E	0.320	20
Toluene	0.0250	ND	0.0166	0.0169	66.5	67.8	1	67.8-124	E		1.86	20
1,1,1-Trichloroethane	0.0250	ND	0.0166	0.0170	66.3	67.9	1	58.7-134			2.42	20
1,1,2-Trichloroethane	0.0250	ND	0.0188	0.0196	75.2	78.3	1	74.1-130			4.11	20
Trichloroethene	0.0250	ND	0.0138	0.0143	55.2	57.2	1	48.9-148			3.59	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0180	0.0185	72.1	73.8	1	60.5-137			2.36	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0180	0.0182	71.9	72.6	1	67.9-134			1.01	20
Vinyl chloride	0.0250	ND	0.00934	0.00924	37.4	36.9	1	44.3-143	E	E	1.09	20
Xylenes, Total	0.0750	ND	0.0495	0.0510	66.0	67.9	1	65.6-133			2.92	20
o-Xylene	0.0250	ND	0.0168	0.0170	67.1	68.1	1	67.1-133			1.51	20
m&p-Xylenes	0.0500	ND	0.0327	0.0339	65.4	67.8	1	64.1-133			3.64	20
(S) Toluene-d8					112	113		90.0-115				
(S) Dibromofluoromethane					104	104		79.0-121				
(S) 4-Bromofluorobenzene					106	107		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/27/15 12:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Carbon disulfide	U		0.000275	0.00100
Ethylbenzene	U		0.000384	0.00100
Methyl tert-butyl ether	U		0.000367	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/27/15 10:18 • (LCSD) 10/27/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0233	0.0231	93.2	92.5	73.0-122			0.750	20
Carbon disulfide	0.0250	0.0226	0.0223	90.5	89.4	53.0-134			1.26	20
Ethylbenzene	0.0250	0.0248	0.0255	99.3	102	80.9-121			2.67	20
Methyl tert-butyl ether	0.0250	0.0229	0.0220	91.5	87.8	70.1-125			4.05	20
1,2,4-Trimethylbenzene	0.0250	0.0234	0.0240	93.5	96.0	79.0-122			2.56	20
Xylenes, Total	0.0750	0.0753	0.0766	100	102	79.2-122			1.66	20
o-Xylene	0.0250	0.0252	0.0259	101	103	79.1-123			2.69	20
m&p-Xylenes	0.0500	0.0501	0.0507	100	101	78.5-122			1.14	20

L796395-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 14:36 • (MS) 10/27/15 13:06 • (MSD) 10/27/15 13:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0218	0.0223	87.4	89.3	1	58.6-133			2.16	20
Carbon disulfide	0.0250	ND	0.0209	0.0214	83.8	85.5	1	34.9-138			2.02	20
Ethylbenzene	0.0250	ND	0.0240	0.0249	96.1	99.5	1	62.7-136			3.51	20
Methyl tert-butyl ether	0.0250	ND	0.0218	0.0210	87.0	83.9	1	61.4-136			3.62	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0231	0.0239	92.5	95.6	1	60.5-137			3.27	20
Xylenes, Total	0.0750	ND	0.0711	0.0750	94.8	100	1	65.6-133			5.36	20
o-Xylene	0.0250	ND	0.0239	0.0252	95.7	101	1	67.1-133			5.06	20
m&p-Xylenes	0.0500	ND	0.0472	0.0499	94.4	99.8	1	64.1-133			5.52	20



Method Blank (MB)

(MB) 10/28/15 09:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/28/15 08:03 • (LCSD) 10/28/15 08:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0248	0.0253	99.2	101	73.0-122			1.82	20

L796603-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 12:05 • (MS) 10/28/15 17:54 • (MSD) 10/28/15 18:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0234	0.0441	0.0430	82.7	78.3	1	58.6-133			2.50	20

L798466-15,16,18

Method Blank (MB)

(MB) 10/27/15 17:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 17:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	102			90.0-115
(S) Dibromofluoromethane	97.1			79.0-121
(S) 4-Bromofluorobenzene	96.7			80.1-120

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 10/27/15 15:55 • (LCSD) 10/27/15 16:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.123	0.110	98.0	87.7	28.7-175			11.1	20.9
Benzene	0.0250	0.0239	0.0233	95.5	93.1	73.0-122			2.49	20
Bromodichloromethane	0.0250	0.0242	0.0238	96.6	95.3	75.5-121			1.35	20
Bromoform	0.0250	0.0262	0.0253	105	101	71.5-131			3.67	20
Bromomethane	0.0250	0.0304	0.0284	122	114	22.4-187			6.96	20
n-Butylbenzene	0.0250	0.0248	0.0243	99.1	97.1	75.9-134			1.98	20
sec-Butylbenzene	0.0250	0.0245	0.0243	98.0	97.2	80.6-126			0.730	20
Carbon disulfide	0.0250	0.0214	0.0208	85.4	83.3	53.0-134			2.55	20
Carbon tetrachloride	0.0250	0.0229	0.0226	91.6	90.3	70.9-129			1.53	20
Chlorobenzene	0.0250	0.0246	0.0245	98.5	97.8	79.7-122			0.680	20
Chlorodibromomethane	0.0250	0.0259	0.0257	103	103	78.2-124			0.610	20
Chloroethane	0.0250	0.0229	0.0224	91.8	89.5	41.2-153			2.53	20
Chloroform	0.0250	0.0244	0.0242	97.8	96.6	73.2-125			1.19	20
Chloromethane	0.0250	0.0217	0.0206	86.7	82.5	55.8-134			4.96	20
1,2-Dibromoethane	0.0250	0.0253	0.0245	101	98.1	79.8-122			3.28	20
1,1-Dichloroethane	0.0250	0.0241	0.0236	96.6	94.5	71.7-127			2.12	20

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

(LCS) 10/27/15 15:55 • (LCSD) 10/27/15 16:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0236	0.0233	94.4	93.2	65.3-126			1.28	20
1,1-Dichloroethene	0.0250	0.0229	0.0224	91.7	89.8	59.9-137			2.15	20
cis-1,2-Dichloroethene	0.0250	0.0249	0.0247	99.7	98.7	77.3-122			1.04	20
trans-1,2-Dichloroethene	0.0250	0.0241	0.0236	96.5	94.4	72.6-125			2.26	20
1,2-Dichloropropane	0.0250	0.0252	0.0244	101	97.6	77.4-125			3.10	20
cis-1,3-Dichloropropene	0.0250	0.0262	0.0258	105	103	77.7-124			1.64	20
trans-1,3-Dichloropropene	0.0250	0.0263	0.0254	105	102	73.5-127			3.28	20
Ethylbenzene	0.0250	0.0245	0.0245	97.8	98.0	80.9-121			0.210	20
2-Hexanone	0.125	0.143	0.131	114	105	59.4-151			8.85	20
Isopropylbenzene	0.0250	0.0244	0.0239	97.5	95.7	81.6-124			1.84	20
p-Isopropyltoluene	0.0250	0.0245	0.0240	98.1	96.1	77.6-129			2.14	20
2-Butanone (MEK)	0.125	0.140	0.126	112	101	46.4-155			10.3	20
Methylene Chloride	0.0250	0.0227	0.0225	90.6	89.8	69.5-120			0.870	20
4-Methyl-2-pentanone (MIBK)	0.125	0.135	0.125	108	99.7	63.3-138			7.71	20
Methyl tert-butyl ether	0.0250	0.0257	0.0248	103	99.3	70.1-125			3.45	20
Naphthalene	0.0250	0.0261	0.0255	105	102	69.7-134			2.59	20
n-Propylbenzene	0.0250	0.0240	0.0237	96.1	94.9	81.9-122			1.27	20
Styrene	0.0250	0.0260	0.0257	104	103	79.9-124			1.19	20
1,1,1,2-Tetrachloroethane	0.0250	0.0252	0.0245	101	98.0	78.5-125			2.69	20
1,1,2,2-Tetrachloroethane	0.0250	0.0251	0.0236	100	94.3	79.3-123			6.09	20
Tetrachloroethene	0.0250	0.0246	0.0243	98.4	97.2	73.5-130			1.25	20
Toluene	0.0250	0.0236	0.0233	94.4	93.2	77.9-116			1.27	20
1,1,1-Trichloroethane	0.0250	0.0240	0.0233	95.9	93.1	71.1-129			2.93	20
1,1,2-Trichloroethane	0.0250	0.0247	0.0241	98.9	96.2	81.6-120			2.74	20
Trichloroethene	0.0250	0.0240	0.0239	96.1	95.6	79.5-121			0.510	20
1,2,4-Trimethylbenzene	0.0250	0.0244	0.0243	97.7	97.0	79.0-122			0.630	20
1,3,5-Trimethylbenzene	0.0250	0.0241	0.0237	96.4	94.6	81.0-123			1.80	20
Vinyl chloride	0.0250	0.0229	0.0226	91.7	90.4	61.5-134			1.40	20
Xylenes, Total	0.0750	0.0742	0.0722	99.0	96.2	79.2-122			2.81	20
o-Xylene	0.0250	0.0251	0.0244	100	97.6	79.1-123			2.89	20
m&p-Xylenes	0.0500	0.0491	0.0478	98.2	95.5	78.5-122			2.77	20
(S) Toluene-d8				102	103	90.0-115				
(S) Dibromofluoromethane				97.8	101	79.0-121				
(S) 4-Bromofluorobenzene				99.4	99.2	80.1-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L796682-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:39 • (MS) 10/27/15 19:02 • (MSD) 10/27/15 19:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0612	8.48	7.56	67.3	60.0	100	25.0-156			11.5	21.5
Benzene	0.0250	0.00148	2.28	2.28	91.0	91.2	100	58.6-133			0.270	20
Bromodichloromethane	0.0250	ND	2.30	2.39	92.1	95.4	100	69.2-127			3.56	20
Bromoform	0.0250	ND	2.47	2.64	98.8	106	100	66.3-140			6.59	20
Bromomethane	0.0250	ND	2.91	2.77	116	111	100	16.6-183			4.81	20.5
n-Butylbenzene	0.0250	ND	2.43	2.52	97.0	101	100	64.8-145			3.62	20
sec-Butylbenzene	0.0250	ND	2.37	2.43	95.0	97.4	100	66.8-139			2.51	20
Carbon disulfide	0.0250	0.00539	2.00	1.97	80.0	78.8	100	34.9-138			1.49	20
Carbon tetrachloride	0.0250	ND	2.20	2.25	88.2	90.1	100	60.6-139			2.15	20
Chlorobenzene	0.0250	ND	2.39	2.42	95.7	96.8	100	70.1-130			1.19	20
Chlorodibromomethane	0.0250	ND	2.48	2.64	99.4	106	100	71.6-132			6.06	20
Chloroethane	0.0250	ND	2.24	2.24	89.5	89.4	100	33.3-155			0.0300	20
Chloroform	0.0250	ND	2.30	2.34	92.0	93.7	100	66.1-133			1.88	20
Chloromethane	0.0250	ND	2.04	1.96	81.5	78.4	100	40.7-139			3.80	20
1,2-Dibromoethane	0.0250	ND	2.42	2.55	96.7	102	100	73.8-131			5.39	20
1,1-Dichloroethane	0.0250	ND	2.31	2.31	92.4	92.5	100	64.0-134			0.120	20
1,2-Dichloroethane	0.0250	ND	2.28	2.29	91.1	91.5	100	60.7-132			0.530	20
1,1-Dichloroethene	0.0250	ND	2.18	2.14	87.1	85.8	100	48.8-144			1.53	20
cis-1,2-Dichloroethene	0.0250	ND	2.38	2.41	95.3	96.6	100	60.6-136			1.32	20
trans-1,2-Dichloroethene	0.0250	ND	2.34	2.31	93.4	92.4	100	61.0-132			1.15	20
1,2-Dichloropropane	0.0250	ND	2.44	2.43	97.6	97.2	100	69.7-130			0.450	20
cis-1,3-Dichloropropene	0.0250	ND	2.52	2.58	101	103	100	71.1-129			2.37	20
trans-1,3-Dichloropropene	0.0250	ND	2.45	2.55	98.0	102	100	66.3-136			3.97	20
Ethylbenzene	0.0250	ND	2.38	2.43	95.2	97.3	100	62.7-136			2.18	20
2-Hexanone	0.125	ND	11.5	11.9	92.0	94.9	100	59.4-154			3.14	20.1
Isopropylbenzene	0.0250	ND	2.37	2.42	94.8	97.0	100	67.4-136			2.31	20
p-Isopropyltoluene	0.0250	ND	2.37	2.44	95.0	97.5	100	62.8-143			2.59	20
2-Butanone (MEK)	0.125	0.0751	10.8	10.4	85.7	83.0	100	45.0-156			3.22	20.8
Methylene Chloride	0.0250	0.00767	2.16	2.16	86.3	85.9	100	61.5-125			0.400	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	12.2	13.1	97.5	104	100	60.7-150			6.94	20
Methyl tert-butyl ether	0.0250	ND	2.42	2.48	96.8	99.0	100	61.4-136			2.26	20
Naphthalene	0.0250	0.00940	2.33	2.60	92.8	104	100	61.8-143			11.1	20
n-Propylbenzene	0.0250	ND	2.32	2.39	92.8	95.4	100	63.2-139			2.82	20
Styrene	0.0250	ND	2.52	2.57	101	103	100	68.2-133			2.24	20
1,1,1,2-Tetrachloroethane	0.0250	ND	2.40	2.50	96.1	100	100	70.5-132			4.09	20
1,1,2,2-Tetrachloroethane	0.0250	ND	2.47	2.61	98.9	104	100	64.9-145			5.37	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796682-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/27/15 18:39 • (MS) 10/27/15 19:02 • (MSD) 10/27/15 19:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	2.38	2.41	95.4	96.2	100	57.4-141			0.860	20
Toluene	0.0250	0.00314	2.28	2.30	91.3	91.8	100	67.8-124			0.610	20
1,1,1-Trichloroethane	0.0250	ND	2.31	2.31	92.5	92.6	100	58.7-134			0.0700	20
1,1,2-Trichloroethane	0.0250	ND	2.38	2.42	95.1	96.6	100	74.1-130			1.52	20
Trichloroethene	0.0250	ND	2.29	2.31	91.5	92.3	100	48.9-148			0.830	20
1,2,4-Trimethylbenzene	0.0250	ND	2.39	2.46	95.7	98.3	100	60.5-137			2.69	20
1,3,5-Trimethylbenzene	0.0250	ND	2.37	2.42	94.9	96.7	100	67.9-134			1.87	20
Vinyl chloride	0.0250	ND	2.18	2.16	87.2	86.3	100	44.3-143			1.08	20
Xylenes, Total	0.0750	ND	7.22	7.35	96.3	98.0	100	65.6-133			1.76	20
o-Xylene	0.0250	ND	2.43	2.48	97.3	99.1	100	67.1-133			1.84	20
m&p-Xylenes	0.0500	ND	4.79	4.87	95.8	97.4	100	64.1-133			1.72	20
(S) Toluene-d8					103	103		90.0-115				
(S) Dibromofluoromethane					102	100		79.0-121				
(S) 4-Bromofluorobenzene					101	102		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/27/15 23:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	0.000899		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
Tetrachloroethene	U		0.000372	0.00100
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/27/15 23:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Toluene	U		0.000780	0.00500
Trichloroethene	U		0.000398	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	101			90.0-115
(S) Dibromofluoromethane	92.5			79.0-121
(S) 4-Bromofluorobenzene	102			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/27/15 21:44 • (LCSD) 10/27/15 22:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0905	0.0946	72.4	75.6	28.7-175			4.38	20.9
Benzene	0.0250	0.0242	0.0244	96.7	97.7	73.0-122			0.960	20
Bromodichloromethane	0.0250	0.0218	0.0217	87.0	86.7	75.5-121			0.360	20
Bromoform	0.0250	0.0278	0.0278	111	111	71.5-131			0.260	20
Bromomethane	0.0250	0.0289	0.0292	116	117	22.4-187			1.00	20
n-Butylbenzene	0.0250	0.0245	0.0249	97.8	99.6	75.9-134			1.78	20
sec-Butylbenzene	0.0250	0.0268	0.0266	107	107	80.6-126			0.760	20
Carbon disulfide	0.0250	0.0207	0.0208	82.8	83.3	53.0-134			0.610	20
Carbon tetrachloride	0.0250	0.0229	0.0230	91.6	92.1	70.9-129			0.530	20
Chlorobenzene	0.0250	0.0277	0.0275	111	110	79.7-122			1.03	20
Chlorodibromomethane	0.0250	0.0269	0.0265	107	106	78.2-124			1.25	20
Chloroethane	0.0250	0.0231	0.0224	92.5	89.6	41.2-153			3.17	20
Chloroform	0.0250	0.0235	0.0235	93.8	94.1	73.2-125			0.240	20
Chloromethane	0.0250	0.0189	0.0187	75.5	74.9	55.8-134			0.800	20
1,2-Dibromoethane	0.0250	0.0259	0.0265	104	106	79.8-122			2.27	20
1,1-Dichloroethane	0.0250	0.0237	0.0236	94.7	94.4	71.7-127			0.350	20

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

(LCS) 10/27/15 21:44 • (LCSD) 10/27/15 22:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0207	0.0205	83.0	81.9	65.3-126			1.29	20
1,1-Dichloroethene	0.0250	0.0224	0.0227	89.7	90.7	59.9-137			1.11	20
cis-1,2-Dichloroethene	0.0250	0.0236	0.0236	94.6	94.5	77.3-122			0.0700	20
trans-1,2-Dichloroethene	0.0250	0.0232	0.0230	92.8	92.2	72.6-125			0.710	20
1,2-Dichloropropane	0.0250	0.0245	0.0250	98.0	100	77.4-125			2.05	20
cis-1,3-Dichloropropene	0.0250	0.0231	0.0234	92.3	93.7	77.7-124			1.60	20
trans-1,3-Dichloropropene	0.0250	0.0228	0.0226	91.0	90.4	73.5-127			0.650	20
Ethylbenzene	0.0250	0.0273	0.0273	109	109	80.9-121			0.0300	20
2-Hexanone	0.125	0.112	0.117	89.2	93.9	59.4-151			5.08	20
Isopropylbenzene	0.0250	0.0269	0.0270	108	108	81.6-124			0.250	20
p-Isopropyltoluene	0.0250	0.0275	0.0271	110	108	77.6-129			1.45	20
2-Butanone (MEK)	0.125	0.0924	0.0969	73.9	77.5	46.4-155			4.78	20
Methylene Chloride	0.0250	0.0221	0.0224	88.4	89.6	69.5-120			1.34	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0908	0.0972	72.6	77.7	63.3-138			6.84	20
Methyl tert-butyl ether	0.0250	0.0231	0.0233	92.6	93.3	70.1-125			0.840	20
Naphthalene	0.0250	0.0205	0.0215	82.1	86.0	69.7-134			4.52	20
n-Propylbenzene	0.0250	0.0269	0.0266	108	106	81.9-122			1.45	20
Styrene	0.0250	0.0285	0.0279	114	112	79.9-124			1.96	20
1,1,1,2-Tetrachloroethane	0.0250	0.0267	0.0265	107	106	78.5-125			0.810	20
Tetrachloroethene	0.0250	0.0287	0.0288	115	115	73.5-130			0.130	20
1,1,2,2-Tetrachloroethane	0.0250	0.0186	0.0190	74.5	76.0	79.3-123	*	*	1.98	20
Toluene	0.0250	0.0248	0.0248	99.2	99.0	77.9-116			0.150	20
1,1,1-Trichloroethane	0.0250	0.0215	0.0214	86.1	85.6	71.1-129			0.570	20
Trichloroethene	0.0250	0.0294	0.0302	118	121	79.5-121			2.79	20
1,1,2-Trichloroethane	0.0250	0.0244	0.0243	97.8	97.0	81.6-120			0.810	20
1,2,4-Trimethylbenzene	0.0250	0.0261	0.0257	105	103	79.0-122			1.69	20
1,3,5-Trimethylbenzene	0.0250	0.0263	0.0263	105	105	81.0-123			0.300	20
Vinyl chloride	0.0250	0.0219	0.0211	87.7	84.4	61.5-134			3.86	20
Xylenes, Total	0.0750	0.0828	0.0820	110	109	79.2-122			1.05	20
o-Xylene	0.0250	0.0274	0.0273	110	109	79.1-123			0.410	20
m&p-Xylenes	0.0500	0.0554	0.0546	111	109	78.5-122			1.37	20
(S) Toluene-d8				101	100	90.0-115				
(S) Dibromofluoromethane				93.1	92.4	79.0-121				
(S) 4-Bromofluorobenzene				103	101	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798466-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 00:58 • (MS) 10/27/15 23:21 • (MSD) 10/27/15 23:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000917	0.0520	0.0446	40.9	35.0	1	25.0-156			15.3	21.5
Benzene	0.0250	ND	0.0154	0.0221	61.7	88.3	1	58.6-133		*	35.4	20
Bromodichloromethane	0.0250	ND	0.0150	0.0194	60.1	77.6	1	69.2-127	F	*	25.3	20
Bromoform	0.0250	ND	0.0181	0.0256	72.3	103	1	66.3-140		*	34.5	20
Bromomethane	0.0250	0.000881	0.0230	0.0233	88.5	89.8	1	16.6-183			1.42	20.5
n-Butylbenzene	0.0250	ND	0.0105	0.0232	42.1	92.8	1	64.8-145	F	*	75.3	20
sec-Butylbenzene	0.0250	0.000946	0.00947	0.0260	34.1	100	1	66.8-139	F	*	93.1	20
Carbon disulfide	0.0250	0.000553	0.0160	0.0195	61.7	75.8	1	34.9-138			19.8	20
Carbon tetrachloride	0.0250	ND	0.0143	0.0211	57.3	84.3	1	60.6-139	F	*	38.3	20
Chlorobenzene	0.0250	ND	0.0134	0.0256	53.6	102	1	70.1-130	F	*	62.5	20
Chlorodibromomethane	0.0250	ND	0.0182	0.0246	72.8	98.6	1	71.6-132		*	30.1	20
Chloroethane	0.0250	ND	0.0187	0.0197	74.9	78.9	1	33.3-155			5.28	20
Chloroform	0.0250	ND	0.0169	0.0211	67.7	84.6	1	66.1-133		*	22.3	20
Chloromethane	0.0250	ND	0.0179	0.0168	71.6	67.1	1	40.7-139			6.48	20
1,2-Dibromoethane	0.0250	ND	0.0189	0.0243	75.4	97.1	1	73.8-131		*	25.1	20
1,1-Dichloroethane	0.0250	ND	0.0178	0.0217	71.2	86.8	1	64.0-134			19.8	20
1,2-Dichloroethane	0.0250	ND	0.0162	0.0188	64.6	75.4	1	60.7-132			15.3	20
1,1-Dichloroethene	0.0250	ND	0.0177	0.0207	70.7	82.7	1	48.8-144			15.6	20
cis-1,2-Dichloroethene	0.0250	ND	0.0165	0.0212	65.9	84.9	1	60.6-136		*	25.3	20
trans-1,2-Dichloroethene	0.0250	ND	0.0161	0.0211	64.3	84.6	1	61.0-132		*	27.2	20
1,2-Dichloropropane	0.0250	ND	0.0173	0.0229	69.3	91.7	1	69.7-130	F	*	27.8	20
cis-1,3-Dichloropropene	0.0250	ND	0.0144	0.0208	57.7	83.1	1	71.1-129	F	*	36.0	20
trans-1,3-Dichloropropene	0.0250	ND	0.0142	0.0202	56.7	80.9	1	66.3-136	F	*	35.2	20
Ethylbenzene	0.0250	ND	0.0125	0.0259	50.2	104	1	62.7-136	F	*	69.5	20
2-Hexanone	0.125	ND	0.0861	0.0968	68.9	77.4	1	59.4-154			11.7	20.1
Isopropylbenzene	0.0250	0.000309	0.0111	0.0255	43.1	101	1	67.4-136	F	*	79.0	20
p-Isopropyltoluene	0.0250	ND	0.00935	0.0260	37.4	104	1	62.8-143	F	*	94.1	20
2-Butanone (MEK)	0.125	ND	0.0844	0.0799	67.5	63.9	1	45.0-156			5.45	20.8
Methylene Chloride	0.0250	ND	0.0186	0.0204	74.4	81.6	1	61.5-125			9.19	20
4-Methyl-2-pentanone (MIBK)	0.125	0.000554	0.0900	0.0961	71.6	76.4	1	60.7-150			6.50	20
Methyl tert-butyl ether	0.0250	ND	0.0213	0.0215	85.3	86.2	1	61.4-136			1.04	20
Naphthalene	0.0250	ND	0.0166	0.0208	66.4	83.3	1	61.8-143		*	22.6	20
n-Propylbenzene	0.0250	ND	0.00977	0.0251	39.1	100	1	63.2-139	F	*	87.9	20
Styrene	0.0250	ND	0.0124	0.0261	49.6	104	1	68.2-133	F	*	71.1	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0145	0.0241	57.9	96.5	1	70.5-132	F	*	50.0	20
Tetrachloroethene	0.0250	ND	0.0138	0.0272	55.2	109	1	57.4-141	F	*	65.5	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L798466-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 00:58 • (MS) 10/27/15 23:21 • (MSD) 10/27/15 23:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0151	0.0213	60.3	85.3	1	64.9-145	F	*	34.4	20
Toluene	0.0250	ND	0.0133	0.0229	53.4	91.7	1	67.8-124	F	*	52.8	20
1,1,1-Trichloroethane	0.0250	ND	0.0140	0.0199	56.0	79.6	1	58.7-134	F	*	34.9	20
Trichloroethene	0.0250	ND	0.0169	0.0260	67.5	104	1	48.9-148		*	42.4	20
1,1,2-Trichloroethane	0.0250	ND	0.0193	0.0243	77.2	97.3	1	74.1-130		*	23.0	20
1,2,4-Trimethylbenzene	0.0250	ND	0.00986	0.0241	39.4	96.5	1	60.5-137	F	*	84.0	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0100	0.0247	40.2	98.7	1	67.9-134	F	*	84.3	20
Vinyl chloride	0.0250	ND	0.0200	0.0195	80.0	78.0	1	44.3-143			2.46	20
Xylenes, Total	0.0750	ND	0.0364	0.0773	48.6	103	1	65.6-133	F	*	71.8	20
o-Xylene	0.0250	ND	0.0124	0.0257	49.6	103	1	67.1-133	F	*	69.7	20
m&p-Xylenes	0.0500	ND	0.0240	0.0516	48.0	103	1	64.1-133	F	*	72.9	20
(S) Toluene-d8					94.4	100		90.0-115				
(S) Dibromofluoromethane					93.7	93.1		79.0-121				
(S) 4-Bromofluorobenzene					81.9	102		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 16:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Methyl tert-butyl ether	U		0.000367	0.00100

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/28/15 14:53 • (LCSD) 10/28/15 16:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0307	0.0290	123	116	73.0-122	*		5.65	20
Methyl tert-butyl ether	0.0250	0.0259	0.0253	104	101	70.1-125			2.33	20

L796118-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 21:16 • (MS) 10/28/15 18:38 • (MSD) 10/28/15 19:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.000477	0.0194	0.0197	75.6	76.8	1	58.6-133			1.57	20
Methyl tert-butyl ether	0.0250	0.0158	0.0329	0.0378	68.2	87.8	1	61.4-136			13.9	20



Method Blank (MB)

(MB) 10/28/15 20:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/28/15 20:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	101			90.0-115
(S) Dibromofluoromethane	93.0			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 19:12 • (LCSD) 10/28/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0621	0.0616	49.7	49.3	28.7-175			0.720	20.9
Benzene	0.0250	0.0265	0.0265	106	106	73.0-122			0.0700	20
Bromodichloromethane	0.0250	0.0235	0.0233	93.8	93.2	75.5-121			0.630	20
Bromoform	0.0250	0.0311	0.0303	124	121	71.5-131			2.41	20
Bromomethane	0.0250	0.0286	0.0306	114	122	22.4-187			6.90	20
n-Butylbenzene	0.0250	0.0258	0.0248	103	99.0	75.9-134			3.95	20
sec-Butylbenzene	0.0250	0.0287	0.0282	115	113	80.6-126			1.78	20
Carbon disulfide	0.0250	0.0265	0.0262	106	105	53.0-134			1.32	20
Carbon tetrachloride	0.0250	0.0244	0.0248	97.6	99.2	70.9-129			1.67	20
Chlorobenzene	0.0250	0.0297	0.0294	119	118	79.7-122			1.02	20
Chlorodibromomethane	0.0250	0.0296	0.0292	119	117	78.2-124			1.32	20
Chloroethane	0.0250	0.0238	0.0241	95.1	96.3	41.2-153			1.24	20
Chloroform	0.0250	0.0250	0.0252	100	101	73.2-125			0.590	20
Chloromethane	0.0250	0.0212	0.0212	84.7	84.6	55.8-134			0.0900	20
1,2-Dibromoethane	0.0250	0.0290	0.0288	116	115	79.8-122			0.930	20
1,1-Dichloroethane	0.0250	0.0258	0.0259	103	104	71.7-127			0.350	20

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

(LCS) 10/28/15 19:12 • (LCSD) 10/28/15 19:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0223	0.0228	89.4	91.1	65.3-126			1.86	20
1,1-Dichloroethene	0.0250	0.0258	0.0258	103	103	59.9-137			0.110	20
cis-1,2-Dichloroethene	0.0250	0.0253	0.0251	101	100	77.3-122			0.920	20
trans-1,2-Dichloroethene	0.0250	0.0261	0.0259	104	103	72.6-125			0.980	20
1,2-Dichloropropane	0.0250	0.0273	0.0268	109	107	77.4-125			1.70	20
cis-1,3-Dichloropropene	0.0250	0.0255	0.0251	102	100	77.7-124			1.60	20
trans-1,3-Dichloropropene	0.0250	0.0246	0.0246	98.5	98.5	73.5-127			0.100	20
Ethylbenzene	0.0250	0.0297	0.0289	119	116	80.9-121			2.48	20
2-Hexanone	0.125	0.113	0.110	90.2	87.7	59.4-151			2.88	20
Isopropylbenzene	0.0250	0.0292	0.0284	117	114	81.6-124			2.83	20
p-Isopropyltoluene	0.0250	0.0290	0.0280	116	112	77.6-129			3.60	20
2-Butanone (MEK)	0.125	0.0831	0.0832	66.5	66.6	46.4-155			0.180	20
Methylene Chloride	0.0250	0.0245	0.0250	98.0	99.8	69.5-120			1.84	20
4-Methyl-2-pentanone (MIBK)	0.125	0.110	0.107	88.2	85.9	63.3-138			2.56	20
Methyl tert-butyl ether	0.0250	0.0259	0.0259	104	103	70.1-125			0.240	20
Naphthalene	0.0250	0.0240	0.0234	95.9	93.8	69.7-134			2.25	20
n-Propylbenzene	0.0250	0.0284	0.0278	114	111	81.9-122			1.97	20
Styrene	0.0250	0.0308	0.0299	123	120	79.9-124			2.97	20
1,1,1,2-Tetrachloroethane	0.0250	0.0284	0.0286	114	114	78.5-125			0.640	20
1,1,2,2-Tetrachloroethane	0.0250	0.0228	0.0224	91.3	89.8	79.3-123			1.75	20
Tetrachloroethene	0.0250	0.0313	0.0309	125	124	73.5-130			1.44	20
Toluene	0.0250	0.0277	0.0269	111	108	77.9-116			2.87	20
1,1,1-Trichloroethane	0.0250	0.0233	0.0235	93.1	93.9	71.1-129			0.930	20
1,1,2-Trichloroethane	0.0250	0.0267	0.0265	107	106	81.6-120			0.870	20
Trichloroethene	0.0250	0.0314	0.0314	126	126	79.5-121	*	*	0.0400	20
1,2,4-Trimethylbenzene	0.0250	0.0276	0.0268	111	107	79.0-122			2.93	20
1,3,5-Trimethylbenzene	0.0250	0.0286	0.0275	114	110	81.0-123			3.82	20
Vinyl chloride	0.0250	0.0239	0.0240	95.7	96.0	61.5-134			0.270	20
Xylenes, Total	0.0750	0.0895	0.0871	119	116	79.2-122			2.64	20
o-Xylene	0.0250	0.0297	0.0291	119	116	79.1-123			2.17	20
m&p-Xylenes	0.0500	0.0598	0.0581	120	116	78.5-122			2.87	20
(S) Toluene-d8				101	99.8	90.0-115				
(S) Dibromofluoromethane				91.2	92.6	79.0-121				
(S) 4-Bromofluorobenzene				102	101	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L796154-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 22:08 • (MS) 10/28/15 20:49 • (MSD) 10/28/15 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000583	0.0456	0.0459	36.0	36.2	1	25.0-156			0.540	21.5
Benzene	0.0250	ND	0.0192	0.0189	77.0	75.5	1	58.6-133			1.87	20
Bromodichloromethane	0.0250	ND	0.0205	0.0200	82.1	80.0	1	69.2-127			2.66	20
Bromoform	0.0250	ND	0.0279	0.0287	111	115	1	66.3-140			2.98	20
Bromomethane	0.0250	ND	0.0141	0.0143	56.5	57.2	1	16.6-183			1.24	20.5
n-Butylbenzene	0.0250	ND	0.0242	0.0238	96.8	95.2	1	64.8-145			1.68	20
sec-Butylbenzene	0.0250	ND	0.0263	0.0261	105	104	1	66.8-139			0.960	20
Carbon disulfide	0.0250	ND	0.00681	0.00665	27.3	26.6	1	34.9-138	E	E	2.48	20
Carbon tetrachloride	0.0250	ND	0.0184	0.0181	73.6	72.2	1	60.6-139			1.94	20
Chlorobenzene	0.0250	ND	0.0253	0.0250	101	99.9	1	70.1-130			1.08	20
Chlorodibromomethane	0.0250	ND	0.0263	0.0264	105	106	1	71.6-132			0.500	20
Chloroethane	0.0250	ND	0.0142	0.0142	57.0	56.8	1	33.3-155			0.280	20
Chloroform	0.0250	ND	0.0216	0.0212	86.3	85.0	1	66.1-133			1.52	20
Chloromethane	0.0250	ND	0.0106	0.0104	42.4	41.5	1	40.7-139			2.26	20
1,2-Dibromoethane	0.0250	ND	0.0246	0.0239	98.2	95.7	1	73.8-131			2.62	20
1,1-Dichloroethane	0.0250	ND	0.0203	0.0201	81.2	80.5	1	64.0-134			0.950	20
1,2-Dichloroethane	0.0250	ND	0.0180	0.0180	72.1	72.1	1	60.7-132			0.0500	20
1,1-Dichloroethene	0.0250	ND	0.0156	0.0151	62.2	60.4	1	48.8-144			2.91	20
cis-1,2-Dichloroethene	0.0250	ND	0.0193	0.0191	77.3	76.6	1	60.6-136			0.980	20
trans-1,2-Dichloroethene	0.0250	ND	0.0156	0.0153	62.5	61.0	1	61.0-132			2.35	20
1,2-Dichloropropane	0.0250	ND	0.0224	0.0223	89.7	89.0	1	69.7-130			0.710	20
cis-1,3-Dichloropropene	0.0250	ND	0.0206	0.0204	82.5	81.7	1	71.1-129			1.01	20
trans-1,3-Dichloropropene	0.0250	ND	0.0210	0.0207	84.0	82.6	1	66.3-136			1.62	20
Ethylbenzene	0.0250	ND	0.0251	0.0244	100	97.8	1	62.7-136			2.61	20
2-Hexanone	0.125	ND	0.100	0.104	80.3	83.2	1	59.4-154			3.56	20.1
Isopropylbenzene	0.0250	ND	0.0256	0.0251	102	100	1	67.4-136			1.95	20
p-Isopropyltoluene	0.0250	ND	0.0267	0.0266	107	107	1	62.8-143			0.130	20
2-Butanone (MEK)	0.125	ND	0.0730	0.0747	58.4	59.7	1	45.0-156			2.28	20.8
Methylene Chloride	0.0250	ND	0.0177	0.0171	70.9	68.6	1	61.5-125			3.37	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.104	0.107	83.4	85.3	1	60.7-150			2.25	20
Methyl tert-butyl ether	0.0250	ND	0.0224	0.0220	89.7	88.2	1	61.4-136			1.77	20
Naphthalene	0.0250	ND	0.0220	0.0231	88.0	92.3	1	61.8-143			4.69	20
n-Propylbenzene	0.0250	ND	0.0255	0.0250	102	99.8	1	63.2-139			2.10	20
Styrene	0.0250	ND	0.0261	0.0261	104	104	1	68.2-133			0.110	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0262	0.0259	105	103	1	70.5-132			1.47	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0231	0.0239	92.2	95.8	1	64.9-145			3.81	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796154-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 22:08 • (MS) 10/28/15 20:49 • (MSD) 10/28/15 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0230	0.0227	92.0	90.9	1	57.4-141			1.20	20
Toluene	0.0250	ND	0.0209	0.0204	83.8	81.7	1	67.8-124			2.46	20
1,1,1-Trichloroethane	0.0250	ND	0.0188	0.0183	75.4	73.3	1	58.7-134			2.75	20
1,1,2-Trichloroethane	0.0250	ND	0.0244	0.0242	97.5	96.9	1	74.1-130			0.690	20
Trichloroethene	0.0250	ND	0.0231	0.0228	92.3	91.3	1	48.9-148			1.10	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0248	0.0246	99.4	98.2	1	60.5-137			1.17	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0253	0.0250	101	99.9	1	67.9-134			1.35	20
Vinyl chloride	0.0250	ND	0.0132	0.0126	53.0	50.4	1	44.3-143			4.99	20
Xylenes, Total	0.0750	ND	0.0749	0.0733	99.8	97.7	1	65.6-133			2.13	20
o-Xylene	0.0250	ND	0.0251	0.0250	100	99.8	1	67.1-133			0.600	20
m&p-Xylenes	0.0500	ND	0.0498	0.0483	99.5	96.7	1	64.1-133			2.92	20
(S) Toluene-d8					101	99.8		90.0-115				
(S) Dibromofluoromethane					91.9	91.0		79.0-121				
(S) 4-Bromofluorobenzene					103	103		80.1-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/29/15 01:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
2-Butanone (MEK)	U		0.00393	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
Methylene Chloride	U		0.00100	0.00500
Methyl tert-butyl ether	U		0.000367	0.00100
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Naphthalene	U		0.00100	0.00500
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/29/15 01:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
Vinyl chloride	U		0.000259	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylene	U		0.000719	0.00100
(S) Toluene-d8	104			90.0-115
(S) Dibromofluoromethane	98.9			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/28/15 23:54 • (LCSD) 10/29/15 00:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0861	0.0841	68.8	67.3	28.7-175			2.26	20.9
Benzene	0.0250	0.0212	0.0216	84.8	86.5	73.0-122			1.90	20
Bromodichloromethane	0.0250	0.0275	0.0278	110	111	75.5-121			1.32	20
Bromoform	0.0250	0.0286	0.0273	115	109	71.5-131			4.79	20
Bromomethane	0.0250	0.0239	0.0236	95.6	94.4	22.4-187			1.25	20
n-Butylbenzene	0.0250	0.0263	0.0260	105	104	75.9-134			1.43	20
sec-Butylbenzene	0.0250	0.0266	0.0277	106	111	80.6-126			4.17	20
Carbon tetrachloride	0.0250	0.0279	0.0268	112	107	70.9-129			4.03	20
Carbon disulfide	0.0250	0.0245	0.0248	98.2	99.3	53.0-134			1.13	20
Chlorobenzene	0.0250	0.0262	0.0254	105	102	79.7-122			3.00	20
Chlorodibromomethane	0.0250	0.0291	0.0274	117	110	78.2-124			6.00	20
Chloroethane	0.0250	0.0247	0.0246	98.8	98.6	41.2-153			0.200	20
Chloroform	0.0250	0.0261	0.0244	104	97.8	73.2-125			6.59	20
Chloromethane	0.0250	0.0205	0.0196	81.9	78.5	55.8-134			4.26	20
1,2-Dibromoethane	0.0250	0.0262	0.0248	105	99.1	79.8-122			5.78	20
1,1-Dichloroethane	0.0250	0.0234	0.0229	93.6	91.7	71.7-127			2.05	20

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

(LCS) 10/28/15 23:54 • (LCSD) 10/29/15 00:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0271	0.0271	108	108	65.3-126			0.190	20
1,1-Dichloroethene	0.0250	0.0281	0.0284	113	114	59.9-137			0.910	20
cis-1,2-Dichloroethene	0.0250	0.0226	0.0224	90.4	89.5	77.3-122			1.01	20
trans-1,2-Dichloroethene	0.0250	0.0235	0.0228	94.1	91.1	72.6-125			3.20	20
1,2-Dichloropropane	0.0250	0.0234	0.0245	93.7	98.2	77.4-125			4.64	20
cis-1,3-Dichloropropene	0.0250	0.0253	0.0255	101	102	77.7-124			0.730	20
trans-1,3-Dichloropropene	0.0250	0.0275	0.0268	110	107	73.5-127			2.53	20
Ethylbenzene	0.0250	0.0259	0.0257	104	103	80.9-121			0.810	20
2-Hexanone	0.125	0.117	0.118	93.7	94.7	59.4-151			1.09	20
Isopropylbenzene	0.0250	0.0267	0.0269	107	107	81.6-124			0.740	20
2-Butanone (MEK)	0.125	0.0954	0.0902	76.3	72.2	46.4-155			5.57	20
p-Isopropyltoluene	0.0250	0.0269	0.0277	108	111	77.6-129			2.85	20
Methylene Chloride	0.0250	0.0232	0.0227	92.6	90.7	69.5-120			2.13	20
4-Methyl-2-pentanone (MIBK)	0.125	0.118	0.118	94.7	94.7	63.3-138			0.0400	20
Methyl tert-butyl ether	0.0250	0.0235	0.0231	94.0	92.5	70.1-125			1.68	20
Naphthalene	0.0250	0.0265	0.0281	106	113	69.7-134			5.81	20
n-Propylbenzene	0.0250	0.0259	0.0263	104	105	81.9-122			1.62	20
Styrene	0.0250	0.0260	0.0251	104	100	79.9-124			3.46	20
1,1,2,2-Tetrachloroethane	0.0250	0.0265	0.0253	106	101	79.3-123			4.72	20
1,1,1,2-Tetrachloroethane	0.0250	0.0280	0.0274	112	110	78.5-125			2.03	20
Tetrachloroethene	0.0250	0.0270	0.0264	108	106	73.5-130			2.07	20
Toluene	0.0250	0.0242	0.0239	96.9	95.8	77.9-116			1.13	20
1,1,1-Trichloroethane	0.0250	0.0268	0.0268	107	107	71.1-129			0.190	20
1,1,2-Trichloroethane	0.0250	0.0269	0.0250	108	100	81.6-120			7.27	20
Trichloroethene	0.0250	0.0256	0.0262	102	105	79.5-121			2.26	20
1,2,4-Trimethylbenzene	0.0250	0.0264	0.0270	106	108	79.0-122			2.22	20
1,3,5-Trimethylbenzene	0.0250	0.0273	0.0270	109	108	81.0-123			1.38	20
Vinyl chloride	0.0250	0.0247	0.0250	98.8	100	61.5-134			1.13	20
Xylenes, Total	0.0750	0.0776	0.0757	103	101	79.2-122			2.50	20
o-Xylene	0.0250	0.0264	0.0256	105	102	79.1-123			3.04	20
m&p-Xylene	0.0500	0.0513	0.0501	103	100	78.5-122			2.22	20
(S) Toluene-d8				103	105	90.0-115				
(S) Dibromofluoromethane				98.2	94.4	79.0-121				
(S) 4-Bromofluorobenzene				102	104	80.1-120				

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

L798587-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 02:57 • (MS) 10/29/15 01:44 • (MSD) 10/29/15 02:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00588	0.0570	0.0557	40.9	39.9	1	25.0-156			2.27	21.5
Benzene	0.0250	ND	0.0173	0.0178	69.2	71.2	1	58.6-133			2.89	20
Bromodichloromethane	0.0250	ND	0.0250	0.0249	99.9	99.5	1	69.2-127			0.340	20
Bromoform	0.0250	ND	0.0276	0.0261	110	104	1	66.3-140			5.74	20
Bromomethane	0.0250	ND	0.0151	0.0150	60.6	59.9	1	16.6-183			1.05	20.5
n-Butylbenzene	0.0250	ND	0.0242	0.0235	96.9	94.0	1	64.8-145			3.04	20
sec-Butylbenzene	0.0250	ND	0.0258	0.0235	103	93.9	1	66.8-139			9.42	20
Carbon disulfide	0.0250	ND	0.0107	0.0111	42.8	44.4	1	34.9-138			3.46	20
Carbon tetrachloride	0.0250	ND	0.0221	0.0212	88.5	84.9	1	60.6-139			4.15	20
Chlorobenzene	0.0250	ND	0.0238	0.0220	95.1	88.1	1	70.1-130			7.57	20
Chlorodibromomethane	0.0250	ND	0.0262	0.0252	105	101	1	71.6-132			3.91	20
Chloroethane	0.0250	ND	0.0162	0.0169	64.9	67.8	1	33.3-155			4.39	20
Chloroform	0.0250	ND	0.0219	0.0221	87.7	88.5	1	66.1-133			0.880	20
Chloromethane	0.0250	ND	0.0115	0.0121	46.1	48.4	1	40.7-139			4.90	20
1,2-Dibromoethane	0.0250	ND	0.0238	0.0222	95.4	88.7	1	73.8-131			7.23	20
1,1-Dichloroethane	0.0250	ND	0.0194	0.0204	77.8	81.6	1	64.0-134			4.84	20
1,2-Dichloroethane	0.0250	ND	0.0232	0.0226	92.6	90.3	1	60.7-132			2.50	20
1,1-Dichloroethene	0.0250	ND	0.0194	0.0191	77.5	76.6	1	48.8-144			1.23	20
cis-1,2-Dichloroethene	0.0250	ND	0.0186	0.0192	74.3	77.0	1	60.6-136			3.51	20
trans-1,2-Dichloroethene	0.0250	ND	0.0168	0.0169	67.4	67.7	1	61.0-132			0.540	20
1,2-Dichloropropane	0.0250	ND	0.0207	0.0211	82.7	84.5	1	69.7-130			2.05	20
cis-1,3-Dichloropropene	0.0250	ND	0.0221	0.0221	88.3	88.3	1	71.1-129			0.0600	20
trans-1,3-Dichloropropene	0.0250	ND	0.0303	0.0290	121	116	1	66.3-136			4.64	20
Ethylbenzene	0.0250	ND	0.0237	0.0221	94.9	88.4	1	62.7-136			7.18	20
2-Hexanone	0.125	ND	0.112	0.114	89.8	91.3	1	59.4-154			1.69	20.1
Isopropylbenzene	0.0250	ND	0.0240	0.0231	96.1	92.4	1	67.4-136			3.93	20
p-Isopropyltoluene	0.0250	ND	0.0258	0.0237	103	95.0	1	62.8-143			8.27	20
2-Butanone (MEK)	0.125	0.00192	0.0761	0.0777	59.4	60.6	1	45.0-156			2.07	20.8
Methylene Chloride	0.0250	ND	0.0179	0.0176	71.4	70.5	1	61.5-125			1.31	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.169	0.175	135	140	1	60.7-150			3.40	20
Methyl tert-butyl ether	0.0250	0.00126	0.0209	0.0224	78.8	84.4	1	61.4-136			6.51	20
Naphthalene	0.0250	ND	0.0280	0.0281	112	112	1	61.8-143			0.250	20
n-Propylbenzene	0.0250	ND	0.0246	0.0225	98.3	90.1	1	63.2-139			8.71	20
Styrene	0.0250	ND	0.0232	0.0229	92.7	91.7	1	68.2-133			1.09	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0256	0.0245	102	98.0	1	70.5-132			4.43	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0258	0.0239	103	95.4	1	64.9-145			7.69	20

1

Cp

2

Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc



L798587-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 02:57 • (MS) 10/29/15 01:44 • (MSD) 10/29/15 02:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0215	0.0209	86.0	83.7	1	57.4-141			2.74	20
Toluene	0.0250	ND	0.0199	0.0204	79.7	81.4	1	67.8-124			2.13	20
1,1,1-Trichloroethane	0.0250	ND	0.0230	0.0223	91.9	89.2	1	58.7-134			2.97	20
1,1,2-Trichloroethane	0.0250	ND	0.0245	0.0233	98.1	93.3	1	74.1-130			5.03	20
Trichloroethene	0.0250	ND	0.0210	0.0208	84.2	83.0	1	48.9-148			1.38	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0249	0.0230	99.7	92.1	1	60.5-137			7.86	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0239	0.0223	95.5	89.3	1	67.9-134			6.78	20
Vinyl chloride	0.0250	ND	0.0156	0.0154	62.2	61.7	1	44.3-143			0.890	20
Xylenes, Total	0.0750	ND	0.0662	0.0637	88.2	85.0	1	65.6-133			3.76	20
o-Xylene	0.0250	ND	0.0229	0.0221	91.8	88.3	1	67.1-133			3.88	20
m&p-Xylene	0.0500	ND	0.0432	0.0416	86.4	83.3	1	64.1-133			3.69	20
(S) Toluene-d8					104	107		90.0-115				
(S) Dibromofluoromethane					96.1	95.1		79.0-121				
(S) 4-Bromofluorobenzene					108	105		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/29/15 11:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 10/29/15 11:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	102			90.0-115
(S) Dibromofluoromethane	96.3			79.0-121
(S) 4-Bromofluorobenzene	102			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/29/15 10:41 • (LCSD) 10/29/15 11:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.129	0.127	103	101	28.7-175			1.73	20.9
Benzene	0.0250	0.0241	0.0240	96.4	95.8	73.0-122			0.610	20
Bromodichloromethane	0.0250	0.0249	0.0249	99.5	99.4	75.5-121			0.0600	20
Bromoform	0.0250	0.0252	0.0257	101	103	71.5-131			1.98	20
Bromomethane	0.0250	0.0264	0.0237	105	94.8	22.4-187			10.6	20
n-Butylbenzene	0.0250	0.0285	0.0288	114	115	75.9-134			1.12	20
sec-Butylbenzene	0.0250	0.0268	0.0264	107	106	80.6-126			1.39	20
Carbon disulfide	0.0250	0.0216	0.0211	86.2	84.4	53.0-134			2.14	20
Carbon tetrachloride	0.0250	0.0246	0.0247	98.4	98.9	70.9-129			0.550	20
Chlorobenzene	0.0250	0.0265	0.0260	106	104	79.7-122			1.91	20
Chlorodibromomethane	0.0250	0.0266	0.0266	107	106	78.2-124			0.150	20
Chloroethane	0.0250	0.0259	0.0265	104	106	41.2-153			2.14	20
Chloroform	0.0250	0.0250	0.0247	99.9	98.7	73.2-125			1.25	20
Chloromethane	0.0250	0.0217	0.0215	86.9	86.0	55.8-134			1.14	20
1,2-Dibromoethane	0.0250	0.0270	0.0274	108	109	79.8-122			1.26	20
1,1-Dichloroethane	0.0250	0.0250	0.0249	99.8	99.5	71.7-127			0.310	20

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

(LCS) 10/29/15 10:41 • (LCSD) 10/29/15 11:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0268	0.0270	107	108	65.3-126			0.880	20
1,1-Dichloroethene	0.0250	0.0260	0.0261	104	104	59.9-137			0.0900	20
cis-1,2-Dichloroethene	0.0250	0.0248	0.0246	99.1	98.2	77.3-122			0.940	20
trans-1,2-Dichloroethene	0.0250	0.0250	0.0253	99.9	101	72.6-125			1.19	20
1,2-Dichloropropane	0.0250	0.0259	0.0258	104	103	77.4-125			0.710	20
cis-1,3-Dichloropropene	0.0250	0.0257	0.0254	103	102	77.7-124			1.27	20
trans-1,3-Dichloropropene	0.0250	0.0267	0.0256	107	102	73.5-127			4.10	20
Ethylbenzene	0.0250	0.0267	0.0263	107	105	80.9-121			1.31	20
2-Hexanone	0.125	0.145	0.145	116	116	59.4-151			0.0800	20
Isopropylbenzene	0.0250	0.0270	0.0264	108	106	81.6-124			2.00	20
p-Isopropyltoluene	0.0250	0.0276	0.0268	110	107	77.6-129			2.72	20
2-Butanone (MEK)	0.125	0.137	0.138	110	110	46.4-155			0.310	20
Methylene Chloride	0.0250	0.0233	0.0232	93.3	92.9	69.5-120			0.460	20
4-Methyl-2-pentanone (MIBK)	0.125	0.130	0.130	104	104	63.3-138			0.440	20
Methyl tert-butyl ether	0.0250	0.0251	0.0251	100	100	70.1-125			0.0100	20
Naphthalene	0.0250	0.0254	0.0268	101	107	69.7-134			5.67	20
n-Propylbenzene	0.0250	0.0277	0.0271	111	108	81.9-122			2.18	20
Styrene	0.0250	0.0270	0.0266	108	106	79.9-124			1.71	20
1,1,1,2-Tetrachloroethane	0.0250	0.0248	0.0251	99.1	101	78.5-125			1.45	20
1,1,2,2-Tetrachloroethane	0.0250	0.0285	0.0278	114	111	79.3-123			2.43	20
Tetrachloroethene	0.0250	0.0269	0.0264	108	105	73.5-130			2.22	20
Toluene	0.0250	0.0252	0.0247	101	98.9	77.9-116			1.99	20
1,1,1-Trichloroethane	0.0250	0.0253	0.0243	101	97.1	71.1-129			4.17	20
1,1,2-Trichloroethane	0.0250	0.0269	0.0269	108	108	81.6-120			0.170	20
Trichloroethene	0.0250	0.0258	0.0256	103	102	79.5-121			0.900	20
1,2,4-Trimethylbenzene	0.0250	0.0265	0.0258	106	103	79.0-122			2.69	20
1,3,5-Trimethylbenzene	0.0250	0.0268	0.0262	107	105	81.0-123			2.35	20
Vinyl chloride	0.0250	0.0262	0.0260	105	104	61.5-134			0.810	20
Xylenes, Total	0.0750	0.0788	0.0771	105	103	79.2-122			2.12	20
o-Xylene	0.0250	0.0265	0.0259	106	104	79.1-123			2.22	20
m&p-Xylenes	0.0500	0.0523	0.0512	105	102	78.5-122			2.07	20
(S) Toluene-d8				103	101	90.0-115				
(S) Dibromofluoromethane				95.2	97.6	79.0-121				
(S) 4-Bromofluorobenzene				104	102	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798466-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 14:10 • (MS) 10/29/15 14:30 • (MSD) 10/29/15 14:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00110	0.0843	0.0831	66.5	65.6	1	25.0-156			1.36	21.5
Benzene	0.0250	ND	0.0156	0.0156	62.5	62.3	1	58.6-133			0.190	20
Bromodichloromethane	0.0250	ND	0.0196	0.0201	78.5	80.3	1	69.2-127			2.30	20
Bromoform	0.0250	ND	0.0205	0.0213	81.9	85.3	1	66.3-140			4.07	20
Bromomethane	0.0250	ND	0.00473	0.00397	18.9	15.9	1	16.6-183		E	17.3	20.5
n-Butylbenzene	0.0250	ND	0.0225	0.0231	89.9	92.5	1	64.8-145			2.89	20
sec-Butylbenzene	0.0250	ND	0.0205	0.0214	81.8	85.6	1	66.8-139			4.53	20
Carbon disulfide	0.0250	ND	0.00436	0.00447	17.5	17.9	1	34.9-138	E	E	2.45	20
Carbon tetrachloride	0.0250	ND	0.0148	0.0167	59.3	66.8	1	60.6-139	E		12.0	20
Chlorobenzene	0.0250	ND	0.0194	0.0197	77.7	78.9	1	70.1-130			1.47	20
Chlorodibromomethane	0.0250	ND	0.0212	0.0214	85.0	85.7	1	71.6-132			0.810	20
Chloroethane	0.0250	ND	0.0159	0.0136	63.4	54.5	1	33.3-155			15.1	20
Chloroform	0.0250	ND	0.0189	0.0191	75.7	76.3	1	66.1-133			0.830	20
Chloromethane	0.0250	ND	0.00739	0.00715	29.6	28.6	1	40.7-139	E	E	3.32	20
1,2-Dibromoethane	0.0250	ND	0.0197	0.0205	78.7	81.9	1	73.8-131			3.92	20
1,1-Dichloroethane	0.0250	ND	0.0178	0.0179	71.3	71.5	1	64.0-134			0.410	20
1,2-Dichloroethane	0.0250	ND	0.0193	0.0193	77.3	77.1	1	60.7-132			0.140	20
1,1-Dichloroethene	0.0250	ND	0.0135	0.0134	54.1	53.5	1	48.8-144			0.980	20
cis-1,2-Dichloroethene	0.0250	ND	0.0169	0.0163	67.7	65.0	1	60.6-136			4.07	20
trans-1,2-Dichloroethene	0.0250	ND	0.0129	0.0129	51.7	51.6	1	61.0-132	E	E	0.0200	20
1,2-Dichloropropane	0.0250	ND	0.0192	0.0193	76.7	77.4	1	69.7-130			0.890	20
cis-1,3-Dichloropropene	0.0250	ND	0.0190	0.0191	75.8	76.3	1	71.1-129			0.660	20
trans-1,3-Dichloropropene	0.0250	ND	0.0190	0.0191	75.9	76.5	1	66.3-136			0.820	20
Ethylbenzene	0.0250	ND	0.0189	0.0193	75.7	77.1	1	62.7-136			1.86	20
2-Hexanone	0.125	ND	0.112	0.115	89.7	92.1	1	59.4-154			2.62	20.1
Isopropylbenzene	0.0250	ND	0.0201	0.0205	80.3	82.1	1	67.4-136			2.16	20
p-Isopropyltoluene	0.0250	ND	0.0213	0.0216	85.1	86.2	1	62.8-143			1.36	20
2-Butanone (MEK)	0.125	ND	0.106	0.104	84.6	83.4	1	45.0-156			1.53	20.8
Methylene Chloride	0.0250	ND	0.0149	0.0151	59.6	60.2	1	61.5-125	E	E	0.960	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.109	0.109	87.1	87.2	1	60.7-150			0.110	20
Methyl tert-butyl ether	0.0250	ND	0.0205	0.0204	81.9	81.4	1	61.4-136			0.560	20
Naphthalene	0.0250	ND	0.0213	0.0223	85.1	89.2	1	61.8-143			4.70	20
n-Propylbenzene	0.0250	ND	0.0204	0.0207	81.7	82.8	1	63.2-139			1.43	20
Styrene	0.0250	ND	0.0201	0.0207	80.3	82.6	1	68.2-133			2.89	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0202	0.0208	80.9	83.2	1	70.5-132			2.78	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0242	0.0249	96.6	99.5	1	64.9-145			2.96	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798466-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 14:10 • (MS) 10/29/15 14:30 • (MSD) 10/29/15 14:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0163	0.0167	65.3	67.0	1	57.4-141			2.62	20
Toluene	0.0250	ND	0.0169	0.0169	67.6	67.8	1	67.8-124	E		0.260	20
1,1,1-Trichloroethane	0.0250	ND	0.0180	0.0178	72.0	71.1	1	58.7-134			1.18	20
1,1,2-Trichloroethane	0.0250	ND	0.0218	0.0221	87.0	88.5	1	74.1-130			1.76	20
Trichloroethene	0.0250	ND	0.0166	0.0163	66.6	65.2	1	48.9-148			2.11	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0199	0.0202	79.5	80.8	1	60.5-137			1.62	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0199	0.0202	79.7	80.7	1	67.9-134			1.25	20
Vinyl chloride	0.0250	ND	0.0109	0.0106	43.5	42.4	1	44.3-143	E	E	2.60	20
Xylenes, Total	0.0750	ND	0.0550	0.0559	73.3	74.5	1	65.6-133			1.61	20
o-Xylene	0.0250	ND	0.0189	0.0195	75.5	77.8	1	67.1-133			3.00	20
m&p-Xylenes	0.0500	ND	0.0361	0.0364	72.2	72.8	1	64.1-133			0.880	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					96.0	95.5		79.0-121				
(S) 4-Bromofluorobenzene					101	101		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/24/15 16:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	77.1			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/24/15 16:50 • (LCSD) 10/24/15 17:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.07	1.18	71.4	78.7	50.0-150			9.72	20
(S) o-Terphenyl				74.4	82.4	50.0-150				



Method Blank (MB)

(MB) 10/24/15 15:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	86.4			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

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

(LCS) 10/24/15 15:49 • (LCSD) 10/24/15 16:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.31	1.35	87.0	90.3	50.0-150			3.74	20
(S) o-Terphenyl				89.1	90.4	50.0-150				

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 18:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	89.7			50.0-150

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/27/15 18:30 • (LCSD) 10/27/15 18:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.26	1.20	84.3	79.8	50.0-150			5.51	20
(S) o-Terphenyl				96.5	94.0	50.0-150				



Method Blank (MB)

(MB) 10/26/15 20:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	69.2			50.0-150

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/26/15 20:21 • (LCSD) 10/26/15 20:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	0.841	0.980	56.0	65.3	50.0-150			15.3	20
(S) o-Terphenyl				74.6	80.7	50.0-150				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
J	Estimated value.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
X	Surrogate recovery outside the control limit.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

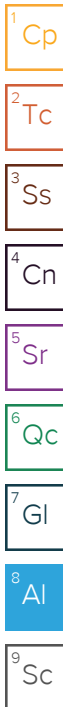
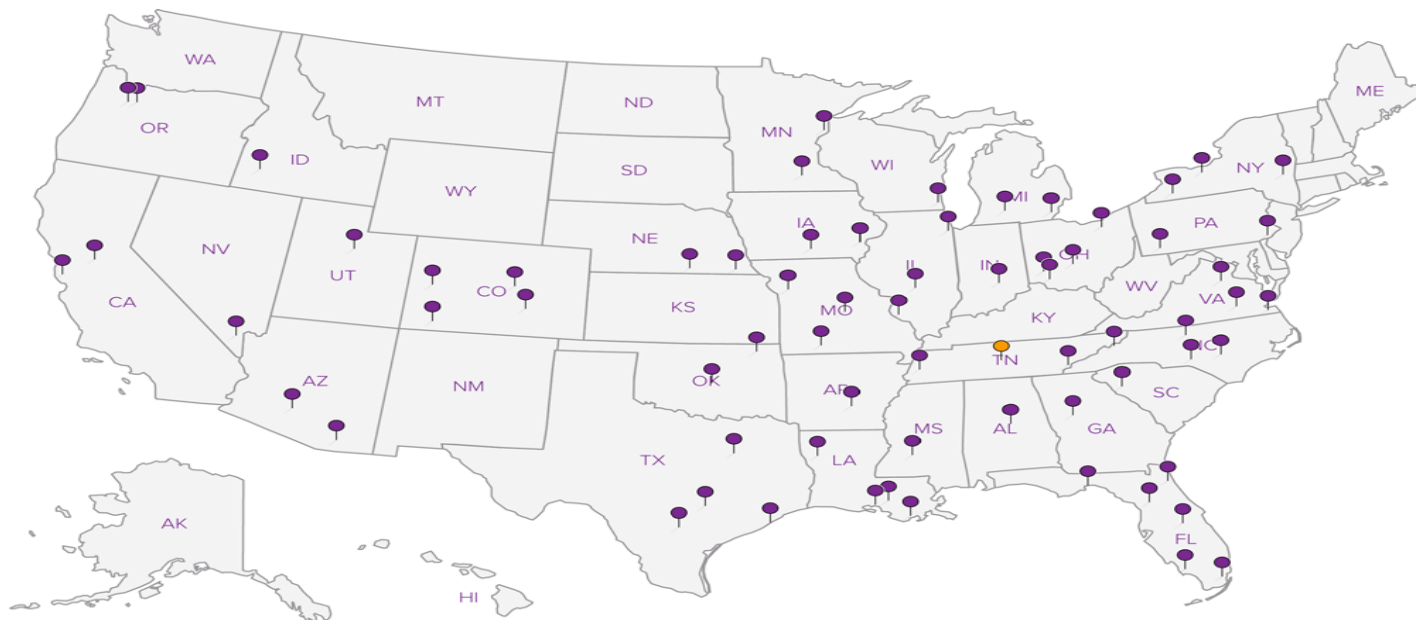
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Report to:
Pam Krueger

Project
Description: Navajo Refining Company - Artesia, NM

Phone: 713-953-4800

Fax:

Collected by (print):
Greg Schenbenske

Collected by (signature):

Immediately
Packed on Ice N Y ✓

Billing Information:

Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;

City/State
Collected: Artesia, NM

Lab Project #
ARCADHTX-NAVAJO FULL

P.O. #

Date Results Needed

Email? No X YesFAX? No YesNo.
of

Analysis / Container / Preservative

CL, FL, SC4 25mlHDPE-NoPres

CN 250mlHDPEAmb-NaOH

DR0 100ml Amb-HCl

GRO 40ml Amb HCl

METALS 6020 500mlHDPE-HNO3

NO2NO3 250mlHDPE-H2SO4

TDS 250mlHDPE-NoPres

V8260 40mlAmb-HCl

V8260 40mlAmb-HCl-Bik

Chain of Custody Page 7 of 16

ESC
L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

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



L #

Table #

Acctn: ARCADHTX

Template: T105668

Prelogin: P524744

TSR: 633 - Pam Langford

PB:

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	CL, FL, SC4 25mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DR0 100ml Amb-HCl	GRO 40ml Amb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb-HCl-Bik	Rem./Contaminant	Sample # (lab only)
MW-101	Grab	GW		10/20/15	1405	10	X		X	X	(X)	X	X	X		-11	11
MW-105		GW		10/20/15	1425	10	X		X	X	(X)	X	X	X		-12	12
MW-61		GW		10/20/15	1135	10	X		X	X	(X)	X	X	X		-13	13
MW-62		GW		10/20/15	1025	10	X		X	X	(X)	X	X	X		-14	14
MW-93		GW				10	X		X	X	(X)	X	X	X			
MW-23		GW				10	X		X	X	(X)	X	X	X			
MW-39	Grab	GW		10/20/15	835	10	X		X	X	(X)	X	X	X		-15	15
MW-98		GW		10/20/15	755	10	X		X	X	(X)	X	X	X		-16	16
MW-29		GW		10/20/15	840	10	X		X	X	(X)	X	X	X		-17	17
MW-106		GW		10/20/15	1225	10	X		X	X	(X)	X	X	X		-18	18

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C Bottles Received:

31 189

COC Seal Intact: Y N NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 10/22/15 Time: 0900

pH Checked:

NCF:

pH Checked:	NCF:
-------------	------

ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Report to:
Pam Krueger

Project
Description: Navajo Refining Company - Artesia, NM

Phone: 713-953-4800
Fax:

Client Project #
TX000836.0007.15008

City/State
Collected: Artesia, NM

Lab Project #
ARCADHTX-NAVAJO FULL

Collected by (print):
Greg Scherbenske

Site/Facility ID #
REST

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Date Results Needed

Email? ___ No ___ Yes

FAX? ___ No ___ Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, SO4 125mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DRO 100ml Amb-HCl	GRO 40ml Amb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40mlAmb-HCl	Metals (Hg, Ni, Va)
MW-50		GW				10	X		X	X	X	X	X	X	Gas
MW-97	Grab	GW				10	X		X	X	X	X	X	X	Gas
MW-92		GW				10	X		X	X	X	X	X	X	Gas
MW-91		GW				10	X		X	X	X	X	X	X	Gas
MW-90		GW				10	X		X	X	X	X	X	X	Gas
MW-96		GW				10	X		X	X	X	X	X	X	Gas
MW-94		GW				10	X		X	X	X	X	X	X	Gas
MW-67		GW				11	X	X	X	X	X	X	X	X	Gas
Trip Blank-REST-02		GW				1								X	Gas
MW-117	Grab	GW		10/20/15	1325	10	X		X	X	X	X	X	X	-22

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: MW-52
DUP- REST-04
EB-REST-04

10/20/15 1230 10 X
10/20/15 1500 10 X
10/20/15 1230 10 X

pH X Temp X
Flg X Other X

Hold # -30 -31 -32

Relinquished by: (Signature)	Date: 7/21/15	Time: 730	Received by: (Signature)	Samples returned via: ☒ UPS ☒ FedEx ☐ Courier ☐	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 189	COC Seal Intact: Y N NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	pH Checked: NCF:

Analysis / Container / Preservative

shipment # 2

Chain of Custody Page 14 of 16



YOUR LAB OF CHOICE

32065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L #

Table # L798466

Acctnum: ARCADHTX

Template: T105690

Prelogin: P524864

TSR: 633 - Pam Langford

PB: 9-11-18

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

(Shipment # 1)

ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Billing Information:

Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129Report to:
Pam KruegerEmail To: pam.krueger@arcadis-us.com;
malsha.turner@arcadis-us.com;

Project

Description: Navajo Refining Company - Artesia, NM

City/State

Collected: Artesia, NM

Phone: 713-953-4800

Client Project

TX000836.0007.15008

Lab Project

ARCADHTX-NAVAJO FULL

Fax:

Collected by (print):

Greg Scherbenke

Site/Facility ID

REST

P.O.

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Date Results Needed

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	CL, FL, SO4 125mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DRO 100mlAmb-HCl	GRO 40mlAmb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40mlAmb-HCl	V8260 40mlAmb-HCl-Bik
MW-101		GW				10	X		X	X	(X)	X	X	X	GD5
MW-105		GW				10	X		X	X	(X)	X	X	X	GD5
MW-61		GW				10	X		X	X	(X)	X	X	X	GD5
MW-62		GW				10	X		X	X	(X)	X	X	X	GD5
MW-93	Grab	GW		10/19/15	1220	10	X		X	X	(X)	X	X	X	
MW-23	↓	GW		10/19/15	1120	10	X		X	X	(X)	X	X	X	-23 -17-38
MW-39		GW				10	X		X	X	(X)	X	X	X	-24 -18-39
MW-98		GW				10	X		X	X	(X)	X	X	X	GD5
MW-29		GW				10	X		X	X	(X)	X	X	X	GD5
MW-106		GW				10	X		X	X	(X)	X	X	X	GD5

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: MW-50
MW-9110/19/15 1025
10/19/15 1115

pH _____ Temp _____

Flow _____ Other _____

Hold # -25 -19

Hold # -26 -20

Relinquished by: (Signature)

Date:

10/20/15

Time:

700

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

2.7 181

COC Seal Intact: ☐ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 10/21/15 Time: 0900

pH Checked: <2, >12

NCF:

Company Name/Address:

Billing Information:

ARCADIS US-TX

Analysis / Container / Preservative

Chain of Custody Page 6 of 15



YOUR LAB OF CHOICE

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



Report to:

Email To:

Pam Krueger

Project

Description: Navajo - Artesia, NM

City/State

Collected: Artesia, NM

Phone: 713-953-4800

Client Project #

TX000836.0007.15008

Lab Project #

ARCADH TX - NAVAJO FULL

Fax:

Collected by (print):

Greg Scherbenske

Site/Facility ID #

REST

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day200%

Next Day100%

Two Day50%

Three Day25%

Date Results Needed

Email? ☐ No ☐ YesFAX? ☐ No ☐ YesNo. of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, SO ₄ - Neg	DRO - HCL	GRO - HCL	Metals 6020-HN ₃	NO ₂ NO ₃ - H ₂ SO ₄	TDS - Neat	V8260 - HCL
KWB-10R	Grab	GW		10/19/15	1425	8	X	X		(X)	X	X	X
MW-131	↓	GW		10/19/15	1010	10	X	X	X	(X)	X	X	X
KWB-5		GW	605	10/19/15	805	8	X	X		(X)	X	X	X
MW-111	Grab	GW		10/19/15	825	10	X	X	X	(X)	X	X	X
KWB-6		GW				8	X	X		(X)	X	X	X
MW-112		GW				10	X	X	X	(X)	X	X	X
MW-132		GW				10	X	X	X	(X)	X	X	X
MW-57		GW				10	X	X	X	(X)	X	X	X

L #

Table #

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Rem./Contaminant

Sample # (lab only)

-27 -62

-28 -63

-29 -64

NOT Sampled; LNAPL

NOT Sampled; LNAPL

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

pH Temp

Remarks:

Flow Other

Hold #

Relinquished by: (Signature)

Date:

10/20/15

Time:

700

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C Bottles Received:

2.7 189

COC Seal Intact: ☐ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

10/21/15 0900

pH Checked:

2.7 12

NCF:

ARCADIS US - TX

Sample Delivery Group: L798475
Samples Received: 10/22/2015
Project Number: TX000836.0007.15008
Description: Navajo Refining Company - Artesia, NM
Site: REST
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-28 L798475-01 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 13:15

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:04	MF
Mercury by Method 7470A	WG823992	1	10/23/15 17:38	10/24/15 14:24	JD
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:09	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	5	10/26/15 09:27	10/29/15 01:32	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	5	10/28/15 01:00	10/28/15 01:00	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	100	10/26/15 17:17	10/26/15 17:17	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:03	10/29/15 17:03	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:46	DR
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 21:28	10/24/15 21:28	DJD
Wet Chemistry by Method 9056MOD	WG824162	50	10/25/15 00:33	10/25/15 00:33	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-60 L798475-02 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 07:45

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:07	MF
Mercury by Method 7470A	WG823992	1	10/23/15 17:38	10/24/15 14:12	JD
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:12	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 19:38	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 01:22	10/28/15 01:22	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	1	10/26/15 17:38	10/26/15 17:38	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:04	10/29/15 17:04	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:47	DR
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 21:44	10/24/15 21:44	DJD
Wet Chemistry by Method 9056MOD	WG824162	50	10/25/15 01:20	10/25/15 01:20	DJD



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3000000		2820	10000	1	10/27/2015 15:04	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	211	J	197	1000	10	10/29/2015 17:03	WG825446

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	10.8		1.80	5.00	1	10/29/2015 10:46	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	159000		2600	50000	50	10/25/2015 00:33	WG824162
Fluoride	1670		9.90	100	1	10/24/2015 21:28	WG824162
Sulfate	1060000		3870	250000	50	10/25/2015 00:33	WG824162

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/24/2015 14:24	WG823992

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	9.36		0.250	2.00	1	10/28/2015 17:09	WG824868
Barium	48.4		0.360	5.00	1	10/28/2015 17:09	WG824868
Calcium	379000		46.0	1000	1	10/28/2015 17:09	WG824868
Chromium	0.931	J	0.540	2.00	1	10/28/2015 17:09	WG824868
Iron	74.4	J	15.0	100	1	10/28/2015 17:09	WG824868
Lead	13.6		0.240	2.00	1	10/28/2015 17:09	WG824868
Manganese	26.1		0.250	5.00	1	10/28/2015 17:09	WG824868
Nickel	3.60		0.350	2.00	1	10/28/2015 17:09	WG824868
Potassium	632	J	37.0	1000	1	10/28/2015 17:09	WG824868
Selenium	20.5		0.380	2.00	1	10/28/2015 17:09	WG824868
Sodium	92700		110	1000	1	10/28/2015 17:09	WG824868
Vanadium	5.57		0.180	5.00	1	10/28/2015 17:09	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	9880		157	500	5	10/28/2015 01:00	WG824598
(S) a,a,a-Trifluorotoluene(FID) 89.5				62.0-128		10/28/2015 01:00	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1000	5000	100	10/26/2015 17:17	WG824433
Benzene	3050		33.1	100	100	10/26/2015 17:17	WG824433
Bromodichloromethane	U		38.0	100	100	10/26/2015 17:17	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Bromoform	U		46.9	100	100	10/26/2015 17:17	WG824433	¹ Cp
Bromomethane	U		86.6	500	100	10/26/2015 17:17	WG824433	² Tc
n-Butylbenzene	U		36.1	100	100	10/26/2015 17:17	WG824433	³ Ss
sec-Butylbenzene	U		36.5	100	100	10/26/2015 17:17	WG824433	⁴ Cn
Carbon disulfide	U		27.5	100	100	10/26/2015 17:17	WG824433	⁵ Sr
Carbon tetrachloride	U		37.9	100	100	10/26/2015 17:17	WG824433	⁶ Qc
Chlorobenzene	U		34.8	100	100	10/26/2015 17:17	WG824433	⁷ Gl
Chlorodibromomethane	U		32.7	100	100	10/26/2015 17:17	WG824433	⁸ Al
Chloroethane	U		45.3	500	100	10/26/2015 17:17	WG824433	⁹ Sc
Chloroform	U		32.4	500	100	10/26/2015 17:17	WG824433	
Chloromethane	U		27.6	250	100	10/26/2015 17:17	WG824433	
1,2-Dibromoethane	U		38.1	100	100	10/26/2015 17:17	WG824433	
1,1-Dichloroethane	U		25.9	100	100	10/26/2015 17:17	WG824433	
1,2-Dichloroethane	U		36.1	100	100	10/26/2015 17:17	WG824433	
1,1-Dichloroethene	U		39.8	100	100	10/26/2015 17:17	WG824433	
cis-1,2-Dichloroethene	U		26.0	100	100	10/26/2015 17:17	WG824433	
trans-1,2-Dichloroethene	U		39.6	100	100	10/26/2015 17:17	WG824433	
1,2-Dichloropropane	U		30.6	100	100	10/26/2015 17:17	WG824433	
cis-1,3-Dichloropropene	U		41.8	100	100	10/26/2015 17:17	WG824433	
trans-1,3-Dichloropropene	U		41.9	100	100	10/26/2015 17:17	WG824433	
Ethylbenzene	44.1	L	38.4	100	100	10/26/2015 17:17	WG824433	
Isopropylbenzene	67.1	L	32.6	100	100	10/26/2015 17:17	WG824433	
p-Isopropyltoluene	U		35.0	100	100	10/26/2015 17:17	WG824433	
2-Butanone (MEK)	U		393	1000	100	10/26/2015 17:17	WG824433	
2-Hexanone	U		382	1000	100	10/26/2015 17:17	WG824433	
Methylene Chloride	U		100	500	100	10/26/2015 17:17	WG824433	
4-Methyl-2-pentanone (MIBK)	U		214	1000	100	10/26/2015 17:17	WG824433	
Methyl tert-butyl ether	1110		36.7	100	100	10/26/2015 17:17	WG824433	
Naphthalene	U		100	500	100	10/26/2015 17:17	WG824433	
n-Propylbenzene	89.0	L	34.9	100	100	10/26/2015 17:17	WG824433	
Styrene	U		30.7	100	100	10/26/2015 17:17	WG824433	
1,1,1,2-Tetrachloroethane	U		38.5	100	100	10/26/2015 17:17	WG824433	
1,1,2,2-Tetrachloroethane	U		13.0	100	100	10/26/2015 17:17	WG824433	
Tetrachloroethene	U		37.2	100	100	10/26/2015 17:17	WG824433	
Toluene	U		78.0	500	100	10/26/2015 17:17	WG824433	
1,1,1-Trichloroethane	U		31.9	100	100	10/26/2015 17:17	WG824433	
1,1,2-Trichloroethane	U		38.3	100	100	10/26/2015 17:17	WG824433	
Trichloroethene	U		39.8	100	100	10/26/2015 17:17	WG824433	
1,2,4-Trimethylbenzene	151		37.3	100	100	10/26/2015 17:17	WG824433	
1,3,5-Trimethylbenzene	U		38.7	100	100	10/26/2015 17:17	WG824433	
Vinyl chloride	U		25.9	100	100	10/26/2015 17:17	WG824433	
o-Xylene	U		34.1	100	100	10/26/2015 17:17	WG824433	
m&p-Xylene	243		71.9	100	100	10/26/2015 17:17	WG824433	
Xylenes, Total	243	L	106	300	100	10/26/2015 17:17	WG824433	
(S) Toluene-d8	96.5			90.0-115		10/26/2015 17:17	WG824433	
(S) Dibromofluoromethane	94.5			79.0-121		10/26/2015 17:17	WG824433	
(S) 4-Bromofluorobenzene	98.7			80.1-120		10/26/2015 17:17	WG824433	

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	16200		124	500	5	10/29/2015 01:32	WG823977
(S) o-Terphenyl	104			50.0-150		10/29/2015 01:32	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3560000		2820	10000	1	10/27/2015 15:07	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:04	WG825446

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	10/29/2015 10:47	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	209000		2600	50000	50	10/25/2015 01:20	WG824162
Fluoride	964		9.90	100	1	10/24/2015 21:44	WG824162
Sulfate	1910000		3870	250000	50	10/25/2015 01:20	WG824162

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U	F	0.0490	0.200	1	10/24/2015 14:12	WG823992

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	8.84		0.250	2.00	1	10/28/2015 17:12	WG824868
Barium	16.7		0.360	5.00	1	10/28/2015 17:12	WG824868
Calcium	395000		46.0	1000	1	10/28/2015 17:12	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 17:12	WG824868
Iron	286		15.0	100	1	10/28/2015 17:12	WG824868
Lead	0.907	J	0.240	2.00	1	10/28/2015 17:12	WG824868
Manganese	332		0.250	5.00	1	10/28/2015 17:12	WG824868
Nickel	0.645	J	0.350	2.00	1	10/28/2015 17:12	WG824868
Potassium	565	J	37.0	1000	1	10/28/2015 17:12	WG824868
Selenium	14.0		0.380	2.00	1	10/28/2015 17:12	WG824868
Sodium	185000		110	1000	1	10/28/2015 17:12	WG824868
Vanadium	1.28	J	0.180	5.00	1	10/28/2015 17:12	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	241		31.4	100	1	10/28/2015 01:22	WG824598
(S) a,a,a-Trifluorotoluene(FID) 87.2				62.0-128		10/28/2015 01:22	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/26/2015 17:38	WG824433
Benzene	3.26		0.331	1.00	1	10/26/2015 17:38	WG824433
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 17:38	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Bromoform	U		0.469	1.00	1	10/26/2015 17:38	WG824433	2 Tc
Bromomethane	U		0.866	5.00	1	10/26/2015 17:38	WG824433	3 Ss
n-Butylbenzene	U		0.361	1.00	1	10/26/2015 17:38	WG824433	4 Cn
sec-Butylbenzene	2.87		0.365	1.00	1	10/26/2015 17:38	WG824433	5 Sr
Carbon disulfide	U		0.275	1.00	1	10/26/2015 17:38	WG824433	6 Qc
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 17:38	WG824433	7 Gl
Chlorobenzene	U		0.348	1.00	1	10/26/2015 17:38	WG824433	8 Al
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 17:38	WG824433	9 Sc
Chloroethane	U		0.453	5.00	1	10/26/2015 17:38	WG824433	
Chloroform	U		0.324	5.00	1	10/26/2015 17:38	WG824433	
Chloromethane	U		0.276	2.50	1	10/26/2015 17:38	WG824433	
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 17:38	WG824433	
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 17:38	WG824433	
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 17:38	WG824433	
1,1-Dichloroethene	U		0.398	1.00	1	10/26/2015 17:38	WG824433	
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 17:38	WG824433	
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 17:38	WG824433	
1,2-Dichloropropane	U		0.306	1.00	1	10/26/2015 17:38	WG824433	
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 17:38	WG824433	
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 17:38	WG824433	
Ethylbenzene	0.394	L	0.384	1.00	1	10/26/2015 17:38	WG824433	
Isopropylbenzene	18.2		0.326	1.00	1	10/26/2015 17:38	WG824433	
p-Isopropyltoluene	U		0.350	1.00	1	10/26/2015 17:38	WG824433	
2-Butanone (MEK)	U		3.93	10.0	1	10/26/2015 17:38	WG824433	
2-Hexanone	U		3.82	10.0	1	10/26/2015 17:38	WG824433	
Methylene Chloride	U		1.00	5.00	1	10/26/2015 17:38	WG824433	
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 17:38	WG824433	
Methyl tert-butyl ether	U		0.367	1.00	1	10/26/2015 17:38	WG824433	
Naphthalene	U		1.00	5.00	1	10/26/2015 17:38	WG824433	
n-Propylbenzene	1.20		0.349	1.00	1	10/26/2015 17:38	WG824433	
Styrene	U		0.307	1.00	1	10/26/2015 17:38	WG824433	
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 17:38	WG824433	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 17:38	WG824433	
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 17:38	WG824433	
Toluene	U		0.780	5.00	1	10/26/2015 17:38	WG824433	
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 17:38	WG824433	
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 17:38	WG824433	
Trichloroethene	U		0.398	1.00	1	10/26/2015 17:38	WG824433	
1,2,4-Trimethylbenzene	U		0.373	1.00	1	10/26/2015 17:38	WG824433	
1,3,5-Trimethylbenzene	U		0.387	1.00	1	10/26/2015 17:38	WG824433	
Vinyl chloride	U		0.259	1.00	1	10/26/2015 17:38	WG824433	
o-Xylene	U		0.341	1.00	1	10/26/2015 17:38	WG824433	
m&p-Xylene	1.76		0.719	1.00	1	10/26/2015 17:38	WG824433	
Xylenes, Total	1.76	L	1.06	3.00	1	10/26/2015 17:38	WG824433	
(S) Toluene-d8	96.6			90.0-115		10/26/2015 17:38	WG824433	
(S) Dibromofluoromethane	96.3			79.0-121		10/26/2015 17:38	WG824433	
(S) 4-Bromofluorobenzene	96.7			80.1-120		10/26/2015 17:38	WG824433	

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	803		24.7	100	1	10/28/2015 19:38	WG823977
(S) o-Terphenyl	100			50.0-150		10/28/2015 19:38	WG823977



Method Blank (MB)

(MB) 10/27/15 15:03

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L798475-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/27/15 15:04 • (DUP) 10/27/15 15:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3000	2980	1	0.669		5

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

(LCS) 10/27/15 15:03 • (LCSD) 10/27/15 15:04

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8550	8600	97.2	97.7	85.0-115			0.583	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/29/15 16:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	0.0200		0.0197	0.100

L796127-05 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:07 • (DUP) 10/29/15 17:08

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	9.00		20

L796127-16 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 17:24 • (DUP) 10/29/15 17:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	10	51.0	*	20

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

(LCS) 10/29/15 17:00 • (LCSD) 10/29/15 17:01

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.16	5.33	103	107	90.0-110			3.00	20

L796127-10 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/29/15 17:13 • (MS) 10/29/15 17:14

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	0.500	0.0900	50.8	101	10	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L796252-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 17:30 • (MS) 10/29/15 17:31 • (MSD) 10/29/15 17:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	0.500	19.3	65.6	65.7	93.0	93.0	10	90.0-110			0.000	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/29/15 10:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

L796143-19 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:50 • (DUP) 10/29/15 10:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

L795910-02 Original Sample (OS) • Duplicate (DUP)

(OS) 10/29/15 10:58 • (DUP) 10/29/15 11:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.000		20

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

(LCS) 10/29/15 10:26 • (LCSD) 10/29/15 10:27

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.110	0.103	110	103	90.0-110			6.57	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/24/15 16:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L796122-01 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 18:23 • (DUP) 10/24/15 18:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9.62	9.63	1	0		20
Fluoride	0.0521	0.0520	1	0	J	20
Sulfate	49.0	49.1	1	0		20

L796122-10 Original Sample (OS) • Duplicate (DUP)

(OS) 10/24/15 23:16 • (DUP) 10/24/15 23:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	10.7	10.7	1	1		20
Fluoride	0.130	0.132	1	1		20
Sulfate	77.2	77.5	1	0		20

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

(LCS) 10/24/15 16:51 • (LCSD) 10/24/15 17:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	39.5	39.3	99	98	90-110			1	20
Fluoride	8.00	7.93	7.89	99	99	90-110			1	20
Sulfate	40.0	40.2	39.9	100	100	90-110			1	20



L796122-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 10/24/15 18:54 • (MS) 10/24/15 19:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	8.56	59.0	101	1	80-120	
Fluoride	5.00	0.135	5.06	99	1	80-120	
Sulfate	50.0	25.4	74.8	99	1	80-120	

L796122-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 23:47 • (MS) 10/25/15 00:03 • (MSD) 10/25/15 00:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	20.2	68.8	68.7	97	97	1	80-120			0	20
Fluoride	5.00	0.261	5.05	5.18	96	98	1	80-120			2	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/24/15 14:06

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

(LCS) 10/24/15 14:08 • (LCSD) 10/24/15 14:10

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Mercury	0.00300	0.00282	0.00268	94	89	80-120			5	20

L798475-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/24/15 14:12 • (MS) 10/24/15 14:19 • (MSD) 10/24/15 14:21

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	ND	0.00220	0.00227	73	76	1	75-125	F		3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/28/15 16:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	U		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Vanadium	0.000489		0.00018	0.00500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 10/28/15 16:37 • (LCSD) 10/28/15 16:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0495	0.0495	99	99	80-120			0	20
Barium	0.0500	0.0506	0.0498	101	100	80-120			2	20
Calcium	5.00	5.05	5.03	101	101	80-120			0	20
Chromium	0.0500	0.0497	0.0492	99	98	80-120			1	20
Iron	5.00	4.86	4.82	97	96	80-120			1	20
Lead	0.0500	0.0499	0.0499	100	100	80-120			0	20
Manganese	0.0500	0.0499	0.0484	100	97	80-120			3	20
Nickel	0.0500	0.0502	0.0498	100	100	80-120			1	20
Potassium	5.00	4.99	5.10	100	102	80-120			2	20
Selenium	0.0500	0.0489	0.0488	98	98	80-120			0	20
Sodium	5.00	4.99	5.11	100	102	80-120			2	20
Vanadium	0.0500	0.0500	0.0495	100	99	80-120			1	20



L798475-01,02

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 16:42 • (MS) 10/28/15 16:46 • (MSD) 10/28/15 16:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.00368	0.0565	0.0552	106	103	1	75-125			2	20
Barium	0.0500	0.0134	0.0640	0.0636	101	101	1	75-125			1	20
Chromium	0.0500	0.000393	0.0469	0.0470	93	93	1	75-125			0	20
Potassium	5.00	1.70	6.48	6.56	96	97	1	75-125			1	20
Iron	5.00	0.0193	4.58	4.58	91	91	1	75-125			0	20
Lead	0.0500	0.000120	0.0494	0.0497	98	99	1	75-125			1	20
Manganese	0.0500	0.110	0.155	0.153	90	87	1	75-125			1	20
Nickel	0.0500	0.00361	0.0485	0.0489	90	91	1	75-125			1	20
Selenium	0.0500	0.00109	0.0529	0.0516	104	101	1	75-125			2	20
Sodium	5.00	157	160	161	57	88	1	75-125	4		1	20
Vanadium	0.0500	0.0364	0.0830	0.0830	93	93	1	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 10/27/15 22:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	90.9			62.0-128

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) 10/27/15 21:41 • (LCSD) 10/27/15 22:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.48	5.53	99.7	101	67.0-132			0.910	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	62.0-128				

L798475-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 01:22 • (MS) 10/28/15 03:57 • (MSD) 10/28/15 04:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.241	5.05	4.80	87.5	82.8	1	50.0-143			5.15	20
(S) a,a,a-Trifluorotoluene(FID)					97.1	97.4		62.0-128				



Method Blank (MB)

(MB) 10/26/15 09:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 10/26/15 09:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	96.7			90.0-115
(S) Dibromofluoromethane	95.5			79.0-121
(S) 4-Bromofluorobenzene	96.8			80.1-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 10/26/15 07:59 • (LCSD) 10/26/15 08:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0992	0.0970	79.3	77.6	28.7-175			2.24	20.9
Benzene	0.0250	0.0247	0.0249	98.7	99.5	73.0-122			0.770	20
Bromodichloromethane	0.0250	0.0223	0.0230	89.3	92.0	75.5-121			2.92	20
Bromoform	0.0250	0.0266	0.0274	107	110	71.5-131			2.80	20
Bromomethane	0.0250	0.0223	0.0231	89.3	92.3	22.4-187			3.36	20
n-Butylbenzene	0.0250	0.0244	0.0246	97.4	98.4	75.9-134			1.04	20
sec-Butylbenzene	0.0250	0.0262	0.0275	105	110	80.6-126			4.87	20
Carbon disulfide	0.0250	0.0219	0.0224	87.7	89.5	53.0-134			2.09	20
Carbon tetrachloride	0.0250	0.0244	0.0246	97.7	98.5	70.9-129			0.780	20
Chlorobenzene	0.0250	0.0270	0.0282	108	113	79.7-122			4.36	20
Chlorodibromomethane	0.0250	0.0267	0.0279	107	112	78.2-124			4.41	20
Chloroethane	0.0250	0.0186	0.0191	74.4	76.5	41.2-153			2.80	20
Chloroform	0.0250	0.0230	0.0238	92.2	95.3	73.2-125			3.27	20
Chloromethane	0.0250	0.0191	0.0194	76.4	77.6	55.8-134			1.57	20
1,2-Dibromoethane	0.0250	0.0270	0.0274	108	109	79.8-122			1.33	20
1,1-Dichloroethane	0.0250	0.0225	0.0229	89.9	91.7	71.7-127			1.96	20



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

(LCS) 10/26/15 07:59 • (LCSD) 10/26/15 08:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0203	0.0205	81.0	82.0	65.3-126			1.22	20
1,1-Dichloroethene	0.0250	0.0198	0.0202	79.4	80.9	59.9-137			1.91	20
cis-1,2-Dichloroethene	0.0250	0.0257	0.0262	103	105	77.3-122			1.77	20
trans-1,2-Dichloroethene	0.0250	0.0258	0.0261	103	104	72.6-125			1.32	20
1,2-Dichloropropane	0.0250	0.0225	0.0232	90.1	92.6	77.4-125			2.71	20
cis-1,3-Dichloropropene	0.0250	0.0235	0.0242	94.2	96.8	77.7-124			2.75	20
trans-1,3-Dichloropropene	0.0250	0.0232	0.0236	93.0	94.4	73.5-127			1.52	20
Ethylbenzene	0.0250	0.0271	0.0284	108	114	80.9-121			4.74	20
2-Hexanone	0.125	0.109	0.110	87.4	88.2	59.4-151			0.850	20
Isopropylbenzene	0.0250	0.0260	0.0274	104	109	81.6-124			4.98	20
p-Isopropyltoluene	0.0250	0.0262	0.0274	105	110	77.6-129			4.68	20
2-Butanone (MEK)	0.125	0.0785	0.0775	62.8	62.0	46.4-155			1.28	20
Methylene Chloride	0.0250	0.0232	0.0236	92.9	94.4	69.5-120			1.57	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0822	0.0842	65.7	67.3	63.3-138			2.40	20
Methyl tert-butyl ether	0.0250	0.0220	0.0226	87.9	90.6	70.1-125			3.02	20
Naphthalene	0.0250	0.0250	0.0252	100	101	69.7-134			0.790	20
n-Propylbenzene	0.0250	0.0254	0.0264	102	106	81.9-122			3.77	20
Styrene	0.0250	0.0268	0.0280	107	112	79.9-124			4.55	20
1,1,1,2-Tetrachloroethane	0.0250	0.0265	0.0279	106	111	78.5-125			4.99	20
1,1,2,2-Tetrachloroethane	0.0250	0.0248	0.0261	99.2	104	79.3-123			5.03	20
Tetrachloroethene	0.0250	0.0279	0.0287	112	115	73.5-130			2.86	20
Toluene	0.0250	0.0244	0.0250	97.4	100	77.9-116			2.56	20
1,1,1-Trichloroethane	0.0250	0.0232	0.0239	92.8	95.5	71.1-129			2.88	20
1,1,2-Trichloroethane	0.0250	0.0268	0.0273	107	109	81.6-120			1.90	20
Trichloroethene	0.0250	0.0260	0.0262	104	105	79.5-121			0.640	20
1,2,4-Trimethylbenzene	0.0250	0.0255	0.0268	102	107	79.0-122			5.04	20
1,3,5-Trimethylbenzene	0.0250	0.0252	0.0267	101	107	81.0-123			5.58	20
Vinyl chloride	0.0250	0.0191	0.0195	76.2	77.8	61.5-134			2.10	20
Xylenes, Total	0.0750	0.0803	0.0836	107	111	79.2-122			4.03	20
o-Xylene	0.0250	0.0270	0.0283	108	113	79.1-123			4.54	20
m&p-Xylenes	0.0500	0.0532	0.0553	106	111	78.5-122			3.77	20
(S) Toluene-d8				96.1	97.5	90.0-115				
(S) Dibromofluoromethane				94.7	95.2	79.0-121				
(S) 4-Bromofluorobenzene				96.7	98.9	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 14:54 • (MS) 10/26/15 15:15 • (MSD) 10/26/15 15:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00105	0.0444	0.0459	34.7	35.9	1	25.0-156			3.34	21.5
Benzene	0.0250	ND	0.0236	0.0217	94.4	86.7	1	58.6-133			8.51	20
Bromodichloromethane	0.0250	ND	0.0234	0.0218	93.6	87.1	1	69.2-127			7.17	20
Bromoform	0.0250	ND	0.0274	0.0246	110	98.4	1	66.3-140			10.8	20
Bromomethane	0.0250	ND	0.0176	0.0162	70.5	65.0	1	16.6-183			8.17	20.5
n-Butylbenzene	0.0250	ND	0.0248	0.0236	99.0	94.2	1	64.8-145			4.98	20
sec-Butylbenzene	0.0250	ND	0.0272	0.0253	109	101	1	66.8-139			7.11	20
Carbon disulfide	0.0250	ND	0.0132	0.0121	52.9	48.5	1	34.9-138			8.60	20
Carbon tetrachloride	0.0250	ND	0.0241	0.0223	96.6	89.3	1	60.6-139			7.79	20
Chlorobenzene	0.0250	ND	0.0274	0.0256	110	103	1	70.1-130			6.83	20
Chlorodibromomethane	0.0250	ND	0.0281	0.0255	112	102	1	71.6-132			9.54	20
Chloroethane	0.0250	ND	0.0163	0.0149	65.2	59.7	1	33.3-155			8.82	20
Chloroform	0.0250	ND	0.0242	0.0225	96.8	90.1	1	66.1-133			7.17	20
Chloromethane	0.0250	ND	0.0139	0.0129	55.5	51.5	1	40.7-139			7.54	20
1,2-Dibromoethane	0.0250	ND	0.0276	0.0252	110	101	1	73.8-131			8.92	20
1,1-Dichloroethane	0.0250	ND	0.0230	0.0211	92.1	84.3	1	64.0-134			8.88	20
1,2-Dichloroethane	0.0250	ND	0.0207	0.0187	82.9	74.9	1	60.7-132			10.2	20
1,1-Dichloroethene	0.0250	ND	0.0183	0.0168	73.3	67.3	1	48.8-144			8.56	20
cis-1,2-Dichloroethene	0.0250	ND	0.0259	0.0241	104	96.3	1	60.6-136			7.26	20
trans-1,2-Dichloroethene	0.0250	ND	0.0230	0.0214	92.1	85.7	1	61.0-132			7.23	20
1,2-Dichloropropane	0.0250	ND	0.0233	0.0217	93.2	86.7	1	69.7-130			7.30	20
cis-1,3-Dichloropropene	0.0250	ND	0.0235	0.0218	94.0	87.1	1	71.1-129			7.64	20
trans-1,3-Dichloropropene	0.0250	ND	0.0238	0.0218	95.3	87.3	1	66.3-136			8.68	20
Ethylbenzene	0.0250	ND	0.0274	0.0252	109	101	1	62.7-136			8.13	20
2-Hexanone	0.125	ND	0.116	0.103	92.8	82.6	1	59.4-154			11.6	20.1
Isopropylbenzene	0.0250	ND	0.0269	0.0250	108	99.8	1	67.4-136			7.64	20
p-Isopropyltoluene	0.0250	ND	0.0269	0.0252	107	101	1	62.8-143			6.20	20
2-Butanone (MEK)	0.125	ND	0.0618	0.0549	49.5	43.9	1	45.0-156		E	11.8	20.8
Methylene Chloride	0.0250	ND	0.0222	0.0203	88.9	81.4	1	61.5-125			8.77	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0896	0.0807	71.7	64.6	1	60.7-150			10.5	20
Methyl tert-butyl ether	0.0250	ND	0.0231	0.0211	92.5	84.6	1	61.4-136			8.90	20
Naphthalene	0.0250	ND	0.0251	0.0252	100	101	1	61.8-143			0.360	20
n-Propylbenzene	0.0250	ND	0.0260	0.0240	104	96.1	1	63.2-139			7.68	20
Styrene	0.0250	ND	0.0272	0.0252	109	101	1	68.2-133			7.48	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0277	0.0258	111	103	1	70.5-132			7.14	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0271	0.0248	108	99.3	1	64.9-145			8.73	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L798300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 14:54 • (MS) 10/26/15 15:15 • (MSD) 10/26/15 15:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0262	0.0242	105	96.8	1	57.4-141			8.04	20
Toluene	0.0250	ND	0.0239	0.0224	95.8	89.6	1	67.8-124			6.69	20
1,1,1-Trichloroethane	0.0250	ND	0.0239	0.0219	95.7	87.6	1	58.7-134			8.80	20
1,1,2-Trichloroethane	0.0250	ND	0.0281	0.0254	112	102	1	74.1-130			10.0	20
Trichloroethene	0.0250	ND	0.0250	0.0232	99.9	92.7	1	48.9-148			7.39	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0258	0.0243	103	97.2	1	60.5-137			6.06	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0261	0.0244	104	97.5	1	67.9-134			6.65	20
Vinyl chloride	0.0250	ND	0.0154	0.0140	61.5	56.2	1	44.3-143			9.11	20
Xylenes, Total	0.0750	ND	0.0805	0.0745	107	99.3	1	65.6-133			7.81	20
o-Xylene	0.0250	ND	0.0274	0.0253	109	101	1	67.1-133			7.73	20
m&p-Xylenes	0.0500	ND	0.0531	0.0491	106	98.3	1	64.1-133			7.85	20
(S) Toluene-d8					97.4	97.4		90.0-115				
(S) Dibromofluoromethane					96.7	94.6		79.0-121				
(S) 4-Bromofluorobenzene					98.3	96.3		80.1-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L795279-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 16:37 • (MS) 10/26/15 15:56 • (MSD) 10/26/15 16:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.373	17.5	17.5	68.6	68.6	200	25.0-156			0.0600	21.5
Benzene	0.0250	0.0267	3.45	3.42	68.5	67.9	200	58.6-133			0.930	20
Bromodichloromethane	0.0250	ND	3.94	3.89	78.8	77.9	200	69.2-127			1.12	20
Bromoform	0.0250	ND	4.92	4.86	98.4	97.1	200	66.3-140			1.28	20
Bromomethane	0.0250	ND	1.98	1.91	39.5	38.1	200	16.6-183			3.63	20.5
n-Butylbenzene	0.0250	0.0645	4.52	4.52	89.1	89.1	200	64.8-145			0.0600	20
sec-Butylbenzene	0.0250	0.0290	4.83	4.79	96.0	95.2	200	66.8-139			0.750	20
Carbon disulfide	0.0250	ND	0.803	0.795	16.1	15.9	200	34.9-138	F	F	0.990	20
Carbon tetrachloride	0.0250	ND	3.57	3.55	71.3	71.0	200	60.6-139			0.530	20
Chlorobenzene	0.0250	0.0125	4.64	4.57	92.5	91.2	200	70.1-130			1.47	20
Chlorodibromomethane	0.0250	ND	4.99	4.98	99.8	99.7	200	71.6-132			0.110	20
Chloroethane	0.0250	ND	1.95	1.92	39.1	38.4	200	33.3-155			1.83	20
Chloroform	0.0250	ND	4.02	3.99	80.4	79.8	200	66.1-133			0.640	20
Chloromethane	0.0250	ND	1.39	1.39	27.9	27.9	200	40.7-139	F	F	0.0200	20
1,2-Dibromoethane	0.0250	ND	4.47	4.46	89.4	89.3	200	73.8-131			0.210	20
1,1-Dichloroethane	0.0250	ND	3.60	3.52	72.1	70.4	200	64.0-134			2.35	20

L795279-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/26/15 16:37 • (MS) 10/26/15 15:56 • (MSD) 10/26/15 16:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	ND	3.26	3.22	65.3	64.5	200	60.7-132			1.28	20
1,1-Dichloroethene	0.0250	ND	2.28	2.25	45.6	45.0	200	48.8-144	F	F	1.27	20
cis-1,2-Dichloroethene	0.0250	0.245	4.12	4.19	77.6	79.0	200	60.6-136			1.68	20
trans-1,2-Dichloroethene	0.0250	ND	2.87	2.84	57.4	56.9	200	61.0-132	F	F	0.870	20
1,2-Dichloropropane	0.0250	0.226	3.85	3.77	72.5	70.8	200	69.7-130			2.24	20
cis-1,3-Dichloropropene	0.0250	ND	3.82	3.79	76.4	75.8	200	71.1-129			0.770	20
trans-1,3-Dichloropropene	0.0250	0.103	4.00	3.77	77.9	73.4	200	66.3-136			5.83	20
Ethylbenzene	0.0250	0.0321	4.46	4.47	88.6	88.7	200	62.7-136			0.110	20
2-Hexanone	0.125	0.394	19.9	19.7	77.9	77.4	200	59.4-154			0.590	20.1
Isopropylbenzene	0.0250	0.0128	4.58	4.57	91.4	91.1	200	67.4-136			0.350	20
p-Isopropyltoluene	0.0250	0.0347	4.78	4.81	95.0	95.5	200	62.8-143			0.520	20
2-Butanone (MEK)	0.125	0.123	13.8	14.0	54.7	55.3	200	45.0-156			1.07	20.8
Methylene Chloride	0.0250	0.0199	3.21	3.17	63.8	63.0	200	61.5-125			1.22	20
4-Methyl-2-pentanone (MIBK)	0.125	0.215	14.9	15.0	58.6	59.2	200	60.7-150	F	F	0.910	20
Methyl tert-butyl ether	0.0250	0.0259	3.87	3.90	76.8	77.5	200	61.4-136			0.820	20
Naphthalene	0.0250	0.386	4.76	4.82	87.4	88.7	200	61.8-143			1.38	20
n-Propylbenzene	0.0250	0.0203	4.46	4.42	88.8	87.9	200	63.2-139			1.04	20
Styrene	0.0250	0.0160	4.72	4.67	94.2	93.0	200	68.2-133			1.25	20
1,1,1,2-Tetrachloroethane	0.0250	ND	5.02	4.90	100	98.1	200	70.5-132			2.27	20
1,1,2,2-Tetrachloroethane	0.0250	0.0293	4.79	4.78	95.1	95.0	200	64.9-145			0.170	20
Tetrachloroethene	0.0250	0.0777	3.91	3.86	76.7	75.6	200	57.4-141			1.49	20
Toluene	0.0250	0.0338	3.66	3.62	72.5	71.6	200	67.8-124			1.16	20
1,1,1-Trichloroethane	0.0250	ND	3.69	3.63	73.7	72.6	200	58.7-134			1.52	20
1,1,2-Trichloroethane	0.0250	ND	4.88	4.88	97.6	97.6	200	74.1-130			0.0700	20
Trichloroethene	0.0250	9.42	12.9	13.2	70.4	75.1	200	48.9-148			1.77	20
1,2,4-Trimethylbenzene	0.0250	0.0575	4.65	4.63	91.8	91.4	200	60.5-137			0.490	20
1,3,5-Trimethylbenzene	0.0250	0.0437	4.56	4.51	90.4	89.3	200	67.9-134			1.21	20
Vinyl chloride	0.0250	ND	1.68	1.62	33.6	32.4	200	44.3-143	F	F	3.72	20
Xylenes, Total	0.0750	ND	13.3	13.2	88.7	87.8	200	65.6-133			0.970	20
o-Xylene	0.0250	0.0346	4.60	4.59	91.3	91.1	200	67.1-133			0.290	20
m&p-Xylenes	0.0500	0.0759	8.70	8.59	86.3	85.1	200	64.1-133			1.33	20
(S) Toluene-d8					95.8	95.6		90.0-115				
(S) Dibromofluoromethane					95.8	95.4		79.0-121				
(S) 4-Bromofluorobenzene					98.1	99.7		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 10/27/15 18:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	89.7			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

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

(LCS) 10/27/15 18:30 • (LCSD) 10/27/15 18:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.26	1.20	84.3	79.8	50.0-150			5.51	20
(S) o-Terphenyl				96.5	94.0	50.0-150				

6Qc

7Gl

8Al

9Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier Description

4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
J	Estimated value.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

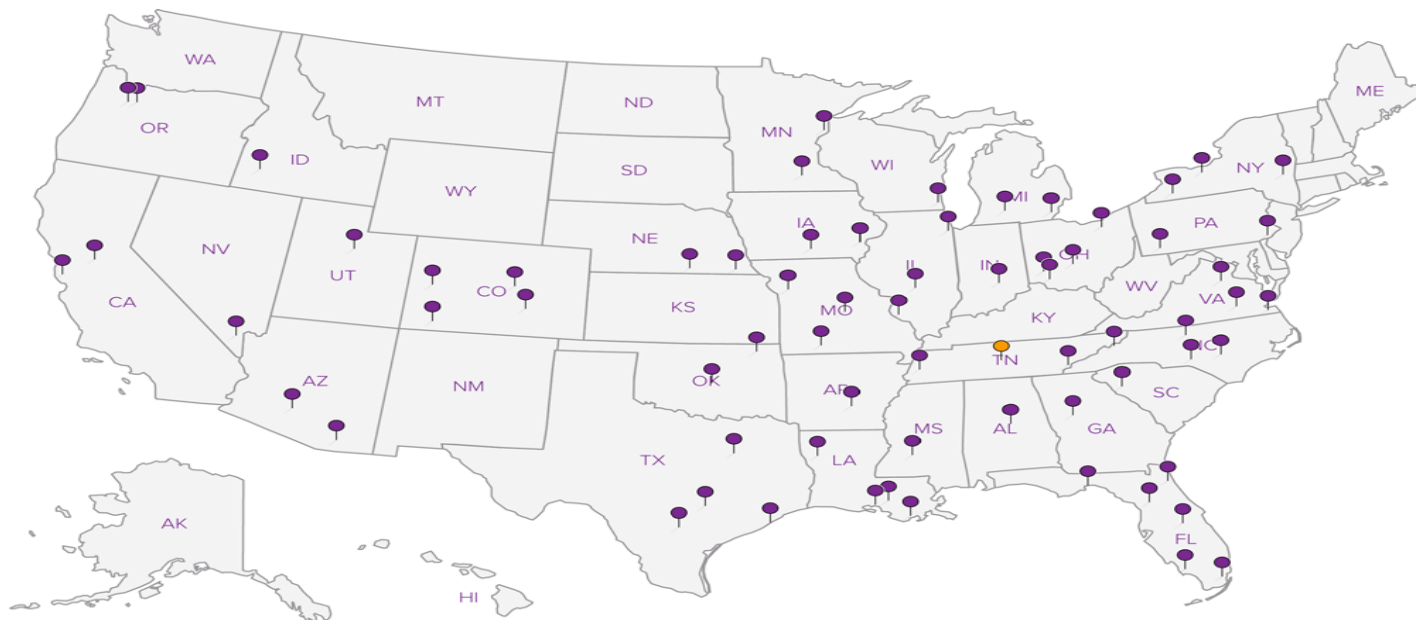
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



shipment #2

ARCADIS US - TX

2929 Briarpark Dr., Suite 300
Houston, TX 77042

Billing Information:
Att: Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80129

Report to:
Pam Krueger

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;

Project
Description: Navajo Refining Company - Artesia, NM

City/State
Collected: Artesia, NM

Phone: 713-953-4800
Fax:

Client Project #
TX000836.0007.15008

Lab Project #
ARCADHTX-NAVAJO FULL

Collected by (print):
Greg Scherbenske

Site/Facility ID #
REST

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ☐ Y ☒

Rush? (Lab MUST Be Notified)
Same Day200%
Next Day100%
Two Day50%
Three Day25%

Date Results Needed

Email? ☐ No ☒ Yes
FAX? ☐ No ☐ Yes

No. of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CL, FL, SO4 125mlHDPE-NoPres	CN 250mlHDPEAmb-NaOH	DRO 100ml Amb-HCl	GRO 40ml Amb HCl	METALS 6020 500mlHDPE-HNO3	NO2NO3 250mlHDPE-H2SO4	TDS 250mlHDPE-NoPres	V8260 40ml Amb-HCl	V8260 40ml Amb-HCl-Blk	Metals (Hg, Ni, Va)
MW-114	Grab	GW		10/20/15	900	10	X		X	X	X	X	X	X		
MW-48		GW		10/20/15	1515	10	X		X	X	X	X	X	X		
MW-130		GW		10/20/15	1325	10	X		X	X	X	X	X	X		
MW-109		GW		10/20/15	1145	10	X		X	X	X	X	X	X		
MW-110		GW		10/20/15	1055	10	X		X	X	X	X	X	X		
DUP-REST-02		GW		10/20/15	1200	10	X		X	X	X	X	X	X		
EB-REST-02		GW		10/20/15	1335	10	X		X	X	X	X	X	X		
MW-66		GW		10/20/15	1540	11	X	X	X	X	X	X	X	X	X	
MW-28		GW		10/20/15	1455	11	X	X	X	X	X	X	X	X	X	
MW-60		GW		10/20/15	1150	11	X	X	X	X	X	X	X	X	X	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold # _____
Condition: (lab use only) OK
COC Seal Intact: Y ☒ N ☐ NA ☐
pH Checked: _____ NCF: _____

Relinquished by: (Signature)	Date: 7/21/15	Time: 730	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 27
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/22/15 Time: 0900



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

MW-G015
Table # ~~1796127~~
Acctnum: ARCADHTX
Template: T105635
Preglogin: P524673
TSR: 633 - Pam Langford
PB:
Shipped Via: FedEX Ground

1798475

-01

-02

ARCADIS US - TX

Sample Delivery Group: L798485
Samples Received: 10/22/2015
Project Number: TX000836.0007.15008
Description: Navajo Refining Company - Artesia, NM
Site: TEL
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-49 L798485-03 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 13:15

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:06	MF
Mercury by Method 7470A	WG823992	1	10/23/15 17:38	10/24/15 14:26	JD
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:14	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 20:12	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 01:45	10/28/15 01:45	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	1	10/26/15 17:58	10/26/15 17:58	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:06	10/29/15 17:06	ASK
Wet Chemistry by Method 9012B	WG824892	1	10/28/15 00:58	10/29/15 10:48	DR
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 22:15	10/24/15 22:15	DJD
Wet Chemistry by Method 9056MOD	WG824162	50	10/25/15 01:50	10/25/15 01:50	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

TEL-4 L798485-04 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 07:45

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:05	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:16	JDG
Metals (ICPMS) by Method 6020	WG824868	5	10/28/15 10:42	10/28/15 19:07	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	5	10/26/15 09:27	10/29/15 00:56	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 02:07	10/28/15 02:07	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	1	10/26/15 18:18	10/26/15 18:18	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	10	10/28/15 22:27	10/28/15 22:27	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:07	10/29/15 17:07	ASK
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 22:30	10/24/15 22:30	DJD
Wet Chemistry by Method 9056MOD	WG824162	50	10/25/15 02:06	10/25/15 02:06	DJD

⁷ Gl

⁸ Al

⁹ Sc

TEL-3 L798485-05 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 10:50

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:05	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:23	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	5	10/26/15 09:27	10/29/15 01:14	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 02:29	10/28/15 02:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	1	10/28/15 22:47	10/28/15 22:47	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:09	10/29/15 17:09	ASK
Wet Chemistry by Method 9056MOD	WG824162	1	10/24/15 22:45	10/24/15 22:45	DJD
Wet Chemistry by Method 9056MOD	WG824952	50	10/28/15 15:01	10/28/15 15:01	DJD

TEL-2 L798485-06 GW

Collected by
Greg Scherbenske

Collected date/time
10/20/15 10:05

Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:06	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:25	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	20	10/26/15 09:27	10/29/15 03:02	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	5	10/28/15 02:51	10/28/15 02:51	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	5	10/26/15 18:59	10/26/15 18:59	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:10	10/29/15 17:10	ASK
Wet Chemistry by Method 9056MOD	WG824156	20	10/24/15 20:15	10/24/15 20:15	DJD
Wet Chemistry by Method 9056MOD	WG824952	1	10/28/15 15:48	10/28/15 15:48	DJD



TEL-1 L798485-07 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 09:20Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:06	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:28	JDG
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:49	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	5	10/26/15 09:27	10/29/15 01:50	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 03:13	10/28/15 03:13	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824433	1	10/26/15 19:20	10/26/15 19:20	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:11	10/29/15 17:11	ASK
Wet Chemistry by Method 9056MOD	WG824156	20	10/24/15 20:31	10/24/15 20:31	DJD
Wet Chemistry by Method 9056MOD	WG824952	1	10/28/15 16:34	10/28/15 16:34	DJD
Wet Chemistry by Method 9056MOD	WG824952	100	10/28/15 16:49	10/28/15 16:49	DJD

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

DUP-TEL-1 L798485-08 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 09:00Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:05	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:30	JDG
Metals (ICPMS) by Method 6020	WG824868	10	10/28/15 10:42	10/28/15 19:14	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 20:30	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	2	10/28/15 03:35	10/28/15 03:35	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	10	10/28/15 23:06	10/28/15 23:06	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:12	10/29/15 17:12	ASK
Wet Chemistry by Method 9056MOD	WG824156	20	10/24/15 21:48	10/24/15 21:48	DJD
Wet Chemistry by Method 9056MOD	WG824952	100	10/28/15 17:05	10/28/15 17:05	DJD

EB-TEL-01 L798485-09 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 11:05Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG824447	1	10/26/15 14:04	10/27/15 15:06	MF
Metals (ICPMS) by Method 6020	WG824868	1	10/28/15 10:42	10/28/15 17:33	JDG
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG823977	1	10/26/15 09:27	10/28/15 20:47	CLG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG824598	1	10/28/15 05:04	10/28/15 05:04	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG825221	1	10/28/15 23:26	10/28/15 23:26	JAH
Wet Chemistry by Method 353.2	WG825446	10	10/29/15 17:13	10/29/15 17:13	ASK
Wet Chemistry by Method 9056MOD	WG824156	1	10/24/15 21:32	10/24/15 21:32	DJD

TRIP BLANK-TEL-01 L798485-10 GW

Collected by
Greg ScherbenskeCollected date/time
10/20/15 00:00Received date/time
10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG824656	1	10/28/15 11:40	10/28/15 11:40	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2260000		2820	10000	1	10/27/2015 15:06	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:06	WG825446

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	2.80	J	1.80	5.00	1	10/29/2015 10:48	WG824892

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	381000		2600	50000	50	10/25/2015 01:50	WG824162
Fluoride	1450		9.90	100	1	10/24/2015 22:15	WG824162
Sulfate	621000		3870	250000	50	10/25/2015 01:50	WG824162

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	10/24/2015 14:26	WG823992

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.93		0.250	2.00	1	10/28/2015 17:14	WG824868
Barium	42.9		0.360	5.00	1	10/28/2015 17:14	WG824868
Calcium	192000		46.0	1000	1	10/28/2015 17:14	WG824868
Chromium	U		0.540	2.00	1	10/28/2015 17:14	WG824868
Iron	19.5	J	15.0	100	1	10/28/2015 17:14	WG824868
Lead	0.453	J	0.240	2.00	1	10/28/2015 17:14	WG824868
Manganese	209		0.250	5.00	1	10/28/2015 17:14	WG824868
Nickel	7.40		0.350	2.00	1	10/28/2015 17:14	WG824868
Potassium	2480		37.0	1000	1	10/28/2015 17:14	WG824868
Selenium	11.7		0.380	2.00	1	10/28/2015 17:14	WG824868
Sodium	326000		110	1000	1	10/28/2015 17:14	WG824868
Vanadium	1.45	J	0.180	5.00	1	10/28/2015 17:14	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	1580		31.4	100	1	10/28/2015 01:45	WG824598
(S) a,a,a-Trifluorotoluene(FID) 91.9				62.0-128		10/28/2015 01:45	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/26/2015 17:58	WG824433
Benzene	179		0.331	1.00	1	10/26/2015 17:58	WG824433
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 17:58	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Bromoform	U		0.469	1.00	1	10/26/2015 17:58	WG824433	2 Tc
Bromomethane	U		0.866	5.00	1	10/26/2015 17:58	WG824433	3 Ss
n-Butylbenzene	1.58		0.361	1.00	1	10/26/2015 17:58	WG824433	4 Cn
sec-Butylbenzene	3.71		0.365	1.00	1	10/26/2015 17:58	WG824433	5 Sr
Carbon disulfide	1.24		0.275	1.00	1	10/26/2015 17:58	WG824433	6 Qc
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 17:58	WG824433	7 Gl
Chlorobenzene	U		0.348	1.00	1	10/26/2015 17:58	WG824433	8 Al
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 17:58	WG824433	9 Sc
Chloroethane	U		0.453	5.00	1	10/26/2015 17:58	WG824433	
Chloroform	U		0.324	5.00	1	10/26/2015 17:58	WG824433	
Chloromethane	U		0.276	2.50	1	10/26/2015 17:58	WG824433	
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 17:58	WG824433	
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 17:58	WG824433	
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 17:58	WG824433	
1,1-Dichloroethene	U		0.398	1.00	1	10/26/2015 17:58	WG824433	
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 17:58	WG824433	
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 17:58	WG824433	
1,2-Dichloropropane	U		0.306	1.00	1	10/26/2015 17:58	WG824433	
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 17:58	WG824433	
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 17:58	WG824433	
Ethylbenzene	4.57		0.384	1.00	1	10/26/2015 17:58	WG824433	
Isopropylbenzene	24.7		0.326	1.00	1	10/26/2015 17:58	WG824433	
p-Isopropyltoluene	0.770	U	0.350	1.00	1	10/26/2015 17:58	WG824433	
2-Butanone (MEK)	U		3.93	10.0	1	10/26/2015 17:58	WG824433	
2-Hexanone	U		3.82	10.0	1	10/26/2015 17:58	WG824433	
Methylene Chloride	U		1.00	5.00	1	10/26/2015 17:58	WG824433	
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 17:58	WG824433	
Methyl tert-butyl ether	44.7		0.367	1.00	1	10/26/2015 17:58	WG824433	
Naphthalene	2.55	U	1.00	5.00	1	10/26/2015 17:58	WG824433	
n-Propylbenzene	15.7		0.349	1.00	1	10/26/2015 17:58	WG824433	
Styrene	U		0.307	1.00	1	10/26/2015 17:58	WG824433	
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 17:58	WG824433	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 17:58	WG824433	
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 17:58	WG824433	
Toluene	2.01	U	0.780	5.00	1	10/26/2015 17:58	WG824433	
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 17:58	WG824433	
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 17:58	WG824433	
Trichloroethene	U		0.398	1.00	1	10/26/2015 17:58	WG824433	
1,2,4-Trimethylbenzene	15.0		0.373	1.00	1	10/26/2015 17:58	WG824433	
1,3,5-Trimethylbenzene	0.858	U	0.387	1.00	1	10/26/2015 17:58	WG824433	
Vinyl chloride	U		0.259	1.00	1	10/26/2015 17:58	WG824433	
o-Xylene	U		0.341	1.00	1	10/26/2015 17:58	WG824433	
m&p-Xylene	38.0		0.719	1.00	1	10/26/2015 17:58	WG824433	
Xylenes, Total	38.0		1.06	3.00	1	10/26/2015 17:58	WG824433	
(S) Toluene-d8	96.1			90.0-115		10/26/2015 17:58	WG824433	
(S) Dibromofluoromethane	87.8			79.0-121		10/26/2015 17:58	WG824433	
(S) 4-Bromofluorobenzene	88.0			80.1-120		10/26/2015 17:58	WG824433	

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7660		24.7	100	1	10/28/2015 20:12	WG823977
(S) o-Terphenyl	101			50.0-150		10/28/2015 20:12	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	7150000		2820	10000	1	10/27/2015 15:05	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	385	J	197	1000	10	10/29/2015 17:07	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	347000		2600	50000	50	10/25/2015 02:06	WG824162
Fluoride	2550		9.90	100	1	10/24/2015 22:30	WG824162
Sulfate	4000000		3870	250000	50	10/25/2015 02:06	WG824162

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	10.6		0.250	2.00	1	10/28/2015 17:16	WG824868
Barium	33.8		0.360	5.00	1	10/28/2015 17:16	WG824868
Calcium	412000		46.0	1000	1	10/28/2015 17:16	WG824868
Chromium	315		0.540	2.00	1	10/28/2015 17:16	WG824868
Iron	107		15.0	100	1	10/28/2015 17:16	WG824868
Lead	2.55		0.240	2.00	1	10/28/2015 17:16	WG824868
Manganese	406		0.250	5.00	1	10/28/2015 17:16	WG824868
Potassium	934	J	37.0	1000	1	10/28/2015 17:16	WG824868
Selenium	20.1		0.380	2.00	1	10/28/2015 17:16	WG824868
Sodium	657000		550	5000	5	10/28/2015 19:07	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	2770		31.4	100	1	10/28/2015 02:07	WG824598
(S) a,a,a-Trifluorotoluene(FID) 86.2				62.0-128		10/28/2015 02:07	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/26/2015 18:18	WG824433
Benzene	637		3.31	10.0	10	10/28/2015 22:27	WG825221
Bromodichloromethane	U		0.380	1.00	1	10/26/2015 18:18	WG824433
Bromoform	U		0.469	1.00	1	10/26/2015 18:18	WG824433
Bromomethane	U		0.866	5.00	1	10/26/2015 18:18	WG824433
n-Butylbenzene	3.09		0.361	1.00	1	10/26/2015 18:18	WG824433
sec-Butylbenzene	11.9		0.365	1.00	1	10/26/2015 18:18	WG824433
Carbon disulfide	0.944	J	0.275	1.00	1	10/26/2015 18:18	WG824433
Carbon tetrachloride	U		0.379	1.00	1	10/26/2015 18:18	WG824433
Chlorobenzene	U		0.348	1.00	1	10/26/2015 18:18	WG824433
Chlorodibromomethane	U		0.327	1.00	1	10/26/2015 18:18	WG824433
Chloroethane	U		0.453	5.00	1	10/26/2015 18:18	WG824433
Chloroform	U		0.324	5.00	1	10/26/2015 18:18	WG824433
Chloromethane	U		0.276	2.50	1	10/26/2015 18:18	WG824433
1,2-Dibromoethane	U		0.381	1.00	1	10/26/2015 18:18	WG824433
1,1-Dichloroethane	U		0.259	1.00	1	10/26/2015 18:18	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/26/2015 18:18	WG824433
1,1-Dichloroethene	U		0.398	1.00	1	10/26/2015 18:18	WG824433
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/26/2015 18:18	WG824433
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/26/2015 18:18	WG824433
1,2-Dichloropropane	U		0.306	1.00	1	10/26/2015 18:18	WG824433
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/26/2015 18:18	WG824433
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/26/2015 18:18	WG824433
Ethylbenzene	6.55		0.384	1.00	1	10/26/2015 18:18	WG824433
Isopropylbenzene	53.0		0.326	1.00	1	10/26/2015 18:18	WG824433
p-Isopropyltoluene	1.79		0.350	1.00	1	10/26/2015 18:18	WG824433
2-Butanone (MEK)	U		3.93	10.0	1	10/26/2015 18:18	WG824433
2-Hexanone	U		3.82	10.0	1	10/26/2015 18:18	WG824433
Methylene Chloride	U		1.00	5.00	1	10/26/2015 18:18	WG824433
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/26/2015 18:18	WG824433
Methyl tert-butyl ether	9.02		0.367	1.00	1	10/26/2015 18:18	WG824433
Naphthalene	4.22	J	1.00	5.00	1	10/26/2015 18:18	WG824433
n-Propylbenzene	63.3		0.349	1.00	1	10/26/2015 18:18	WG824433
Styrene	U		0.307	1.00	1	10/26/2015 18:18	WG824433
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/26/2015 18:18	WG824433
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/26/2015 18:18	WG824433
Tetrachloroethene	U		0.372	1.00	1	10/26/2015 18:18	WG824433
Toluene	6.23		0.780	5.00	1	10/26/2015 18:18	WG824433
1,1,1-Trichloroethane	U		0.319	1.00	1	10/26/2015 18:18	WG824433
1,1,2-Trichloroethane	U		0.383	1.00	1	10/26/2015 18:18	WG824433
Trichloroethene	U		0.398	1.00	1	10/26/2015 18:18	WG824433
1,2,4-Trimethylbenzene	74.0		0.373	1.00	1	10/26/2015 18:18	WG824433
1,3,5-Trimethylbenzene	0.524	J	0.387	1.00	1	10/26/2015 18:18	WG824433
Vinyl chloride	U		0.259	1.00	1	10/26/2015 18:18	WG824433
o-Xylene	1.62		0.341	1.00	1	10/26/2015 18:18	WG824433
m&p-Xylene	70.3		0.719	1.00	1	10/26/2015 18:18	WG824433
Xylenes, Total	71.9		1.06	3.00	1	10/26/2015 18:18	WG824433
(S) Toluene-d8	98.4			90.0-115		10/26/2015 18:18	WG824433
(S) Dibromofluoromethane	84.4			79.0-121		10/26/2015 18:18	WG824433
(S) 4-Bromofluorobenzene	97.0			80.1-120		10/26/2015 18:18	WG824433

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4980		124	500	5	10/29/2015 00:56	WG823977
(S) o-Terphenyl	102			50.0-150		10/29/2015 00:56	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2960000		2820	10000	1	10/27/2015 15:05	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:09	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	66400		51.9	1000	1	10/24/2015 22:45	WG824162
Fluoride	2950		9.90	100	1	10/24/2015 22:45	WG824162
Sulfate	1520000		3870	250000	50	10/28/2015 15:01	WG824952

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	2.34		0.250	2.00	1	10/28/2015 17:23	WG824868
Barium	12.8		0.360	5.00	1	10/28/2015 17:23	WG824868
Calcium	550000		46.0	1000	1	10/28/2015 17:23	WG824868
Chromium	6.13		0.540	2.00	1	10/28/2015 17:23	WG824868
Iron	41.7	J	15.0	100	1	10/28/2015 17:23	WG824868
Lead	0.435	J	0.240	2.00	1	10/28/2015 17:23	WG824868
Manganese	13.9		0.250	5.00	1	10/28/2015 17:23	WG824868
Potassium	6850		37.0	1000	1	10/28/2015 17:23	WG824868
Selenium	9.66		0.380	2.00	1	10/28/2015 17:23	WG824868
Sodium	74700		110	1000	1	10/28/2015 17:23	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	633		31.4	100	1	10/28/2015 02:29	WG824598
(S) a,a,a-Trifluorotoluene(FID) 91.3				62.0-128		10/28/2015 02:29	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	10/28/2015 22:47	WG825221
Benzene	38.5		0.331	1.00	1	10/28/2015 22:47	WG825221
Bromodichloromethane	U		0.380	1.00	1	10/28/2015 22:47	WG825221
Bromoform	U		0.469	1.00	1	10/28/2015 22:47	WG825221
Bromomethane	U		0.866	5.00	1	10/28/2015 22:47	WG825221
n-Butylbenzene	1.33		0.361	1.00	1	10/28/2015 22:47	WG825221
sec-Butylbenzene	11.1		0.365	1.00	1	10/28/2015 22:47	WG825221
Carbon disulfide	3.67		0.275	1.00	1	10/28/2015 22:47	WG825221
Carbon tetrachloride	U		0.379	1.00	1	10/28/2015 22:47	WG825221
Chlorobenzene	U		0.348	1.00	1	10/28/2015 22:47	WG825221
Chlorodibromomethane	U		0.327	1.00	1	10/28/2015 22:47	WG825221
Chloroethane	U		0.453	5.00	1	10/28/2015 22:47	WG825221
Chloroform	U		0.324	5.00	1	10/28/2015 22:47	WG825221
Chloromethane	U		0.276	2.50	1	10/28/2015 22:47	WG825221
1,2-Dibromoethane	U		0.381	1.00	1	10/28/2015 22:47	WG825221
1,1-Dichloroethane	U		0.259	1.00	1	10/28/2015 22:47	WG825221



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.361	1.00	1	10/28/2015 22:47	WG825221
1,1-Dichloroethene	U		0.398	1.00	1	10/28/2015 22:47	WG825221
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/28/2015 22:47	WG825221
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/28/2015 22:47	WG825221
1,2-Dichloropropane	U		0.306	1.00	1	10/28/2015 22:47	WG825221
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/28/2015 22:47	WG825221
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/28/2015 22:47	WG825221
Ethylbenzene	0.880	U	0.384	1.00	1	10/28/2015 22:47	WG825221
Isopropylbenzene	60.5		0.326	1.00	1	10/28/2015 22:47	WG825221
p-Isopropyltoluene	1.28		0.350	1.00	1	10/28/2015 22:47	WG825221
2-Butanone (MEK)	U		3.93	10.0	1	10/28/2015 22:47	WG825221
2-Hexanone	U		3.82	10.0	1	10/28/2015 22:47	WG825221
Methylene Chloride	U		1.00	5.00	1	10/28/2015 22:47	WG825221
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	10/28/2015 22:47	WG825221
Methyl tert-butyl ether	0.964	U	0.367	1.00	1	10/28/2015 22:47	WG825221
Naphthalene	1.23	U	1.00	5.00	1	10/28/2015 22:47	WG825221
n-Propylbenzene	9.20		0.349	1.00	1	10/28/2015 22:47	WG825221
Styrene	U		0.307	1.00	1	10/28/2015 22:47	WG825221
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	10/28/2015 22:47	WG825221
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/28/2015 22:47	WG825221
Tetrachloroethene	U		0.372	1.00	1	10/28/2015 22:47	WG825221
Toluene	1.54	U	0.780	5.00	1	10/28/2015 22:47	WG825221
1,1,1-Trichloroethane	U		0.319	1.00	1	10/28/2015 22:47	WG825221
1,1,2-Trichloroethane	U		0.383	1.00	1	10/28/2015 22:47	WG825221
Trichloroethene	U	U	0.398	1.00	1	10/28/2015 22:47	WG825221
1,2,4-Trimethylbenzene	21.3		0.373	1.00	1	10/28/2015 22:47	WG825221
1,3,5-Trimethylbenzene	1.28		0.387	1.00	1	10/28/2015 22:47	WG825221
Vinyl chloride	U		0.259	1.00	1	10/28/2015 22:47	WG825221
o-Xylene	3.16		0.341	1.00	1	10/28/2015 22:47	WG825221
m&p-Xylene	17.1		0.719	1.00	1	10/28/2015 22:47	WG825221
Xylenes, Total	20.2		1.06	3.00	1	10/28/2015 22:47	WG825221
(S) Toluene-d8	101			90.0-115		10/28/2015 22:47	WG825221
(S) Dibromofluoromethane	91.4			79.0-121		10/28/2015 22:47	WG825221
(S) 4-Bromofluorobenzene	101			80.1-120		10/28/2015 22:47	WG825221

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5860		124	500	5	10/29/2015 01:14	WG823977
(S) o-Terphenyl	110			50.0-150		10/29/2015 01:14	WG823977



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2460000		2820	10000	1	10/27/2015 15:06	WG824447

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		197	1000	10	10/29/2015 17:10	WG825446

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	371000		1040	20000	20	10/24/2015 20:15	WG824156
Fluoride	1180		9.90	100	1	10/28/2015 15:48	WG824952
Sulfate	680000		1550	100000	20	10/24/2015 20:15	WG824156

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	11.8		0.250	2.00	1	10/28/2015 17:25	WG824868
Barium	153		0.360	5.00	1	10/28/2015 17:25	WG824868
Calcium	188000		46.0	1000	1	10/28/2015 17:25	WG824868
Chromium	1.78	J	0.540	2.00	1	10/28/2015 17:25	WG824868
Iron	29.1	J	15.0	100	1	10/28/2015 17:25	WG824868
Lead	2.42		0.240	2.00	1	10/28/2015 17:25	WG824868
Manganese	7.53		0.250	5.00	1	10/28/2015 17:25	WG824868
Potassium	1100		37.0	1000	1	10/28/2015 17:25	WG824868
Selenium	6.79		0.380	2.00	1	10/28/2015 17:25	WG824868
Sodium	404000		110	1000	1	10/28/2015 17:25	WG824868

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	2860		157	500	5	10/28/2015 02:51	WG824598
(S) a,a,a-Trifluorotoluene(FID) 88.0				62.0-128		10/28/2015 02:51	WG824598

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		50.0	250	5	10/26/2015 18:59	WG824433
Benzene	535		1.66	5.00	5	10/26/2015 18:59	WG824433
Bromodichloromethane	U		1.90	5.00	5	10/26/2015 18:59	WG824433
Bromoform	U		2.34	5.00	5	10/26/2015 18:59	WG824433
Bromomethane	U		4.33	25.0	5	10/26/2015 18:59	WG824433
n-Butylbenzene	3.82	J	1.80	5.00	5	10/26/2015 18:59	WG824433
sec-Butylbenzene	6.49		1.82	5.00	5	10/26/2015 18:59	WG824433
Carbon disulfide	1.94	J	1.38	5.00	5	10/26/2015 18:59	WG824433
Carbon tetrachloride	U		1.90	5.00	5	10/26/2015 18:59	WG824433
Chlorobenzene	U		1.74	5.00	5	10/26/2015 18:59	WG824433
Chlorodibromomethane	U		1.64	5.00	5	10/26/2015 18:59	WG824433
Chloroethane	U		2.26	25.0	5	10/26/2015 18:59	WG824433
Chloroform	U		1.62	25.0	5	10/26/2015 18:59	WG824433
Chloromethane	U		1.38	12.5	5	10/26/2015 18:59	WG824433
1,2-Dibromoethane	U		1.90	5.00	5	10/26/2015 18:59	WG824433
1,1-Dichloroethane	U		1.30	5.00	5	10/26/2015 18:59	WG824433



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		1.80	5.00	5	10/26/2015 18:59	WG824433
1,1-Dichloroethene	U		1.99	5.00	5	10/26/2015 18:59	WG824433
cis-1,2-Dichloroethene	U		1.30	5.00	5	10/26/2015 18:59	WG824433
trans-1,2-Dichloroethene	U		1.98	5.00	5	10/26/2015 18:59	WG824433
1,2-Dichloropropane	U		1.53	5.00	5	10/26/2015 18:59	WG824433
cis-1,3-Dichloropropene	U		2.09	5.00	5	10/26/2015 18:59	WG824433
trans-1,3-Dichloropropene	U		2.10	5.00	5	10/26/2015 18:59	WG824433
Ethylbenzene	5.77		1.92	5.00	5	10/26/2015 18:59	WG824433
Isopropylbenzene	40.5		1.63	5.00	5	10/26/2015 18:59	WG824433
p-Isopropyltoluene	3.97	J	1.75	5.00	5	10/26/2015 18:59	WG824433
2-Butanone (MEK)	U		19.6	50.0	5	10/26/2015 18:59	WG824433
2-Hexanone	U		19.1	50.0	5	10/26/2015 18:59	WG824433
Methylene Chloride	U		5.00	25.0	5	10/26/2015 18:59	WG824433
4-Methyl-2-pentanone (MIBK)	U		10.7	50.0	5	10/26/2015 18:59	WG824433
Methyl tert-butyl ether	11.0		1.84	5.00	5	10/26/2015 18:59	WG824433
Naphthalene	6.30	J	5.00	25.0	5	10/26/2015 18:59	WG824433
n-Propylbenzene	48.7		1.74	5.00	5	10/26/2015 18:59	WG824433
Styrene	U		1.54	5.00	5	10/26/2015 18:59	WG824433
1,1,1,2-Tetrachloroethane	U		1.92	5.00	5	10/26/2015 18:59	WG824433
1,1,2,2-Tetrachloroethane	U		0.650	5.00	5	10/26/2015 18:59	WG824433
Tetrachloroethene	U		1.86	5.00	5	10/26/2015 18:59	WG824433
Toluene	18.6	J	3.90	25.0	5	10/26/2015 18:59	WG824433
1,1,1-Trichloroethane	U		1.60	5.00	5	10/26/2015 18:59	WG824433
1,1,2-Trichloroethane	U		1.92	5.00	5	10/26/2015 18:59	WG824433
Trichloroethene	U		1.99	5.00	5	10/26/2015 18:59	WG824433
1,2,4-Trimethylbenzene	138		1.86	5.00	5	10/26/2015 18:59	WG824433
1,3,5-Trimethylbenzene	10.9		1.94	5.00	5	10/26/2015 18:59	WG824433
Vinyl chloride	U		1.30	5.00	5	10/26/2015 18:59	WG824433
o-Xylene	9.70		1.70	5.00	5	10/26/2015 18:59	WG824433
m&p-Xylene	146		3.60	5.00	5	10/26/2015 18:59	WG824433
Xylenes, Total	155		5.30	15.0	5	10/26/2015 18:59	WG824433
(S) Toluene-d8	97.0			90.0-115		10/26/2015 18:59	WG824433
(S) Dibromofluoromethane	94.1			79.0-121		10/26/2015 18:59	WG824433
(S) 4-Bromofluorobenzene	99.6			80.1-120		10/26/2015 18:59	WG824433

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	18700		494	2000	20	10/29/2015 03:02	WG823977
(S) o-Terphenyl	0.000	X		50.0-150		10/29/2015 03:02	WG823977